

土木工程學系

(P.S.非黑色姓名字體為今年更新資料)

大地工程組

林美聆 教授 Mei-Ling Lin	4
鄭富書 教授 Fu-Shu Jeng	8
林銘郎 教授 Ming-Lang Lin	11
卿建業 教授 Jianye Ching.....	16
葛宇甯 教授 Ge, Yu-Ning (Louis)	21
楊國鑫 教授 Kuo-Hsin Yang	26
郭安妮 助理教授 On-Lei Annie Kwok	31
邱俊翔 助理教授 Jiunn-Shyang Chiou	34

結構工程組

洪宏基 教授 Hong-Ki Hong.....	37
張國鎮 教授 Kuo-Chun Chang.....	40
蔡克銓 教授 Keh-Chyuan Tsai	49
呂良正 教授 Liang-Jenq Leu	56
詹穎雯 教授 Yin-Wen Chan.....	59
黃世建 教授 Shyh-Jiann Hwang	62
周中哲 教授 Chung-Che Chou	66
歐昱辰 教授 Yu-Chen Ou.....	78

黃尹男	副教授 Yin-Nan Huang	83
廖文正	副教授 Wen-Cheng Liao	86
張書璋	助理教授 Shu-Wei Chang	93
張家銘	助理教授 Chia-Ming Chang	95
吳東諭	助理教授 Tung-Yu WU.....	103

水利工程組

林國峰	教授 Gwo-Fong Lin	105
李鴻源	教授 Hong-Yuan Lee	111
黃良雄	教授 Liang-Hsiung Huang	113
劉格非	教授 Ko-Fei Liu	116
卡艾瑋	教授 H. Capart.....	120
蔡宛珊	教授 Christina Wan Shan Tsai.....	122
李天浩	副教授 Tim Hau Lee.....	124
游景雲	副教授 Jiing-Yun You	127
施上粟	副教授 Shang-Shu Shih.....	129
詹益齊	助理教授 I-Chi Chan.....	133

交通工程組

張學孔	教授 Shyue-Koong Chang	134
周家蓓	教授 Chia-Pei Chou	138

賴勇成 教授 Yung-Cheng Lai 143

許添本 教授 Tien-Pen Hsu 147

朱致遠 教授 Chih-Yuan Chu 150

陳柏華 副教授 Chen, Albert Y. 156

許聿廷 助理教授 Yu-Ting Hsu 160

營管工程組

曾惠斌 教授 Hui-Ping Tserng 166

荷世平 教授 Shih-Ping Ho 170

陳柏翰 教授 Po-Han Chen 175

電輔工程組

謝尚賢 教授 Shang-Hsien Hsieh 181

陳俊杉 教授 Chuin-Shan Chen 191

測量工程組

韓仁毓 教授 Jen-Yu Han 197

趙鍵哲 副教授 Jen -Jer Jaw 203

徐百輝 助理教授 Pai-Hui Hsu 207

林美玲 教授 Mei-Ling Lin

Professor

學歷/ 美國德州大學奧斯汀校區博士

Ph.D., University of Texas, Austin

專長/ 土壤動力、邊坡穩定、地盤下陷、土石流

Soil Dynamics, Slope Stability, Ground Settlement Analysis, Debris Flow

期刊論文 (Journal Paper)

1. Chen, Tien-Chien, Meei-Ling Lin*, Kuo-Lung Wang, 2014, "Landslide Seismic Signal Recognition and Mobility for an Earthquake-induced Rockslide in Tsaojing, Taiwan", *Engineering Geology*, 171, pp.31-44.(SCI)
2. 林美玲，陳永昇，王國隆，謝佑明，黃文昭，2014.9，“公路邊坡工程設計規範(草案)研修”，地工技術，第 141 期，第 7-16 頁。
3. 林美玲、陳彥澄，”應用光達地形資料於莫拉克災後陳有蘭溪流域崩塌與土石流地質敏感地區判釋與分析“，航測及遙測學刊，第十八卷，第 2 期，第 129-144 頁。
4. Lin*, Meei-Ling, Te-Wei Chen, Ching-Wee Lin, Dia-Jie Ho, Keng-Ping Cheng, Hsiao-Yuan Yin and Mei-Chen Chen, “Detecting Large-Scale Landslides Using Lidar Data and Aerial Photos in the Namasha-Liuoguey Area, Taiwan”, *Remote Sensing*, 2014, 6(1), p42-63. doi:10.3390/rs6010042(SCI)
5. Wang, Kuo-Lung, Jun-Tin Lin, Meei-Ling Lin, Ching-Wee Lin, Hongey Chen, Tien-Chien Chen, Chih-Ming Tseng, “Large Scale Rainfall Induced Potential Landslide Analysis and Monitoring from DInSAR– A Case Study after Heavy Rainfall Event in 2006, Central Taiwan”, *Disaster Advances*, 2013
6. 林美玲，王國隆，陳德偉，林育崇，謝佑明，黃文昭，田耘昇，2012.6，“公路邊坡設計規範研修探討”，地工技術，第 122 期，第 35-44 頁。
7. 林美玲，王國隆，廖瑞堂，余炳盛，王元度，費立沅，紀宗吉，林錫宏，2011. 10, “和雅地區順向坡受地震影響滑動潛能分析”，中華水土保持學報，第四十二卷，第四期，pp.336-344.
8. Wang, Kuo-Lung, and Meei-Ling Lin, 2011, 04 , “Initiation and displacement of landslide induced by earthquake - a study of shaking table model slope test”, *Engineering Geology*, 122, pp.106-114, NSC97-2221-E-002-190(SCI)
9. 王國隆，林美玲，2010 年 9 月，“1-g 條件下之大型邊坡模型受震行為” 地工技術，第 125 期，第 23-34 頁, NSC 92 - 2211 - E002 - 050, NSC 93 - 2211 - E002 - 017, NSC 94 - 2211 - E - 002 - 039
10. Wang, Kuo-Lung, and Meei-Ling Lin, 2010, “Development of shallow seismic landslide potential map based on Newmark’s displacement: the case study of Chi-Chi Earthquake, Taiwan’, *Environmental Earth Sciences*, 60:775–785, DOI 10.1007/s12665-009-0215-1 (SCI) NSC 94-2211-E002-039.

研討會論文 (Conference Paper)

1. .Lin, Meei-Ling, Te-Wei Chen, Yu-Chung Lin, Tien-Chien Chen, Chun-Ya Su, Kuo-Lung

- Wang, Shiao-Yue Huang, Mei-Jen Chen "Numerical Simulation of Debris Flow Affected Area Caused by Different Precipitations." *Engineering Geology for Society and Territory*-Volume 2. Springer International Publishing, 2014. 495-499.
2. Wang, Kuo-Lung, Meei-Ling Lin, Jun-Tin Lin, Ssu-Chung Huang, Ray-Tang Liao, Chao-Wei Chen. "Monitoring of the Evolution of a Deep-Seated Landslide in Lushan Area, Taiwan." *Engineering Geology for Society and Territory*-Volume 2. Springer International Publishing, 2014. 1317-1320.
 3. Lin, Meei-Ling, Te-Wei Chen, and Yung-Shen Chen, "Effects of landslides and sediment transportation on river basin following extreme rainfall event", Proceedings, The Fourth International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation (4th GEDMAR), 2014, Sept. Japan, Key Note Lecture
 4. Lin, M.L. and C.Y. Huang, "Numerical Simulation of Run-out Behavior of Earthquake-induced Landslides" Proceedings, the Sixth Japan- Taiwan Joint Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall, 2014, June, Japan
 5. 林美玲，陳德偉，林育崇，陳天健，蘇群雅，王國隆，黃效禹，陳美珍，"莫拉克颱風土石流出影響範圍模擬與土石量體評估"，第十五屆大地工程學術研究討論會，民國 102 年 9 月 11-13 日，雲林。
 6. 林美玲，林聖琪，"概似率模式於深層崩塌之應用"，第十五屆大地工程學術研究討論會，民國 102 年 9 月 11-13 日，雲林。
 7. 陳彥澄，林美玲，"和雅地區地震引致邊坡破壞之滑動行為數值模擬"，第十五屆大地工程學術研究討論會，民國 102 年 9 月 11-13 日，雲林。
 8. Lin, Meei-Ling, "2009 Typhoon Morakot in Taiwan" Proceedings, The 18th International Conference on Soil Mechanics and Geotechnical Engineering, ISSMGC, Workshop of Technical Committee 303, Paris 2013 Sept., Special report
 9. Lin, M.L. and Y.S. Lin , "Estimation and Prediction of Debris Flow Potential Using Discrimination Analysis" Proceedings, The 18th International Conference on Soil Mechanics and Geotechnical Engineering, ISSMGC, Paris 2013 Sept.
 10. Lin, Meei-Ling, Ter-Wei, Chen, Yu-Chung, Lin, Tien-Chien Chen, Kuo-Lung Wang, Shiao-Yue Huang, and Mei-Jeng Chen "Effects of Different Rainfalls on Run-out Distances and Affected Areas of Debris Flow", EGU General Assembly, Vienna, Austria, Vol. 15, EGU2013-6622
 11. Wang, Kuo-Lung, Lin, Meei-Ling, et al."Investigation of Landslide from Deformation - Comparison of High Resolution DEM, Aero Photos Using Long Wave Length DInSAR", EGU General Assembly, Vienna, Austria, Vol. 15, EGU2013-6343
 12. Lin, Meei-Ling 2012, 01, "Combined Geotechnical Hazard Caused by Typhoon Morakot in Taiwan", Kyoto Seminar 2012 -Large scale combined geotechnical hazards in coastal urban areas-, Kyoto, Japan. Invited lecture
 13. 林美玲，廖瑞堂，余炳盛，王國隆，民國 100 年，11 月，"翠巒岩體滑動探查與分析"，中華民國鑛冶工程學會 100 年年會，台北。
 14. 林美玲，陳天健，林育崇，陳德偉，蘇群雅，黃效禹，陳振宇，民國 100 年 8 月，"土石流潛勢溪流土石流出影響範圍之研究"，第 14 屆大地工程學術研討會，桃園。
 15. 林美玲，林聖琪，王國隆，紀宗吉，林錫宏，民國 100 年 8 月，"重大山崩災害潛勢地區災害模擬與風險分析"，第 14 屆大地工程學術研討會，桃園。優良論文獎。
 16. 林美玲，林彥志，許孝源，王國隆，民國 100 年 8 月，"邊坡受震滑移行為模擬與影響分析"，第 14 屆大地工程學術研討會，桃園。
 17. Meei-Ling LIN, Kuo-Lung WANG, Tien-Chien CHEN and Shen-Chi LIN, 2011, 07, "The Case Study of the Debris Flow Hazard Caused by Typhoon Morakot in Taiwan, 2009", 5th International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction and Assessment, Padua, Italy

18. Meei-Ling Lin and Sheng-Chi Lin, 2011, 04 “Using conditional probability method for estimation of landslide occurrence probability”, EGU General Assembly, Vienna, Austria, Vol. 13, EGU2011-10073.
19. Meei-Ling Lin, Kuo-Lung Wang, Jui-Tung Liao, Bin-Sheng Yu, Sheng-Chi Lin, Chao-Wei Chen, Li-Yuan Fei, Chung-Ji Ji, and Hsi-Horng Lin, 2011, 04, “Investigation and analysis of a landslide area subjected to faults and fracture materials- the Tsuiluan area in Central Taiwan”, EGU General Assembly, Vienna, Austria, Vol. 13, EGU2011-10165.
20. Meei-Ling Lin, 2010, 11, “Typhoon Morakot and Debris Flow Hazard in Taiwan”, The half day seminar on Natural Terrain Hazards, Hong Kong. Invited lecture
21. Meei-Ling LIN, and Yeng-Ji LIN, 2010,10, “Simulation of seismic behavior of a dip-slope using Newmark’s method”, Proceedings, the 4th Japan-Taiwan Joint Worshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfalls, Sendai, Japan 25-28, October, 2010, Sendai, Japan
22. M.-L. Lin, 2010, 05 “Debris Flow Hazard and Mitigations in Taiwan Following Chi-Chi Earthquake, 1999”, Proceedings, The 17th Southeast Asian Geotechnical Conference, Taipei, Taiwan (Invited speaker)
23. K.-L. Wang and M.-L. Lin, 2010, 05 “Monitoring and Analysis of A Deep-Seated Landslide With Ground Based LiDAR and Close Range Photogrammetry” Proceedings, The 17th Southeast Asian Geotechnical Conference, Taipei, Taiwan
24. Meei-Ling Lin, Kuo-Lung Wang, Sheng-Chi Lin, Chung-Hsien Chen, and Hsi-Hong Lin, 2010, 05 “A pseudo-3D rock fall scenario and risk assessment model- case study of Danfon site, Taipei” , EGU General Assembly, Vienna, Austria, EGU2010-14110
25. Meei-Ling Lin, Kuo-Lung Wang, Tien-Chien Chen, Sheng-Chi Lin , 2010, 05 “Case study of severe debris flow hazard caused by typhoon Morakot” , EGU General Assembly, Vienna, Austria

技術報告及其他

1. 林美玲，陳天健，王國隆，陳永昇，蘇群雅，莊漢鑫，2014.12，六龜-寶來地區不同崩塌類型分類方法與土砂遷移分析，行政院農業委員會水土保持局研究委託研究計畫報告。
2. 林慶偉，張中白，林美玲，王泰典，董家鈞，陳天健，曾志民，2014.12，“國土保育之地質敏感地區調查分析計畫-非莫拉克颱風受災區域之地質敏感特性分析(2/3)” 經濟部中央地質調查所委託研究計畫報告。
3. 林美玲，饒瑞鈞，陳天健，王國隆，曾志民，2014.12，區域性大規模坡地崩塌調查技術及潛勢分析方法研究 - 以廬山、清境地區為例，行政院國家科學委員會計畫報告。NSC102-2119-M-002-019-
4. 林美玲，陳宏宇，林慶偉，陳天健，王國隆，曾志民，2013.07，多尺度遙測技術應用於大型坡地崩塌災害潛勢分析與監測，行政院國家科學委員會計畫報告。NSC101-2119-M-002-021
5. 林美玲，陳天健，王國隆，陳永昇，蘇群雅，陳德偉，莊漢鑫，陳彥澄，2013.12，流域崩塌及土砂災害演化對土石流災害影響研究，行政院農業委員會水土保持局研究委託研究計畫報告。
6. 林慶偉，張中白，林美玲，王泰典，董家鈞，陳天健，曾志民，2013.12，“國土保育之地質敏感地區調查分析計畫-非莫拉克颱風受災區域之地質敏感特性分析(1/3)” 經濟部中央地質調查所委託研究計畫報告。
7. 林美玲，林慶偉，陳天健，王國隆，陳德偉，何岱杰，2012.12，光達數值地形應用於大

- 規模崩塌與土石流關係研究，行政院農業委員會水土保持局研究委託研究計畫報告。
8. 林慶偉，張中白，林美玲，王泰典，董家鈞，陳天健，曾志民，2012.12，國土保育之地質敏感地區調查計畫—莫拉克颱風受災區域之地質敏感特性分析(3/3)，經濟部中央地質調查所委託研究計畫報告。
 9. 林美玲，陳天健，王國隆，陳德偉，林育崇，蘇群雅，2012.2，機率化土石流潛勢溪流影響範圍劃設與分析，行政院農業委員會水土保持局研究委託研究計畫報告。
 10. 林慶偉，張中白，林美玲，王泰典，董家鈞，陳天健，曾志民，2011.12，國土保育之地質敏感地區調查計畫—莫拉克颱風受災區域之地質敏感特性分析(2/3)，經濟部中央地質調查所委託研究計畫報告。
 11. 林美玲，陳天健，陳德偉，林育崇，蘇群雅，2010.12，研修土石流潛勢溪流影響範圍劃設方法，行政院農業委員會水土保持局研究委託研究計畫報告。
 12. 林慶偉，張中白，林美玲，王泰典，董家鈞，陳天健，2010.12，國土保育之地質敏感地區調查計畫—莫拉克颱風受災區域之地質敏感特性分析(1/3)，經濟部中央地質調查所委託研究計畫報告。
 13. 林美玲、王國隆、廖瑞堂、余炳盛、林聖琪、陳忠賢、陳昭維、吳俊揚、丁御崇，2010，12，重大山崩災害潛勢地區災害模擬與監測（第4期）經濟部中央地質調查所委託研究計畫報告。

專利 (Patents)

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利期間	國科會計畫編號
新型專利	室內土壤模型試驗用小型振動台	中華民國	M269452	林美玲 王國隆 周英豪	林美玲	2005/07/01 2014/07/21	NSC-92-2211-E0 02-050

鄭富書 教授 Fu-Shu Jeng

Professor

學歷/ 美國麻省理工學院博士

Ph.D., MIT

專長/ 岩石力學、岩體之組成律模式

Rock Mechanics, Numerical Analysis, Engineering Geology

期刊論文 (Journal Paper)

1. Y.M. Hsieh, K.C. Lee, F.S. Jeng* and T.H. Huang, 2011. Can tilt tests provide correct insight regarding frictional behavior of sliding rock block under seismic excitation? *Engineering Geology* 122, 84-92.
2. T. T. Wang*, F. S. Jeng and W. Lo, 2011. Mitigating large water inrushes into the New Yungchuen Tunnel, Taiwan, *Bulletin of Engineering Geology and the Environment*, 70(2), 173-186.
3. M.C. Weng, L.S. Tsai, Y.M. Hsieh and F.S. Jeng*, 2010. An associated elastic-viscoplastic constitutive model for sandstone involving shear-induced volumetric deformation. *International Journal of Rock Mechanics and Mining Sciences* 47, 1263-1273. (SCI)
4. K.P. Huang, K.J. Chang, T.T. Wang and F.S. Jeng*, 2010. Buckling folds of a single layer embedded in matrix – Folding behavior revealed by numerical analysis. *Journal of Structural Geology* 32(7), 960-974. (SCI)
5. M.C. Weng, L.S. Tsai, C.Y. Liao and F.S. Jeng*, 2010. Numerical modeling of tunnel excavation in weak sandstone using a time-dependent anisotropic degradation model. *Tunnelling and Underground Space Technology* 25(4), 397-406. (SCI)
6. K.P. Huang, T.T. Wang*, T.H. Huang and F.S. Jeng, 2010. Profile deformation of a circular tunnel induced by ambient stress changes. *Tunnelling and Underground Space Technolog* 25(3), 266-278. (SCI)
7. T.T. Wang, J. J. Jaw, C.H. Hsu and F.S. Jeng*, 2010. Profile-image method for measuring tunnel profile - Improvements and procedures. *Tunnelling and Underground Space Technology* 25(1), 78-90. (SCI)
8. M.C. Weng, F.S. Jeng*, L. S. Tsai and Y.M. Hsieh, 2010. A simple model for geo-materials involving shear-induced anisotropic degradation. *Journal of the Chinese Institute of Engineers* 33(6), 833-844. (SCI)
9. T.T. Wang*, F.S. Jeng and W. Lo, 2010. Mitigating large water ingresses into the New Yungchuen Tunnel. *Environmental Earth Sciences* XX, XX-XX. (published online). (SCI)
10. T.T. Wang*, J.J. Jaw, Y. H. Chang and F.S. Jeng, 2009. Application and validation of profile-image method for measuring deformation of tunnel wall. *Tunnelling and Underground Space Technology* 24(2), 136-147. (SCI)
11. T.L. Chiang, T.T. Wang, K.C. Lee and F.S. Jeng*, 2009. Analysis of pyramidal block slide induced by seismic excitation. *Journal of the Chinese Institute of Engineers* 32(1), 107-122. (SCI)

12. L.S. Tsai, Y.M. Hsieh, M.C. Weng, T.H. Huang and F.S. Jeng*, 2008. Time-dependent deformation behaviors of weak sandstones. International Journal of Rock Mechanics and Mining Sciences 45(2), 144-154. (SCI)
13. M.C. Weng, F.S. Jeng*, Y.M. Hsieh and T.H. Huang, 2008. A simple model for stress-induced anisotropic softening of weak sandstones. International Journal of Rock Mechanics and Mining Sciences 45(2), 155-166. (SCI)
14. F.S. Jeng* and K.P. Huang, 2008. Buckling folds of a single layer embedded in matrix – Theoretical solutions and characteristics. Journal of Structural Geology 30(5), 633-648. (SCI)
15. Y.M. Hsieh, H.H. Li, T.H. Huang and F.S. Jeng*, 2008. Interpretations on how the macroscopic mechanical behavior of sandstone affected by microscopic properties – revealed by bonded-particle model. Engineering Geology 99(1-2), 1-10. (SCI)
16. F.S. Jeng*, T.T. Wang, H.H. Li and T.H. Huang, 2008. Influences of microscopic factors on macroscopic strength and stiffness of inter-layered rocks – revealed by a bonded particle model. Journal of Mechanics 24(4), 379-389. (SCI)
17. 王泰典、邱雅筑、鄭富書、黃燦輝 (2008)：隧道結構安全管理新潮流與襯砌非破壞性檢測新技術，地工技術，第 117 期，第 17-28 頁。

研討會論文 (Conference Paper)

1. C.H. Lee, T.T. Wang, F.S. Jeng and T.H. Huang, 2011. Experimental study on durability of shotcrete and concrete lining under hot spring and geothermal environments. Proceedings of the ITA-AITES World Tunnel Congress and 37th General Assembly, May 20-26, Helsinki, Finland, 1777-1786.
2. 王泰典、林信宏、李佳翰、鄭富書 (2010)：營運中隧道補襯砌裂縫影像判釋暨特徵化與數字化技術，第九屆海峽兩岸隧道與地下工程學術及技術研討會論文集，洛陽，第 100-108 頁。
3. K.C. Lee, F.S. Jeng* and T.H. Huang, 2010. The dynamic frictional behavior of sliding block under base excitation. Proc. of The 23rd KKCNN, Taipei on Civil Engineering, 387-390.
4. 王泰典、莊海岳、邱雅筑、李佳翰、鄭富書 (2009)：微變監測在營運中隧道穩定評估之應用，第八屆海峽兩岸隧道與地下工程學術與技術研討會論文集，11 月 18~19 日，台北。
5. 邱雅筑、韓仁毓、王泰典、鄭富書、黃燦輝 (2009)：平差技術應用於隧道全斷面量測精度之探討，第八屆海峽兩岸隧道與地下工程學術與技術研討會論文集，11 月 18~19 日，台北，B9-1~10。
6. Wang, T. T., C. H. Lee, F. S. Jeng and T. H. Huang (2009): Recent researches on tunnel inspection and safety evaluation in Taiwan, 2nd International Tunnel Safety Forum for Road and Rail, Apr. 20-22, Lyon, France, 57-72.
7. 李國誠、王少聰、鄭富書、黃燦輝 (2009)：動態受震條件下對塊體滑動門檻值之影響，第十三屆大地工程研討會，宜蘭，I17-01。
8. Y.M. Hsieh, K.C. Lee, F.S. Jeng* and T.H. Huang, 2009. Can tilt tests provide correct insight regarding frictional behavior of sliding rock block under seismic excitation? The next generation of research on earthquake-induced landslides: an international conference in commemoration of 10th anniversary of the Chi-Chi earthquake, 187-200.
9. 鄭富書、翁孟嘉、廖俊逸 (2008)：軟弱砂岩之異向性弱化組成模式，第七屆海峽兩岸隧

- 道與地下工程學術及技術研討會論文集，大連，第 1-7 頁。
10. 邱雅筑、王泰典、鄭富書、黃燦輝 (2008)：攝影測量技術於隧道檢測之應用，第七屆海峽兩岸隧道與地下工程學術及技術研討會暨海峽兩岸岩土工程和地下工程青年科技研討會論文集，8月 29-30 日，大連，第 247-254 頁。
 11. 李國誠、鄭富書、黃燦輝、王少韁 (2008)：節理岩塊受震滑動臨界加速度之研究，第九屆岩盤工程研討會論文集，台北，第 239-248 頁
 12. 李國誠、鄭富書、黃燦輝 (2008)：應用小型振動台探討節理岩塊受震滑動之臨界加速度，第三十二屆力學學會研討會論文集，嘉義，第 476-480 頁。(優良論文獎佳作)
 13. Wang, T. T., F. M. Chang, M. L. Lin, F. S. Jeng and T. H. Huang (2008/06): Using image mosaic technology for tunnel inspection, 42nd U.S. Rock Mechanics Symposium and 2nd U.S.-Canada Rock Mechanics Symposium, Jun, 28-Jul, 2, San Francisco, CD-ROM 026/MS2.

技術報告及其它

1. 黃燦輝、鄭富書、王泰典、李維峰 (2009)：隧道補強技術與材料之開發總結報告書，交通部鐵路改建工程局東部工程處委託研究計畫報告，宜蘭。
2. 鄭富書、李順敏、李家慶 (2008). 從工程爭議探討大地工程風險管理，中華技術，第 77 期，第 151-157 頁。
3. 王泰典、邱雅筑、鄭富書、黃燦輝 (2008)：隧道結構安全管理新潮流與襯砌非破壞性檢測新技術，地工技術，第 117 期，第 17-28 頁。

專利 請填入目前仍有效之專利。「類別」請填入代碼：(A)發明專利(B)新型專利(C)新式樣專利。

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利期間	國科會計畫編號
新型專利	旋轉式加砂水刀裝置	中華民國	170930	沈景鵬 鄭富書 黃燦輝 謝宏新	榮民工程股份有限公司、 鄭富書、 黃燦輝、 謝宏新	2001/03/ ~ 2102/01/	86-2221-E-002-0-29

林銘郎 教授 Ming-Lang Lin

Professor

學歷/ 國立臺灣大學博士

Ph.D., National Taiwan University

專長/ 大地工程、岩石力學、工程地質

Geotechnical Engineering、Rock Mechanics、Engineering Geology

期刊論文 (Journal Paper)

1. Lin, Hsi-Hung, **Lin, Ming-Lang**, Lu, Jia-Hao, Chi, Chung-Chi, Fei, Li-Yuan (2019) Deep-seated gravitational slope deformation in Lushan, Taiwan: transformation from cleavage-controlled to weakened rockmass-controlled deformation. *Engineering Geology*, <https://doi.org/10.1016/j.enggeo.2019.105387> (SCI)
2. Weng, Meng-Chia, Lin, Ming-Lang, Lo, Chia-Ming, Lin, Hsi-Hung, Lin, Cheng-Han, Lu, Jia-Hao , Tsai, Shang-Jyun (2019) Evaluating failure mechanisms of dip slope using a multiscale investigation and discrete element modelling. *Engineering Geology*, <https://doi.org/10.1016/j.enggeo.2019.105303> (SCI)
3. Lin, Cheng-Han, Hung, Ching, Weng, Meng-Chia, **Lin, Ming-Lang**, Uzuoka,Ryosuke (2019) Failure mechanism of a mudstone slope embedded with steep anti-dip layered sandstones: case of the 2016 Yanchao catastrophic landslide in Taiwan. *Landslides*, <https://doi.org/10.1007/s1034> (SCI) Li, Chien-Hung, Lin, Ming-Lang, Huang, Wen-Chao (2019) Interaction between pile groups and thrust faults in a physical sandbox and numerical analysis. *Engineering Geology*, 252, 65-77. (SCI)
4. Li, Chien-Hung, Lin, Ming-Lang, Huang, Wen-Chao (2019) Interaction between pile groups and thrust faults in a physical sandbox and numerical analysis. *Engineering Geology*, 252, 65-77. (SCI)
5. Lin, Cheng-Han, **Lin, Ming-Lang**, Peng, Hou-Ren, Lin, Hsi-Hung (2018) Framework for susceptibility analysis of layered rock slopes considering the dimensions of the mapping units and geological data resolution at various map scales. *Engineering Geology*, 246 (2018), 310-325. (SCI)
6. Cheng Hsueh Weng , **Ming Lang Lin** , Chia Ming Lo, His Hung Lin (2018) The influence of groundwater on the sliding and deposition behaviors of cataclinal slopes. *Water* 10 (9), 1179 (SCI)
7. Chia-Ming Lo, Meng-Chia Weng, Ming-Lang Lin, Shun-Min Lee & Kuo-Chen Lee (2018) Landscape evolution characteristics of large-scale erosion and landslides at the Putanpunas Stream, Taiwan. *Geomatics, Natural Hazards and Risk*, 9:1, 175-195, DOI:10.1080/19475705.2017.1414079 (SCI)
8. 詹佩臻、謝沛宸、陸安、柳鈞元、林劭儒、李健宏、林銘郎 (2018) 0206 花蓮地震之米崙斷層地表變形破裂與人工設施互制關係. 地工技術, 156 期, 79-90 頁
9. 李健宏、詹佩臻、吳亮均、林銘郎 (2018) 跨斷層國道三號田寮 3 號橋與中寮隧道北口段變形機制，中國土木水利工程學刊，第 30 卷，1 期，001-010 頁(EI)。

10. Yeh, CH , Lin, ML, Chan, YC , Chang, KJ , Hsieh, YC (2017) Dip-slope mapping of sedimentary terrain using polygon auto-tracing and airborne LiDAR topographic data. *Engineering Geology*, 222(2017), 236-249. (SCI)
11. 謝沛宸、陸安、詹佩臻、林銘郎 (2017) 為什麼土木系學生應該與地質系學生一起進行野外觀察？，*地質*，36(2)期，第 60-64 頁。
12. Lo, CM, Huang, WK, and Lin, ML (2016) [Earthquake-induced deep-seated landslide and landscape evolution process at Hungtsaiping, Nantou County, Taiwan](#), *Environmental Earth Sciences* 75 (8), 1-16. (SCI)
13. Lo CM, Lee CF, Lin ML (2016) Consideration of the Maximum Impact Force Design for the Rock-Shed Slab. *Journal of Geography & Natural Disasters*, 6: 169. doi:10.4172/2167-0587.1000169 (SCI)
14. Huang, W.-J., W.-S. Chen, Y.-H. Lee, C.-C. Yang, M.-L. Lin, C.-S. Chiang, J.-C. Lee, and S.-T. Lu (2016) Insights from heterogeneous structures of the 1999 M_w 7.6 Chi-Chi earthquake thrust termination in and near Chushan excavation site, Central Taiwan, *J. Geophys. Res. Solid Earth*, 121, 339–364, doi:[10.1002/2015JB012174](#). (SCI)
15. 詹佩臻、林銘郎、張國楨 (2016) 順層岩坡滑動破壞面之粗糙度特徵與尺寸效應，中國土木水利工程學刊，28 卷，第 2 期，129-137。(EI)
16. 楊士賢、詹佩臻、林承翰、林錫宏、徐明志、溫廷睿、林銘郎 (2015) 差異侵蝕岩石邊坡之調查與穩定分析-以台 2 線 68k 附近邊坡為例，*中華水土保持學報*, 46(1) , 38-46.
17. Cheng-Han Lin, Lin, Ming-Lang (2015) Evolution of the large landslide induced by Typhoon Morakot : A case study in the Butangbunasi River, southern Taiwan using the discrete element method, *Engineering Geology* 197, 172–187. (SCI)
18. Chu, Sheng-Shin , Lin, Ming-Lang, Huang, Wen-Chao, Nien, Wei-Tung, Liu, Huan-Chi, Chan, Pei-Chen (2015) Simulation of growth normal fault sandbox tests using the 2D discrete element method, *Computers & Geosciences*, 74, 1–12,. (SCI)
19. Chang , Y.Y., Lee, C.J., Huang ,W.C., Hung, W.Y. , Huang, W.J. , Lin, M.L., Chen Y.H. (2015) Evolution of the surface deformation profile and subsurface distortion zone during reverse faulting through overburden sand, *Engineering Geology*, Vol. 184, 52-70. (SCI)

研討會論文 (Conference Paper)

1. Hsieh, Pei-Chen and Lin, Ming-Lang (2018, November). “Block Toppling Induced by Differential Settlement of Bearing Layers”. The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
2. Hung, Chien-Hui, Liu, Chun-Yuan, Li, Chien-Hung and Lin, Ming-Lang (2018, November). “The Deformation Pattern of Gravel Layer with Different Fabrics Induced by Thrust Faulting”. The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
3. Chang, Yu-Hsuan, Lin, Shao-Ru and Lin, Ming-Lang (2018, November). “Calculating the Volume of Wedge Failure by Photogrammetry and 3-D Point Cloud Analysis”. The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
4. 謝沛宸、林劭儒、陸安、林銘郎 (2018)。軟硬岩層形成逆向坡承載破壞之研究，2018

- 岩盤工程研討會，台南，2018/09/06-07，350-355。
5. 陸安、林劭儒、謝沛宸、翁正學、林銘郎（2018）。向上滲流水對順向節理岩體邊坡可滑動體形成之影響，2018 岩盤工程研討會，台南，2018/09/06-07，356-361。
 6. 謝沛宸、陸安、林銘郎（2018 年 5 月）。軟硬岩層形成之逆向坡承載力破壞。中華民國地質學會與中華民國地球物理學會 107 年年會暨學術研討會，嘉義，臺灣。
 7. 林劭儒、謝沛宸、陸安、黃韋凱、林銘郎（2018 年 5 月）。以無人飛行載具(UAV)攝影測量分析節理性質對楔型破壞行為之影響。中華民國地質學會與中華民國地球物理學會 107 年年會暨學術研討會，嘉義，臺灣。
 8. 陸安、謝沛宸、林銘郎（2018 年 5 月）。向上滲流水對順向節理岩體邊坡可滑動形成的影響。中華民國地質學會與中華民國地球物理學會 107 年年會暨學術研討會，嘉義，臺灣。
 9. 柳鈞元、李健宏、林銘郎（2018 年 5 月）。斜移斷層之上覆土層和淺基礎互制行為。中華民國地質學會與中華民國地球物理學會 107 年年會暨學術研討會，嘉義，臺灣。
 10. Hsieh, Pei-Chen, Huang, Wei-Kai, Chan, Pei-Chen, and Lin, Ming-Lang (2018). "An Overhang Obsequent Slope Landslide Due to Bearing Failure on Coastal Area in Northern Taiwan". 20th EGU General Assembly, EGU2018, Proceedings from the conference held 4-13 April, 2018 in Vienna, Austria, p.15446.
 11. Lu An, Hsieh Pei-Chen, Huang Shao-Cheng, Wang Tai-Tien, Yeh Chin-Hsiang, Lin His-Hung and Lin Ming_lang (2017) The Influence of Control Gactors on History of Pore Pressure Within Preferential Flow Path on Rock Slope Stability. American Geophysical Union's Fall Meeting 2017, AGU NH43A-0187, New Orleans, America.
 12. Hsieh Pei-Chen, Lu An, Yeh Chih-Hsiang, Huang Wei-Kai, Lin His-Hung and Lin Ming-Lang (2017) Characterization of Joint Sets Through UAV Photogrammetry on Sedimentary Rock Sea Cliffs and Abrasion Platforms in Northern Taiwan. American Geophysical Union's Fall Meeting 2017, AGU NH43A-0201, New Orleans, America.
 13. Liu, Chun-Yuan and Lin, Ming-Lang (2017, November). "Co-seismic ground deformation and shallow foundation dis-placement of overburden cohesive soil induced by oblique-slip fault". The Thirtieth KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
 14. Wu, LC , Li, CH , Chan, PC, Lin, Ming-Lang (2017). The Deformation of Overburden Soil and Interaction with Pile Foundations of Bridges Induced by Normal Faulting. 2017 EGU General Assembly Conference, Vienna, Austria.
 15. Lu, An, Hsieh, Pei-Chen, Wu, LC , Lin, Ming-Lang (2017). Using Discrete Element Method to Simulate Influence of Vertical Joints and Upward Groundwater on The Stability of Dip Slope: A Case Study on Formosa Freeway. 2017 EGU General Assembly Conference, Vienna, Austria.
 16. Hsieh, Pei-Chen, Weng, Cheng-Hsueh, Lu, An, Lin, Ming-Lang (2017). A Case Study of the Activity Gravitational Deformation Slate Slope on One Newly Rebuild Highway Bridge in Taitung Longitudinal Valley of Taiwan. 2017 EGU General Assembly Conference, Vienna, Austria.
 17. 翁正學，林錫宏，吳亮均，林銘郎，楊智翔，蔡易辰，黃耀儀，張少華，凌家宜（2017）由工程地質角度評估烏來忠治崩塌地災害潛勢。中華民國地球物理學會與中華民國地質學會 106 年年會暨學術研討會，臺南，106 年 5 月 10~11 日、論文集- O-2-NH1-1。
 18. 翁正學、林銘郎、羅佳明、謝沛宸（2017）地下水對順向坡滑動面位置及崩塌行為之影

響，第十七屆大地工程研討會，宜蘭、宜蘭市。

19. Li, Chien-Hung, Wum Liang-Chun, Chan, Pei-Chen, Lin, Ming-Lang (2016) Interaction Behavior between Thrust Faulting and the National Highway No. 3 - Tianliao III bridge as Determined using Numerical Simulation. American Geophysical Union's 49th annual Fall Meeting 2016, AGU NH53C-2011, San Francisco, America.
20. Weng, Cheng-Hsueh, Pei-Chen, Lin, Ming-Lang (2016) The Influence of Upward CleftGroundwater on the Stability and the Behavior of Dip Slope Failures. The Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China
21. Weng, Cheng-Hsueh, Shao-Cheng, Hsieh, Pei-Chen, Lin, Ming-Lang (2016) The Influence of Upward Groundwater between Joints on the Stability and the Behavior of Dip Slope Failures. American Geophysical Union's 49th annual Fall Meeting 2016, AGU NH41B-1780, San Francisco, America. (獲優良論文獎)
22. Wu, Liang-Chun, Li, Chien-Hung, Lin, Ming-Lang (2016). Interaction between Thrust Faulting and Pile Foundations in Cohesionless Overburden Soil and “The Pile of National Freeway No.3-Minchien Elevated Viaducts” by Numerical Simulation. American Geophysical Union's 49th annual Fall Meeting 2016, AGU NH53C-2010, San Francisco, America.
23. Wu, Liang-Chun, Li, Chien-Hung, Lin, Ming-Lang (2016). Interaction between Thrust Faulting and Pile Foundations in Cohesionless Overburden Soil by Numerical Simulation The Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China
24. Chan, P. C., Li, C. H. and Lin, M. L. (2015) Evolution of Overburden Soil Deformation by Oblique-slip Faulting from Analogue Models. 7th Taiwan-Japan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall September, 22-23, 2016, PingTung, Taiwan.(Best student paper award)
25. Lin, ML, Lee, KC, Lo, CM, Weng, MC, Lee, SM (2016) Multi-stage evolution process of large scale landslides at the Patanpunas stream, Taiwan, EGU General Assembly Conference Abstracts 18, 2361, Vienna, Austria.
26. Wong, PS, Lin, ML (2016) preliminary study on surface ground deformation near shallow foundation induced by strike-slip faulting, EGU General Assembly Conference Abstracts 18, 6968, Vienna, Austria.
27. 陳大均、翁孟嘉、黃文昭、羅佳明、林銘郎 (2016) 順向坡體重力變形與坡頂沉陷量之關係研究-以物理模型試驗探討, 2016 岩盤工程研討會, 高雄, 2016/11/24-25, 138-147。
28. 林錫宏、林銘郎、紀宗吉、劉桓吉、呂家豪、蘇泰維 (2016) 利用孔內探測技術探討順向坡的岩體滑動變形之研究, 2016 岩盤工程研討會, 高雄, 2016/11/24-25, 245-253。
29. 彭厚仁、林銘郎、黃韋凱、林偉雄、林錫宏、詹佩臻、李健宏、林承翰、莊心凱、翁正學 (2016) 不同尺度山崩潛感圖製作方法之研究, 2016 岩盤工程研討會, 高雄, 2016/11/24-25, 274-283。
30. 翁培軒、林銘郎、吳亮均 (2016) 平移斷層錯動引致凝聚性覆土地表變形及淺基礎變位特性, 2016 岩盤工程研討會, 高雄, 2016/11/24-25, 505-514。(獲最佳論文獎)
31. Lo, C. M. , Huang , W. K., Lin, M.L. (2015) Earthquake-induced deep-seated landslide and landscape evolution process at Hungtsaiping, Nantou County, Taiwan. 6th International Conference on Earthquake Geotechnical Engineering 1-4, November 2015 Christchurch, New Zealand.
32. Chan, Pei-Chen, Wong, Pei-Syuan, Lin, Ming-Lang (2015) Progressive Development of Riedel-Shear on Overburden Soil by Strike-Slip Faulting: Insights from Analogue Model,

European Geosciences Union, General Assembly 2015, Vol. 17, EGU2015 -8336-2, Vienna, Austria.

33. Lyu, Jhen-Yi, Chang, Yu-Yi, Lee, Chung-Jung, Lin, Ming-Lang (2015) Evolution of Ground Deformation Zone on Normal Fault Using Distinct Element Method and Centrifuge Modeling, European Geosciences Union, General Assembly 2015, Vol. 17, EGU2015 -2943-3, Vienna, Austria.
34. Yeh, Chih-Hsiang, Lin, Ming-Lang, Chan, Yu-Chang, Chang, Kuo-Jen, and Hsieh, Yu-Chung (2015) Terrane daylight mapping on large dip-slope terrain based on high-resolution DTM and semi-automatic geoprocessing processes, European Geosciences Union, General Assembly 2015, Vol. 17, EGU2015 -4406, Vienna, Austria.
35. Che-Ming Yang, Hui-Yun Cheng, Chia-Che Tsao, Wen-Jie Wu, Jia-Jyun Dong, Chyi-Tyi Lee, Ming-Lang Lin, Wei-Fong Zhang, Xiang-Jun Pei, Gong-Hui Wang, Run-Qiu Huang (2015) The kinematics and initiation mechanisms of the earthquake-triggered Daguanbao landslide, European Geosciences Union, General Assembly 2015, Vol. 17, EGU2015 -13014-1, Vienna, Austria.
36. 林錫宏、林銘郎、紀宗吉、劉桓吉、呂家豪（2015）層間剪裂特性對順向坡的邊坡穩定影響研究。第十六屆大地工程學術研究討論會論文集(Geotech2013)，高雄，台灣，B17 (榮獲優良論文)。

專書、技術報告等

- 1 林銘郎 (2019) 跨越活動斷層橋梁基礎互制行為研究(106-2221-E-002-085-MY2)
期末報告
- 2 林銘郎 (2019) 整合不同調查尺度之岩坡破壞潛勢區評估、分析及監測研究—子計畫：不連續面位態及延續性對岩坡崩塌及滑動機制之影響 (II)(107-2625-M-002-018-) 期末報告

卿建業 教授 Jianye Ching

Professor

學歷/ 美國加州大學柏克萊分校博士

Ph.D. in Civil Engineering, U. C. Berkeley (UCB)

專長/ 大地工程中不確定性量化分析

期刊論文 (Journal Paper)

corresponding author

1. Hu, Y.G. and Ching, J.✉ (2015). Impact of spatial variability in soil shear strength on active lateral forces, *Structural Safety*, 52, 121-131. (SCI)
2. Ching, J.✉ and Phoon, K.K. (2015). Reducing the transformation uncertainty for the mobilized undrained shear strength of clays, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 141(2), 04014103. (SCI)
3. Wu, S.H., Ching, J.✉, and Ou, C.Y. (2015). Simplified reliability-based design of wall displacements for excavations in soft clay considering cross walls, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 141(3), 06014017. (SCI)
4. Ching, J.✉, Phoon, K.K., and Yang, J.J. (2015). Role of redundancy in simplified geotechnical reliability-based design - a quantile value method perspective, *Structural Safety*, 55, 37-48. (SCI)
5. Hu, Y.G. and Ching, J.✉ (2015). A new procedure for simulating active lateral force in spatially variable clay modeled by anisotropic random field, *Journal of Mechanics*, 31(4), 381-390. (SCI)
6. Ching, J.✉, Wang, J.S., Juang, C.H., and Ku, C.S. (2015). CPT-based stratigraphic profiling using the wavelet transform modulus maxima, *Canadian Geotechnical Journal*, 52(12), 1993-2007. (SCI)
7. Ching, J.✉ and Wang, J.S. (2016). Application of the transitional Markov chain Monte Carlo to probabilistic site characterization, *Engineering Geology*, 203, 151-167. (SCI)
8. Ching, J.✉, Wu, S.H., and Phoon, K.K. (2016). Statistical characterization of random field parameters using frequentist and Bayesian approaches, *Canadian Geotechnical Journal*, 53(2), 285-298. (SCI)
9. Ching, J.✉, Hu, Y.G., and Phoon, K.K. (2016). On characterizing spatially variable soil shear strength using spatial average, *Probabilistic Engineering Mechanics*, 45, 31-43. (SCI)
10. Ching, J.✉, Tong, X.W., and Hu, Y.G. (2016). Effective Young's modulus for a spatially variable elementary soil mass subjected to a simple stress state, *Georisk*, 10(1), 11-26. (ESCI)
11. Ching, J.✉, Lee, S.W., and Phoon, K.K. (2016). Undrained strength for a 3D spatially variable clay column subjected to compression or shear, *Probabilistic Engineering Mechanics*, 45, 127-139. (SCI)
12. Ching, J.✉ and S.P. Sung (2016). Simulating a curve average in a stationary normal random field using Fourier series method, *Journal of GeoEngineering*, 11(1), 33-43. (EI)

13. Gong, W.✉, Juang, C.H., Martin, J.R., and Ching, J. (2016). New sampling method and procedures for estimating failure probability, ASCE Journal of Engineering Mechanics, 142(4), 04015107. (SCI)
14. Ching, J.✉, Phoon, K.K., and Wu, S.H. (2016). Impact of statistical uncertainty on geotechnical reliability estimation, ASCE Journal of Engineering Mechanics, 142(6), 04016027. (SCI)
15. Phoon, K.K.✉, Retief, J.V., Ching, J., Dithinde, M., Schreckendiek, T., Wang, Y., and Zhang, L. (2016). Some observations on ISO2394:2015 Annex D (Reliability of Geotechnical Structures), Structural Safety, 62, 24-33. (SCI)
16. Ching, J.✉, Phoon, K.K., and Li, D.Q. (2016). Robust estimation of correlation coefficients among soil parameters under the multivariate normal framework, Structural Safety, 63, 21-32. (SCI)
17. Ching, J.✉ and Hu, Y.G. (2016). Effect of element size in random field finite element simulation on effective Young's modulus, Mathematical Problems in Engineering, Volume 2016, Article ID 8756271. (SCI)
18. Chen, J.C.✉, Yang, J., and Ching, J. (2016). Estimating peak flow-discharge during extreme rainfall events for the Gao-Ping river, Taiwan. International Journal of Safety and Security Engineering, 6(3), 663-673. (EI)
19. Ching, J.✉, Wu, T.J., and Phoon, K.K. (2016). Spatial correlation for transformation uncertainty and its applications, Georisk, 10(4), 294-311. (ESCI)
20. Ching, J.✉, Phoon, K.K., and Pan, Y.K. (2017). On characterizing spatially variable soil Young's modulus using spatial average, Structural Safety, 66, 106-117. (SCI)
21. Ching, J.✉, Lin, G.H., Chen, J.R., and Phoon, K.K. (2017). Transformation models for effective friction angle and relative density calibrated based on a multivariate database of coarse-grained soils, Canadian Geotechnical Journal, 54(4), 481-501. (SCI)
22. Ching, J.✉ and Phoon, K.K. (2017). Characterizing uncertain site-specific trend function by sparse Bayesian learning, ASCE Journal of Engineering Mechanics, 143(7), 04017028. (SCI)
23. Ching, J.✉, Phoon, K.K., and Sung, S.P. (2017). Worst case scale of fluctuation in basal heave analysis involving spatially variable clays, Structural Safety, 68, 28-42. (SCI)
24. Ching, J.✉ and Wang, J.S. (2017). Discussion: Transitional Markov Chain Monte Carlo: Observations and Improvements, ASCE Journal of Engineering Mechanics, 143(9), 07017001. (SCI)
25. Ching, J.✉, Phoon, K.K., Beck, J.L., and Huang, Y. (2017). Identifiability of geotechnical site-specific trend functions, ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 3(4), 04017021. (ESCI)
26. Ching, J.✉ and Wu, T.J. (2017). Probabilistic transformation model for preconsolidation stress based on clay index properties, Engineering Geology, 226, 33-43. (SCI)
27. Ching, J.✉, Lin, G.H., Phoon, K.K., and Chen, J.R. (2017). Correlations among some parameters of coarse-grained soils – the multivariate probability distribution model, Canadian Geotechnical Journal, 54(9), 1203-1220. (SCI)
28. Ching, J.✉, Hu, Y.G, and Phoon, K.K. (2018). Effective Young's modulus of a spatially variable soil mass under a footing. Structural Safety, 73, 99-113. (SCI)
29. Ching, J.✉ (2018). What does the soil parameter estimated from a transformation model really mean? Journal of GeoEngineering, 13(3), 105-113. (EI)
30. Ching, J.✉, Wu, T.J., Stuedlein, A.W., and Bong, T. (2018). Estimating horizontal scale of fluctuation with limited CPT soundings. Geoscience Frontiers, 9, 1597-1608. (SCI)

31. Ching, J.✉, Li, K.H., Phoon, K.K., and Weng, M.C. (2018). Generic transformation models for some intact rock properties. Canadian Geotechnical Journal, 55(12), 1702-1741. (SCI)
32. Tabarroki, M. and Ching, J.✉ (2019). Discretization error in random finite element method for spatially variable undrained shear strength, Computers and Geotechnics, 105, 183-194. (SCI)
33. Ching, J.✉ and Phoon, K.K. (2019). Impact of auto-correlation function model on the probability of failure. ASCE Journal of Engineering Mechanics, 145(1), 04018123. (SCI)
34. Ching, J.✉ and Phoon, K.K. (2019). Constructing site-specific multivariate probabilistic distribution model by Bayesian machine learning, ASCE Journal of Engineering Mechanics, 145(1), 04018126. (SCI)
35. Yang, Z.Y. and Ching, J.✉ (2019). A novel simplified geotechnical reliability analysis method, Applied Mathematical Modeling, 74, 337-349. (SCI)
36. Ching, J.✉, Phoon, K.K., Stuedlein, A.W., and Jaksa, M. (2019). Identification of sample path smoothness in soil spatial variability. Structural Safety, 81, 101870. (SCI)
37. Ching, J.✉, Phoon, K.K., Li, K.H., and Weng, M.C. (2019). Multivariate probability distribution for some intact rock properties, Canadian Geotechnical Journal, 56(8), 1080-1097. (SCI)

研討會論文 (Conference Paper)

1. Phoon, K.K. and Ching, J. (2015). Is there anything better than LRFD for simplified geotechnical RBD? ISGSR 2015. (Wilson Tang Lecture)
2. Ching, J., Wu, S.H., and Phoon, K.K. (2015). Quantifying statistical uncertainty in site investigation. ISGSR 2015.
3. Hu, Y.G., Ching, J., and Phoon, K.K. (2015). Can the effect of shear strength spatial variability be summarized as the pure spatial average? 15 ARC.
4. Ching, J., Hu, Y.G., and Phoon, K.K. (2015). On the use of spatially averaged shear strength for the bearing capacity of a shallow foundation. ICASP 12.
5. Ching, J. and Pan, Y.K. (2015). First two moments of effective Young's modulus for a three-dimensional spatially variable soil mass, 2015 SRES.
6. Ching, J., Wang, J.S., and Phoon, K.K. (2016). Consistency of maximum likelihood estimates for random field parameters. APSSRA 2016.
7. Ching, J., Pan, Y.K., and Phoon, K.K. (2016). A unified spatial averaging model for effective Young's modulus of a three-dimensional spatially variable elementary soil mass. APSSRA 2016.
8. Ching, J. and Hu, Y.G. (2017). Effective Young's modulus for a footing on a spatially variable soil mass. Geo-Risk 2017/6th ISGSR.
9. Ching, J. and Phoon, K.K. (2017). Characterizing unknown trend using sparse Bayesian learning. Geo-Risk 2017/6th ISGSR.
10. Ching, J., Hu, Y.G., and Tabarroki, M. (2017). Mobilization of spatially variable shear strength. ICOSSAR 2017.
11. Ching, J. (2017). Construction of site-specific probabilistic transformation model for geotechnical design. Int. Symp. on Life-cycle Engineering and Sustainability Infrastructure. (keynote)
12. Phoon, K.K. and Ching, J. (2017). Homogenization of shear strength and modulus in spatially variable soils. IACMAG 2017. (invited lecture)

13. Phoon, K.K. and Ching, J. (2017). Better correlations for geotechnical design. GeoSS 10th Anniversary Conference. (State-of-the-Practice Lecture)
14. Ching, J. and Phoon, K.K. (2018). Bayesian data mining for a generic geotechnical database. 6 ISRERM. (keynote lecture)
15. Ching, J. and Phoon, K.K. (2018). Constructing multivariate probability distribution for soil properties based on site-specific data. 6 ISRERM.
16. Ching, J. and Phoon, K.K. (2018). Mobilized Young's modulus of a footing. 6 ISRERM.
17. Ching, J. and Phoon, K.K. (2018). Impact of sample path smoothness of random field on geotechnical reliability. 5th National Symposium on Engineering Risk & Insurance Research. (keynote lecture)
18. Ching, J. and Phoon, K.K. (2019). Making use of a generic geotechnical database for site-specific purposes. 13th Chinese National Conference on Soil Mechanics and Geotechnical Engineering. (invited lecture) 天津
19. Ching, J. and Phoon, K.K. (2019). Role of generic soil database in site-specific soil property estimation. 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering. (keynote lecture) 台北
20. Phoon, K.K. and Ching, J. (2019). Managing uncertain ground truth using Bayesian machine learning. 29th European Safety and Reliability Conference. (keynote lecture) 德國
21. Phoon, K.K. and Ching, J. (2019). The “site challenge” in geotechnical engineering. 13th International Conference on Applications of Statistics and Probability in Civil Engineering. (keynote lecture) 南韓
22. Phoon, K.K., Ching, J., and Wang, Y. (2019). Managing risk in geotechnical engineering – from data to digitalization. 7th International Symposium on Geotechnical Safety and Risk. (Suzanne Lacasse lecture) 台北
23. Ching, J. (2019). Constructing site-specific multivariate probability distribution model: Hybridization versus hierarchical Bayesian analysis. International Symposium on Reliability of Multi-disciplinary Engineering Systems under Uncertainty. (keynote lecture) 台北

專書及專書論文

1. Phoon, K.K. and Ching, J. (2015). Risk and Reliability in Geotechnical Engineering. Taylor & Francis.
2. Ching, J. and K.K. Phoon (2015). Constructing multivariate distributions for soil parameters. Chap. 1 in Risk and Reliability in Geotechnical Engineering (Eds.: K.K. Phoon and J. Ching). Taylor & Francis.
3. Hu, Y.G., Ching, J. , and K.K. Phoon (2016). Can a spatially variable field be converted into a homogeneous spatial average over an influence zone? GSP in memory of the late Professor Wilson H. Tang.
4. Phoon, K.K., Prakoso, W.A., Wang, Y., and Ching, J. (2016). Uncertainty representation of geotechnical design parameters. Chap 3 in Reliability of Geotechnical Structures in ISO2394, Eds. KK Phoon & JV Retief, CRC Press/Balkema.
5. Ching, J., Li, D.Q., and Phoon, K.K. (2016). Statistical characterization of multivariate geotechnical data. Chap 4 in Reliability of Geotechnical Structures in ISO2394, Eds. KK Phoon & JV Retief, CRC Press/Balkema.

6. Dithinde, M., Phoon, K.K., Ching, J., Zhang, L.M., and Retief, J.V. (2016). Statistical Characterisation of Model Uncertainty. Chap 5 in Reliability of Geotechnical Structures in ISO2394, Eds. KK Phoon & JV Retief, CRC Press/Balkema.
7. Phoon, K.K. and Ching, J. (2016). Semi-probabilistic reliability-based design. Chap 6 in Reliability of Geotechnical Structures in ISO2394, Eds. KK Phoon & JV Retief, CRC Press/Balkema.
8. Ching, J., Li, D. Q. & Zhang, J. (Eds) (2019). Proceedings, 7th International Symposium on Geotechnical Safety and Risk, Research Publishing, 11-13 December 2019, Taipei, Taiwan, 899pp.

葛宇甯 教授 Ge, Yu-Ning (Louis)

Professor

學歷/ 美國科羅拉多大學(Boulder 分校)土木工程博士

Ph.D.in Civil Engineering, Univ. of Colorado at Boulder

專長/ 土壤力學實驗；土壤行為；組成律模式

Laboratory Soil Testing; Soil Behavior; Constitutive Modeling

(A) 期刊論文

1. Hwang, Y.W., Chiou, J.S., and Ge, L. (2019) Application of system identification for dynamic properties of rocking foundations, *Journal of GeoEngineering*, 14(3), 167-178. (EI)
2. Jhuo, Y.-S., Guan Y., Ge*, L., Xia, Z. and Kang, X. (2019) Assessment of direct tension tests on compacted sand-clay mixtures, *Journal of Materials in Civil Engineering*, 31(10): 04019236. (SCI)
3. Kang, X., Xia, Z., Chen, R., Ge, L., and Liu, X. (2019) The critical state and steady state of sands: a literature review, *Marine Georesources & Geotechnology*, 37(9), 1105-1118. (SCI)
4. Ge, L., Hwang, Y.W., Sun, H., He, G.D., Chen, R., and Kang, X. (2019) Effective tensile strength of lightly cemented sand, *Journal of Materials in Civil Engineering*, 31(1): 04018350. (SCI)
5. Ge, L., Wang, C.C, Hung, C.W., Liao, W.C., and Zhao, H. (2018) Assessment of strength development of slag cement stabilized kaolinite, *Construction and Building Materials*, 184, 492-501. (SCI)
6. Lu, C.W., Ge, L., Chu, M.C., and Chin, C.T. (2018) Liquefaction-induced settlement of structures on shallow foundation, *Geotechnical Engineering Journal of the SEAGS & AGSSEA*, 49(2), 138-141. (EI)
7. Liu, P., Wang, S., Ge, L., Thewes, M., Yang, J. and Xia, Y. (2018) Changes of Atterberg limits and electrochemical behaviors of clays with dispersants as conditioning agents for EPB shield tunnelling, *Tunnelling and Underground Space Technology*, 73, 244-251. (SCI)
8. Hsiung B.C.B., Yang, K.H., Aila, W., and Ge, L. (2018) Three-dimensional effects of a deep excavation on wall deflections in central Jakarta, *Tunnelling and Underground Space Technology*, 72, 84-96. (SCI)
9. Ueng, T.S., Wang, Z.F., Chu, M.C., and Ge, L. (2017) Laboratory tests for permeability of sand during liquefaction, *Soil Dynamics and Earthquake Engineering*, 100, 249-256. (SCI)

10. Hsieh, H.-S., Huang, Y.-H., Hsu, W.-T., and Ge, L. (2017). On the system stiffness of deep excavation in soft clay, *Journal of GeoEngineering*, 12(1), 21-34. (EI)
11. Onyejekwe, S., Kang, X., and Ge, L. (2016). Evaluation of the scale of fluctuation of geotechnical parameters by autocorrelation function and semivariogram function, *Engineering Geology*, 214, 43-49. (SCI)
12. Chang, C.S., Wang, J.-Y., and Ge, L. (2016). Maximum and minimum void ratios for sand-silt mixtures, *Engineering Geology*, 211(23), 7-18. (SCI)
13. Kang, X., Ge, L., and Liao, W.-C. (2016). Cement hydration based micromechanics modeling of the time-dependent small-strain stiffness of fly ash stabilized soils, *International Journal of Geomechanics*, 16(3), 04015071 (SCI)
14. Kang, X., Ge, L., Chang, K.-T., and Kwok, A.O.L. (2016). Strain-controlled cyclic simple shear tests on sand with radial strain measurements, *Journal of Materials in Civil Engineering*, 28(4), 04015169. (SCI)
15. Ni, J.C., Cheng, W.-C., and Ge, L. (2016). Assessment of concrete maturity and overturning mechanism of primary diaphragm walls in very soft clay during cold winter, *KSCE Journal of Civil Engineering*, 20(4), 1314-1322. (SCI)
16. Kang, X., Ge, L., Kang, Gi-Chun, and Mathews, C. (2015). Laboratory investigation on the strength, stiffness, and thermal conductivity of fly ash and lime kiln dust stabilized clay subgrade materials, *Road Materials and Pavement Design*, 16(4), 928-945. (SCI)
17. Kang, X., Cheng, Y., and Ge, L. (2015). Radial strain behaviors in direct simple shear and its stress state interpretation, *Journal of Testing and Evaluation*, 43(6). (SCI)
18. Chang, K.-T., Kang, Y.-M., Ge, L., and Cheng, M.-C. (2015) Mechanical properties of gravel deposits evaluated by non-conventional methods, *Journal of Materials in Civil Engineering.*, 27(11), 04015032. (SCI)
19. Kang, X. and Ge, L. (2015). Enhanced series-parallel model for estimating the time-dependent thermal conductivity of fly ash soil mixtures, *Granular Matter*, 17(5), 579-592. (SCI)
20. Chang, C.S., Wang, J.-Y., and Ge, L. (2015). Modeling of minimum void ratio for sand-silt mixtures, *Engineering Geology*, 196, 293-304. (SCI)
21. Onyejekwe, S., Kang, X., and Ge, L. (2015). Assessment of empirical equations for compression index of fine- grained soils in Missouri, *Bulletin of Engineering Geology and the Environment*, 74(3), 705-716. (SCI)
22. Kang, X., Kang, G.-C., Chang, K.-T., and Ge, L. (2015) Chemically Stabilized Soft Clays for Road Base Construction, *Journal of Materials in Civil Engineering.*, 27(7), 04014199. (SCI)
23. Chang, K.-T., Ge, L., and Lin, H.-H. (2015). Slope creep behavior: observations and simulations, *Environmental Earth Sciences*, 73(1), 275-287. (SCI)

(B) 研討會論文集

1. Lin, Y.H., Yeh, Y.H., Jhuo, Y.S., and Ge, L. (2019) Effects of fines content on the mechanical properties of binary mixtures, the 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, October 24-26, 2019.
2. Yang, Y.H., Li, Y.R., Chu, M.C., and Ge, L. (2019) Investigation of post cyclic behavior of sands under the framework of binary packing, the 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, October 24-26, 2019.
3. Yang, M.Y. and Ge, L. (2019) Predicting natural frequency of piled raft foundation by finite element method, the 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, October 24-26, 2019.
4. Hsiao, C.H. and Ge, L. (2019) Stability analysis of unsaturated slope using random finite element and Monte-Carlo methods, the 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, October 24-26, 2019.
5. Yeh, F.H., Weng, M.C., and Ge, L. (2019) Implementation of a nonlinear elastoplastic model for tunneling in sandstone, the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, Taipei, Taiwan, October 14-18, 2019.
6. Ge, L., Cheng, W.C., and Lu, C.W. (2019) Developing a flow pump apparatus for soil-water characteristics curve measurement, 7th Asia-Pacific Conference on Unsaturated Soils (AP-UNSAT2019), Japanese Geotechnical Society Special Publication, EA25.
7. Cheng, W.C., Jin, X., Wang, L., Xue, Z.F., Ge, L., and Zhou A. (2019) Investigation into mechanical behaviour of loess-wheat straw mixtures, 7th Asia-Pacific Conference on Unsaturated Soils (AP-UNSAT2019), Japanese Geotechnical Society Special Publication, 418-423.
8. Yeh, F.H., Chuang, T.S., and Ge, L. (2018) Calibration of advanced constitutive model using an optimization method, the 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24, 2018.
9. Chu, M.C. and Ge, L. (2018) The effect of cyclic loading on monotonic stress-strain behaviour of saturated granular materials, the 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24, 2018.
10. Wang, Z.Y., Ge, L., Hsiung, B.C.B., and Hsieh, H.S. (2018). Effects of buttress wall and cross wall to the system stiffness of deep excavations in soft clay, the 20th Southeast Asian Geotechnical Conference & 3rd AGSSEA Conference, Jakarta, Indonesia, November 5-8, 2018.
11. Hung, C.W., Chen, Y.C., and Ge, L. (2018) Effects of curing time on dynamic properties and strength developments of slag cement stabilized clay. The Second Kazakhstan-Taiwan Geotechnical Seminar on TC 305 Geotechnical Infrastructure for Megacities and New Capitals, Astana and Almaty, Kazakhstan, August 3-6, 2018.
12. Cheng, W.C., Ni, J.C., and Ge, L. (2018). An alternative method for soil characterisation using pipejacking parameters and spoil characteristics, GeoShanghai 2018, Shanghai, China, May 27-30, 2018.
13. Wu, H.P., Hsieh, H.S., Ge, L., Hsiung, B.C.B., Hung, C., and Yang, K.H. (2017). Simplified approach to analyze diaphragm wall deflection considering

- buttress walls, the 2nd International Symposium on Asia Urban GeoEngineering, Changsha, China, November 25-26, 2017.
14. Yeh, F.H., Huang, C.J., Han, J.Y., and Ge, L. (2017). Modeling slope topography using unmanned aerial vehicle image technique, In: Proceedings of the Third International Conference on Sustainable Infrastructure and Built Environment, Bandung, Indonesia, September 26-27, 2017.
 15. Tsai, E., Ge, L., Ueng, T.S., and Kwok, O.L.A. (2017). Energy based pore water pressure formulation in a cyclic plasticity model for sand, In: Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering, Seoul, South Korea, September 17-22, 2017.
 16. Lu, C.W., Ge, L., Chu, M.C., and Chin, C.T. (2017). Liquefaction-induced settlement of structures on shallow foundation, In: Proceedings of the SEAGS 50th Anniversary Symposium, Thailand, September 14-15, 2017.
 17. Chen, Y.W., Chu, M.C., and Ge, L. (2017). Determination of drying and wetting soil water characteristic curves by flow pump technique, In: Proceedings of the 5th International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation, Taipei, September 12-13, 2017.
 18. Hsiung, B.C.B, Yang, K.H., Ge, L., Hung, C., and Yong, T.H. (2017). Deep excavation in Kaohsiung, Taiwan and Central Jakarta, Indonesia, Southeast Asian Conference and Exhibition in Tunnelling and Underground Space 2017 (SEACETUS2017) Subang Jaya, Malaysia 18-19 April 2017.
 19. Zhao, H., Yang, Y., Ge, L., and Deng, A. (2016). Influences of stiffness ratio, friction coefficient and strength ratio on the macro behavior of cemented sand based on DEM, the 7th International Conference on Discrete Element Methods, Dalian, China, August 1-4, 2016.
 20. Chu, M.C., Lu, C.W., and Ge, L. (2016). Estimating the settlement of structure with shallow foundation due to liquefaction, the 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 21. Wu, H.P. and Ge, L. (2016). Three-dimensional finite element analysis of a deep excavation, the 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 22. Chen, Y.W. and Ge, L. (2016). Use of flow pump method for soil permeability measurement, the 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 23. Tsai, E. and Ge, L. (2016). Calibration of a fuzzy set plasticity model for intact rock under monotonic loading, the 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 24. Yeh, F.-H., Ge, L. (2016). Implementation of membership function in a cyclic plasticity model for granular materials, the 7th Taiwan-Japan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall, September 22-23, 2016, Ping Tung, Taiwan.
 25. Hung, C.-W., and Ge, L. (2015). Effects of curing time and water content on strength properties of slag cement stabilized clay, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.

26. Chen, Y.C. and Ge, L. (2015). Effects of curing time on dynamic properties of slag cement stabilized clay, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.
27. Shang, T., Ge, L., and Ni, C.N. (2015). Equations used for predicting jacking force - slurry pressure balance method, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.
28. Huang, Y.W., Chiou, J.S., and Ge, L. (2015). Rocking behavior of column-footing model under shaking table testing, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.
29. Chang, C.P. and Ge, L. (2015). Three-dimensional finite element analysis of deep excavations, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.
30. Tonglian, Z.Q. and Ge, L. (2015). Tensile strength of compacted sand-clay mixture, The Twenty-Eight KKHTCNN Symposium on Civil Engineering November 16-18, 2015, Bangkok, Thailand.
31. Ueng, T.S., Wang, Z.F., and Ge, L. (2015). Tests of permeability in saturated sand during liquefaction, 6th International Conference on Earthquake Geotechnical Engineering, Christchurch, New Zealand, November, 1-4, 2015.

(C) 專書論文

1. Lee, W.F., Chen, C.C, Chang, M.H., and Ge, L.Y.N. (2015). A Case Study on Silty Sand Liquefaction - 2010 Hsin Hwa Liquefaction in Taiwan, Book Chapter in: Perspectives on Earthquake Geotechnical Engineering, Geotechnical, Geological and Earthquake Engineering Series 37, Springer, 391-414.

楊國鑫 教授 Kuo-Hsin Yang

Professor

學歷/ 美國德州大學奧斯汀校區博士

Ph.D., The University of Texas at Austin

專長/ 邊坡穩定與擋土工程、地工合成材應用、大地工程數值模擬、環境地工與防災工程

Journal Publications

1. Yang, K-H, Chiang, J^⑨, Lai, Z. W.^⑨, Lin, M.L. (2019) “Performance of Geosynthetic- Reinforced Soil Walls across a Normal Fault”, *Geotextiles and Geomembranes*, accept. [SCI]
2. Nguyen, M.D.^⑨, Yang, K-H, and Yalew, W. M.^⑨ (2019) “Compaction Behavior of Nonwoven Geotextile-Reinforced Clay”, *Geosynthetics International*. [SCI]
3. Hung, W-Y, Yang, K-H, Nguyen, T.S.^⑨, and Pham, T.N.P.^⑨ (2019) “Performance of Geosynthetic-Reinforced Soil Walls at Failure”, *Journal of GeoEngineering*. [EI]
4. Yang, K-H, Wei, S-B, Adilehou, W. M.^⑨, and Ho, H-C, (2019) “Fiber-Reinforced Internally Unstable Soil against Suffusion Failure”, *Construction and Building Materials*, 222, 458-473. [MOST105-2221-E-011-038] [SCI]
5. Yang, K-H, Nguyen, T.S.^⑨, Lee, Y-H^⑨, and Leshchinsky, B, (2019) “Performance and Design of Geosynthetic-Reinforced Soil Slopes against Rainfall: Considering Regional Hydrological Conditions”, *Geosynthetics International*, 26(5), 451-473. [MOST107-2628- E-002-003-MY3] [SCI]
6. Yang, K-H, Thuo, J.N. ^⑨, Chen, J-W^⑨, and Liu, C-N, (2019) “Failure Investigation of a Geosynthetic-Reinforced Soil Slope subject to Rainfall”, *Geosynthetics International*, 26(1), 42-65. [MOST107-2628-E-002-003 -MY3] [SCI]
7. Hung, C., Pang, X., Lin, G-W, Yang, K-H, and Uzuoka R. (2019) “The Role and Impact of Geofluids in Geohazards”, *Geofluids*, 2019, 7217489 [SCI]
8. Yang, K-H, Thuo J.N.^⑨, Huynh, V.D.A.^⑨, Nguyen T.S.^⑨ and Portelinha, F.H.M, (2018) “Numerical Evaluation of Reinforced Slopes with Various Backfill-Reinforcement- Drainage Systems subject to Rainfall Infiltration”, *Computers and Geotechnics*, 96, 25-39. [NSC102-2221-E-011-057- MY3] [SCI]
9. Hsiung, B-C, Yang, K-H, Aila, W. ^⑨ and Ge, L., (2018) “Evaluation of Wall Deflections of a Deep Excavation in Central Jakarta using Three-Dimensional Modeling”, *Tunnelling and Underground Space Technology*, 72, 84-96. [SCI]
10. Yang, K-H, Nguyen T.S.^⑨ and Thuo J.N.^⑨, (2018) “Discussion of Influence Factors involving Rainfall-Induced Shallow Slope Failure: Numerical Study”, *International Journal of Geomechanics*, ASCE, 18(4), 07018003. [SCI]
11. Yang, K-H, and Wang, J-Y^⑨, (2018) “Closure to Discussion of Experiment and Statistical Assessment on Piping Failure of Soils with Different Gradations”, *Marine Georesources and Geotechnology*, 36(3), 376-378. [NSC100-2221-E-011-115] [SCI]
12. Yang, K-H, Adilehou, W. M.^⑨, Jian, S-T.^⑨ and Wei, S-B.^⑨, (2017) “Hydraulic Response of Fiber-Reinforced Sand subject to Seepage”, *Geosynthetics International*, 24(5), 491-507. [MOST105-2221-E-011-038] [SCI]
13. Yang, K-H, Uzuoka R., Thuo J.N.^⑨, Lin G-L^⑨, and Nakai T., (2017) “Coupled Hydro-Mechanical Analysis of Two Unstable Unsaturated Slopes subject to Rainfall Infiltration”, *Engineering Geology*, 216, 13-30. [SCI]

14. Yang, K-H[✉], and Wang, J-Y[◎], (2017) "Experiment and Statistical Assessment on Piping Failure of Soils with Different Gradations", *Marine Georesources and Geotechnology*, 35(4), 512-527. [NSC100-2221-E-011-115] [SCI]
15. 周瑞生、楊國鑫、林婕嫻[◎], (2016) “應用資料探勘技術暨啟發式演化組合模型預測離散纖維加勁土壤之剪力強度參數”, 中國土木水利工程學刊, 第 28 卷第 3 期, 205-218。[EI]
16. Hsiung, B-C, Yang, K-H, Aila, W. [◎] and Hung, C., (2016) “Three-Dimensional Effect of a Deep Excavation on Wall Deflections in Loose to Medium Dense Sands”, *Computers and Geotechnics*, 80, 138-151. [SCI]
17. Yang, K-H[✉], Wu, J.T.H., Chen, R-H, and Chen, Y-S[◎], (2016) “Lateral Bearing Capacity and Failure Mode of Geosynthetic-Reinforced Soil Barriers subject to Lateral Loadings”, *Geotextiles and Geomembranes*, 44, 799-812. [MOST104-2918-I-011-006] [SCI]
18. Yang, K-H[✉], Nguyen, M.D[◎], Yalew, W. M.[◎], Liu, C-N, and Gupta, R., (2016) “Behavior of Geotextile-Reinforced Clay under Consolidated-Undrained Tests: Reinterpretation of Porewater Pressure Parameters”, *Journal of GeoEngineering*, 11(2), 45-57. [NSC102-2221-E-011-057- MY3] [EI]
19. Tung, H., Chen H-Y, Hu, J-C, Chen, H., Yang, K-H, (2016) “Transient Deformation induced by Groundwater Change in Taipei Metropolitan Area revealed by High Resolution X-band SAR Interferometry”, *Tectonophysics*, 692(B), 265-277 [SCI]
20. Chou, J.S, Yang, K-H, and Lin J-Y.[◎] (2016) “Peak Shear Strength of Discrete Fiber-Reinforced Soils computed by Machine Learning and Metaensemble Methods”, *Journal of Computing in Civil Engineering*, ASCE, 30(6), 04016036. [SCI]
21. Yang, K-H[✉], Yalew, W. M.[◎] and Nguyen, M.D[◎], (2016) “Behavior of Geotextile- Reinforced Clay with a Coarse Material Sandwich Technique under Unconsolidated- Undrained Triaxial Compression”, *International Journal of Geomechanics*, ASCE, 16(3), 04015083. [MOST102-2221-E-011-057- MY3] [SCI]
22. Thuo, J.N.[◎], Yang, K-H[✉] and Huang, C-C, (2015) “Infiltration into Unsaturated Reinforced Slopes with Nonwoven Geotextile Drains sandwiched in Sand Layers”, *Geosynthetics International*, 22(6), 457-474. [MOST102-2221-E-011-057- MY3] [SCI]
23. Chou, J-S, Yang, K-H, and Ren, T-C[◎], (2015) “Ex-post Evaluation of Preparedness Education in Disaster Prevention, Mitigation and Response”, *International Journal of Disaster Risk Reduction*, 12, 188-201. [SCI]
24. Chou, J-S, Yang, K-H, Pampang J. P.[◎], and Pham, A.D., (2015) “Evolutionary Metaheuristic Intelligence to Simulate Tensile Loads in Reinforcement for Geosynthetic-Reinforced Soil Structures”, *Computers and Geotechnics*, 66, 1-15. [SCI]
25. 邱建國、楊國鑫、陳道平、蔡長銘、邱子熙,(2015)“臺北市企業防災推動機制研究”, 災害防救科技與管理學刊, 第 4 卷第 1 期 , 49-75 。*2015 Best Paper Award from this journal.

International Conference Publications

1. Nguyen, T.S.[◎], Yang, K-H, Hung, W-Y, and Pham, T.N.P.[◎], (2019) “Centrifuge Modeling of Geosynthetic-Reinforced Soil Walls at Failure”, *Proceedings of the 4th International Conference on Geotechnics for Sustainable Infrastructures Development, Geotec Hanoi 2019*, Hanoi, Vietnam, November 2019. [EI]
2. Yang, K-H[✉], Lai, Z. W.[◎], Chiang, J[◎], Lin, M.L., (2019) “Model Tests on Geosynthetic-Reinforced Soil Foundation subjected to Normal Faulting”, *Proceedings of the 8th Civil Engineering Conference in the Asian Region, CECAR8*, Tokyo, Japan, April 2019.
3. Lu, H.C.[◎], Gonzaga M.[◎], Tseng, T. L. and Yang, K-H, (2019) “Model Tests to Evaluate the Performance of Geosynthetic- Reinforced Soil Wall with Marginal Backfill subjected to Rainfall”, *Proceedings of the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 16ARC*, Taipei, Taiwan, October 2019. [EI]

4. Nguyen, T.S.^⑤, and Yang, K-H[✉], (2019) “Design of Geosynthetic-Reinforced Soil Structures against Rainfall considering Regional Hydrological Conditions”, *Proceedings of the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 16ARC*, Taipei, Taiwan, October 2019. [EI]
5. Muntohar, A.S., Fata, N., Jotisankasa, A., and Yang, K-H, (2019) “Suction Monitoring and Stability of the Volcanic-Residual Soil Slope during Rainfall”, *Proceedings of the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 16ARC*, Taipei, Taiwan, October 2019. [EI]
6. Rus, T.Y.^⑥, Hsiung, B-C, Yang, K-H, (2018) “3D Finite Element Analysis of Deep Excavation in Central Jakarta using Total and Effective Shear Strength Properties”, *Proceedings of the 20th Southeast Asian Geotechnical Conference and the 3rd Inaugural AGSSEA Conference, 20SEAGC/3AGSSEA*, Jakarta, Indonesia, November 2018.
7. Yang, K-H[✉], Thuo, J.N. and Liu, C. N., (2018) “Coupled Hydro-mechanical Analysis of a Multi-tier Geosynthetic-Reinforced Soil Slope subject to Rainfall Infiltration”, *The 11th International Conference on Geosynthetics, 11ICG*, Seoul, Korea, September 2018. [EI]
8. Nguyen, T.S., and Yang, K-H, (2018) “Geosynthetic-Reinforced Soil Slopes with Different Backfills and Reinforcements subjected to Rainfall Infiltration”, *The 11th International Conference on Geosynthetics, 11ICG*, Seoul, Korea, September 2018. [EI]
9. Uzuoka, R., Hizen, D., Nakai, Y., Matsumaru, T., and Yang, K-H, (2018) “Seismic Behavior of Unsaturated Embankment after Rainfall”, *Proceedings of the 7th International Conference on Unsaturated Soils, UNSAT2018*, Hong Kong, China, August 2018.
10. Yang, K-H[✉], Adilehou, W. M.^⑦, Jian, S-T.^⑧, Hsiung, B-C (2017) “Permeability and Critical Hydraulic Gradient of Fiber-Reinforced Sand subject to Seepage”, *Proceedings of the 2nd International Symposium on Asia Urban GeoEngineering (Springer Series in Geomechanics and Geoengineering)*, 2nd ISAUG, Changsha, China, November 2017. [EI]
11. Hung, C., Hsiung, B-C, Yang, K-H, Ge, L. (2017) “Effect of Foreshocks of the 2016 Kumamoto Earthquakes on the Aso-Bridge Slope”, *Proceedings of the 2nd International Symposium on Asia Urban GeoEngineering, (Springer Series in Geomechanics and Geoengineering)*, 2nd ISAUG, Changsha, China, November 2017. [EI]
12. Wu, H-P., Hsieh, H-S, Ge, L, Hsiung B-C, Hung, C, and Yang, K-H (2017) “Simplified Approach to Analyze Diaphragm Wall Deflection Considering Buttress Walls”, *Proceedings of the 2nd International Symposium on Asia Urban GeoEngineering, (Springer Series in Geomechanics and Geoengineering)*, 2nd ISAUG, Changsha, China, November 2017. [EI]
13. Hsiung, B-C., and Yang, K-H, (2017) “Displacement of Ground and Structure induced by Deep Excavations in Loose to Medium Dense Sand”, *Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering, ICSMGE 2017*, Seoul, South Korea, September 2017. [EI]
14. Yang, K-H[✉], Thuo, J.N.^⑨, Chen, J-W^⑩, and Liu, C-N, (2017) “Failure Investigation of a Multi-tier Geosynthetic-Reinforced Soil Slope with Marginal Backfill subject to Heavy Rainfall”, *The 5th Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation, 5th GEDMAR*, Taipei, Taiwan, September 2017.
15. Hsiung, B-C., Yang, K-H, Ge, L., Hung. C., and Yong, T.H. (2017) “Deep Excavations in Kaohsiung, Taiwan and Jakarta, Indonesia”, *Proceedings of Southeast Asian Conference and Exhibition in Tunneling and Underground Space, SEACETUS 2017*, Subang Jaya, Malaysia, April 2017.
16. Thuo, J.N.^⑪, Huynh, V.D.A.^⑫, Yang, K-H and Portelinha, F.H.M, (2016) “Behavior of Geotextile-and Geogrid-Reinforced Soil Slopes with Various Backfills subject to Rainfalls”, *Proceedings of the 6th Asian Regional Conference on Geosynthetics, Geosynthetics Asia 2016*, Deli, India, November 2016. [EI]
17. Yang, K-H[✉], Liu, C-N, Thuo, J.N., and Kuo, C-J, (2016) “Failure Case Study of a Geosynthetic-Reinforced Soil Wall with Marginal Backfill subject to Rainfall Infiltration”, *Symposium for Assessment and Analysis of Large-scale Landslide, The 2nd Computational Mechanics Conference*

in Taiwan, ACMT 2016, Taipei, Taiwan, October 2016.

18. Huynh, V.D.A.[◎], Thuo, J.N.[◎], and Yang, K-H, (2016) "Effect of Sand Cushion Thickness on Improving the Stability of Geosynthetic-reinforced Soil Slopes subject to Rainfalls", *Proceedings of the 3rd International Conference on Geotechnics for Sustainable Infrastructure Development, Geotec Hanoi 2016*, Hanoi, Vietnam, November 2016.
19. Hsiung, B-C., Wu, W-M, Cheang W.L. and Yang, K-H, (2016) "Determination of Hardening Soil Model Parameters for Modeling Deep Excavations in Loose to Medium Dense Sand", *Proceedings of the 3rd International Conference on Geotechnics for Sustainable Infrastructure Development, Geotec Hanoi 2016*, Hanoi, Vietnam, November 2016.
20. Uzuoka R., Nakai T., Hizen, D., Yang, K-H, and Thuo J.N.[◎], (2016), "Effect of Rainfall Histories on Seismic Behavior of Embankment using Numerical Analyses", *International Workshop on Geotechnical Natural Hazards – The 7th Taiwan –Japan Joint Workshop on Hazards from Large Earthquake and Heavy Rainfall*, Pingtung, Taiwan, September 2016.
21. Yang, K-H[✉], Uzuoka R., Thuo J.N.[◎], and Nakai T. (2016), "Coupled Hydro-Mechanical Analysis of Rainfall Infiltration induced Slope Excessive Deformation", *International Workshop on Geotechnical Natural Hazards – The 7th Taiwan –Japan Joint Workshop on Hazards from Large Earthquake and Heavy Rainfall*, Pingtung, Taiwan, September 2016.
22. Aila, W. [◎], Hsiung, B-C, Yang, K-H[✉], Tsai, Y-Y, and Lin, Kuan-Hun, (2016) "Establishment of Geotechnical Properties and 3D Numerical Models for Deep Excavation in Central Jakarta", *Proceedings of the 19th Southeast Asian Geotechnical Conference and the 2nd Inaugural AGSSEA Conference, 19SEAGC/2AGSSEA*, Kuala Lumpur, Malaysia, May 2016.
23. Yang, K-H[✉], Wu, J.T.H., Chen, R-H, and Chen, Y-S[◎], (2015) "Numerical Study on Lateral Bearing Capacity and Failure Mode of Geosynthetic-Reinforced Soil Barriers", *Proceedings of the 15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 15ARC*, Fukuoka, Japan, November 2015. [EI]
24. 楊國鑫[✉]、吳宗欣、陳榮河、陳毅修[◎] (2015) "加勁擋土壁壘側向承載力與破壞機制之數值研究", *Proceedings of the 5th China Geosynthetic Conference on Soil Reinforcement*, 第五屆全國土工合成材料加筋土學術研討會, Chengdu China, May 2015 *Best Paper Award from this conference.

Domestic Conference Publications

1. 邱建國, 潘宗毅, 王靜婷, 鄭正奇, 楊國鑫, 陳沛煊, 涂瑜婷 (2019) "都會區社區型災害風險溝通案例分析-以臺北市大同區光能里為例", *Proceedings of Taiwan Risk Analysis Conference*, 臺灣風險分析研討會, January 2019.
2. 陳均維[◎], 楊國鑫, 黃奉琦 (2017) "改善多階加勁擋土結構受降雨入滲破壞之可行性分析", *Proceedings of 2017 Soil and Water Conservation Conference, 2017*, 水土保持研討會, December 2017
3. 郭哲睿[◎], 陳均維[◎], Thuo, J.N.[◎], 楊國鑫, 劉家男 (2017) "多階加勁邊坡受降雨入滲之破壞案例分析", *Proceedings of the 29th Armed Force Conference of Military Engineering, 2017*, 第 29 屆國軍軍事工程研討會, October 2017
4. 郭哲睿[◎], 陳均維[◎], Thuo, J.N.[◎], 楊國鑫[✉], 劉家男 (2017) "以低滲透性土壤為回填土之多階加勁邊坡受降雨作用之破壞案例分析", *Proceedings of the 17th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2017*, 第 17 屆臺灣大地工程研討會, ILan Taiwan, September 2017
5. 楊國鑫[✉], Thuo, J.N.[◎] (2015) "利用緩衝砂層降低不飽和黏土邊坡內土壤與不織布排水層間的毛細阻水效應", *Proceedings of the 16th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2015*, 第 16 屆臺灣大地工程研討會, Kaohsiung Taiwan, September 2015.
6. 周瑞生、楊國鑫、林婕嫻[◎] (2015) "應用資料探勘技術預測纖維加勁土壤之剪力強度參數", *Proceedings of the 16th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2015*, 第 16 屆臺灣大地工程研討會, Kaohsiung Taiwan, September 2015
7. 周瑞生、楊國鑫、林婕嫻[◎] (2015) "人工智慧暨其演化組合模式預測纖維加勁土壤之剪力強度參數", *Proceedings of the 19th Symposium on Construction Engineering and Management, SCEM 2015*, 第 19

Technical Books and Reports

1. 黃尹男、楊國鑫等 (2019)「臺北市災害防救深耕計畫(第三期第二年)」，臺北市政府消防局委託研究案期末報告,中華民國 108 年 12 月。
2. 潘宗毅、楊國鑫等 (2019)「108 年度臺北市山坡地住宅自主防災」，臺北市大地工程處委託研究案期末報告, 中華民國 108 年 12 月。
3. 黃尹男、楊國鑫等 (2018)「臺北市災害防救深耕計畫(第三期第一年)」，臺北市政府消防局委託研究案期末報告, 中華民國 107 年 12 月。
4. 呂良正、楊國鑫等 (2018)「人工擋土柱開挖施工安全改善實物及指引編撰」，行政院勞動部勞動及職業安全衛生研究所委託研究案期末報告, 中華民國 107 年 12 月。
5. 楊國鑫等 (2018)「107 年度臺北市山坡地住宅自主防災」，臺北市大地工程處委託研究案期末報告, 中華民國 107 年 12 月。
6. 楊國鑫 (2018)「纖維加勁土堤之物理模型試驗研究」，科技部專題研究計畫期末報告 MOST106-2221-E-011-046, 中華民國 107 年 9 月。
7. 劉家男、楊國鑫等 (2017)「106 年度臺北市山坡地住宅自主防災」，臺北市大地工程處委託研究案期末報告, 中華民國 106 年 12 月。
8. 葛宇甯、楊國鑫等 (2017)「邊坡防護警示柵欄工法之開發」，中華顧問工程司及托爾斯公司委託研究案期末報告, 中華民國 106 年 12 月。
9. 楊國鑫 (2017)「纖維加勁土壤之水力行為研究」，科技部專題研究計畫期末報告 MOST105-2221-E-011-038, 中華民國 106 年 9 月。
10. 劉家男、楊國鑫等 (2016)「105 年度臺北市山坡地住宅自主防災」，臺北市大地工程處委託研究案期末報告, 中華民國 105 年 12 月。
11. Yang, K-H and Uzuoka, R. (2016) “Numerical Analyses of Combined Geohazards induced Failures by Earthquake and Heavy Rainfall”, Final Report of *Collaboration Program between the National Taiwan University of Science and Technology and the University of Tokushima*, August 2016.
12. 楊國鑫 (2016)「利用薄砂層改善低滲透性勁土壤之透水與力學行為」，科技部優秀年輕學者研究計畫期末報告 NSC102-2221-E-011-057-MY3, 中華民國 105 年 9 月。
13. 楊國鑫 (2015)「水泥系處理劑(HSC301)阻水性能複校分析研究」，臺灣營建研究院委託研究案期末報告, 中華民國 104 年 12 月。

郭安妮 助理教授 On-Lei Annie Kwok

Assistant Professor

學歷/美國加州大學洛杉磯分校博士

Ph.D. in Civil & Envir. Engr., Univ. of California, Los Angeles

專長/ 大地地震工程包括土壤力學、地震波分析及特性描述、土壤對地震波的影響

Geotechnical earthquake engineering including soil dynamics, ground motion characterization and site response analysis

期刊論文 (Journal Paper)

1. OLA Kwok, JP Stewart, DY Kwak, and PL Sun (2018). Taiwan-Specific Model for VS30 Prediction Considering Between-Proxy Correlations. *Earthquake Spectra*, Vol 34, No 4, 1973-1993 本人為第一作者、通訊作者. (SCI)
2. CT Sun, OLA Kwok, PC Guan, WK Shih (2018). Using Reproducing Kernel Particle Method for Shallow Water Problems, *Journal of Marine Science and Technology*, Vol 26, No. 3 (SCI)
3. CT Sun, PC Guan, WK Shih, OLA Kwok (2018). The weighted reconstruction of reproducing kernel particle method for one-dimensional shock wave problems. *OCEAN ENGINEERING*, Vol 149, 325-340 (SCI).
4. PC Guan, OL Kwok, WC Yao, YF Chen, JS Li, YL Chen, LC Chen, HH Chou (2017, Nov). The Development of Transformation Interface Program Between AVEVA Marine Data Base and Finite Element Method. *Journal of Taiwan Society of Naval Architects and Marine Engineers*, 36 (4), 179-188. (EI)
5. X. Kang, L. Ge, K.T. Chang, A.O.L. Kwok (2016, Apr). Strain-Controlled Cyclic Simple Shear Tests on Sand with Radial Strain Measurements. *Journal of Materials in Civil Engineering*, 28 (4). (SCI)
6. O.L.A. Kwok, P.-C. Guan, W.-P. Cheng, C-T. Sun (2015). Semi-Lagrangian reproducing kernel particle method for slope stability analysis and post-failure simulation . *KSCE Journal of Civil Engineering*, Vol 19, Issue 1, 107-115. (SCI)

研討會論文 (Conference Paper)

1. OLA Kwok, PC Guan, CT Sun (2018, Jul). Numerical Investigation of Stability of Submarine Pipelines Subjected to Wave/Current-Induced Scour Using RKPM Method. 13TH World Congress on Computational Mechanics , New York, USA. 本人為第一作者、通訊作者.
2. AOL Kwok, YW Hwang, ML Lee (2018, Jun). Numerical Simulation of Site Effect Due to Inclined Bedrock on Seismic Ground Motion. 11th US National Conference on Earthquake Engineering, Los Angeles, USA. 本人為第一作者、通訊作者.
3. T. Kishida, V. Contreras, Y. Bozorgnia, N. A. Abrahamson, S. K. Ahdi, T. D. Ancheta, D. M.

- Boore, K. W. Campbell, B. Chiou, R. Darragh, N. Gregor, N. Kuehn, D. Y. Kwak, A. O. Kwok, P. Lin, H. Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, H. Si, W. J. Silva, J. P. Stewart, K. E. Wooddell, R. R. Youngs (2018, Jun). NGA-SUB Ground Motion Database. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
4. Y. Bozorgnia, T. Kishida, N.A. Abrahamson, S.K. Ahdi, T D. Ancheta, R.J. Archuleta, G. Atkinson, D. M. Boore, K. W. Campbell, B. Chiou, V. Contreras, R. Darragh, N. Gregor, Z. Gulerce, I.M. Idriss, C. Ji, R. Kamai, N. Kuehn, D. Y. Kwak, A. Kwok, P.S. Lin, H Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, G. Parker, H Si, W.J. Silva, J.P. Stewart, M. Walling, K. E. Wooddell, R. R. Youngs (2018, Jun). NGA-Subduction Research Program. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
 5. OLA Kwok, CY Lien (2017, Nov). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Penghu Calcareous Sand by Resonant Column Test. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.
 6. OLA Kwok, ML Lee, YW Huang, WA Chang (2017, Nov). Numerical Study of Ground Response of Sites with Inclined Bedrock. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.
 7. OLA Kwok, BH Ye, WA Chang (2017, Aug). A Study of Maximum Shear Modulus of Sands Containing Fines by Bender Element Tests. 第十七屆大地工程學術討論會, Yilan, Taiwan. 本人為第一作者、通訊作者.
 8. OLA Kwok, CH Hung, YT Lu (2017, Aug). Determination of Small-Strain Dynamic Shear Modulus and Damping Ratio of Laterite from Linkou Tableland by Resonant Column Tests. 第十七屆大地工程學術討論會, Yilan, Taiwan. 本人為第一作者、通訊作者.
 9. OLA Kwok, PC Guan, CT Sun (2017, Jul). Modeling of Flow and Scouring under Pipelines by Reproducing Kernel Particle Method. 14th U.S. National Congress on Computational Mechanics , Montreal, Canada. 本人為第一作者、通訊作者.
 10. PC Guan, OLA Kwok, CT Sun (2017, May). Keynote Speech: Development of fluid-solid interacting reproducing kernel particle method for the modeling of flow and scouring under pipelines.. Engineering Mechanics Institute Conference, Taiwan.
 11. SK Ahdi, TD Ancheta, V Contreras, T Kishida, DY Kwak, OLA Kwok, GA Parker, Y Bozorgnia, JP Stewart (2017, Jan). NGA-Subduction site database. 16WCEE World Conference Earthquake Engineering, Santiago, Chile.
 12. T. Kishida, Y. Bozorgnia, N. Abrahamson, S. Ahdi, T. Ancheta, D. Boore, K. Campbell, B. Chiou, R. Darragh, N. Gregor, R. Kamai, D. Kwak, OLA. Kwok, P. Lin, H. Magistrale, S. Midorikawa, G. Parker, H. Si, W. Silva, J. Stewart, C. Tsai, K. Wooddell, R. Youngs (2017, Jan). Development of the NGA-Subduction Database. 16th World Conference on Earthquake, Santiago, Chile.
 13. O.L.A Kwok, B.-H. Ye (2016, Dec). A study of dynamic properties of sands containing fines. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong. 本人為第一作者、通訊作者.
 14. O.L.A. Kwok, C.-H. Hung (2016, Dec). Determination of small-strain dynamic shear modulus and damping ratio of laterite in Linkou Tableland by resonant column test. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong. 本人為第一作者、通訊作者.
 15. O.L.A. Kwok, Y.-C, Li (2016, Sep). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Calcareous Sand by Resonant Column Tests. 7th Japan-Taiwan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall , PingTung, Taiwan. 本人為第一作者、通訊作者.
 16. O.L.A Kwok, B.-J. Chen (2016, Aug). Evaluation of Site Effect at Surface-Downhole Ground Motion Stations in Taiwan by Nonlinear Ground Response Analyses. 5th IASPEI / IAEE

- International Symposium: Effects of Surface Geology on Seismic Motion, Taipei, Taiwan. 本人為第一作者、通訊作者。
17. P.C. Guan, C.-T. Sun, O.L.A. Kwok (2016, Jul). Modeling of Offshore Foundation with Dynamic Wave Loading Using Reproducing Kernel Particle Method. 12th World Congress on Computational Mechanics, Seoul, Korea.
 18. A.O.L. KWOK, P.K. CHEN, P.L. SUN (2015, Nov). A Preliminary Study on the Depth Parameters for the Ground Motion Prediction Equations in Taiwan. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand. 本人為第一作者、通訊作者.
 19. A.O.L. KWOK, P.L. SUN, P.K. CHEN, H.C. CHIU (2015, Nov). Estimation of Vs30 for Ground Motion Prediction in Taiwan. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand. 本人為第一作者、通訊作者.
 20. A.O.L. KWOK, B.J. CHEN (2015, Nov). Comparison of Theoretical Site Response Modeling Methods by Using Vertical Array. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand. 本人為第一作者、通訊作者.
 21. O. L. A. Kwok, P.-C. Guan (2015, Sep). Modeling of Dynamic Slope Behavior by Semi-Lagrangian Reproducing Kernel Particle Meshfree Method. The 16th Conference on Current Researches in Geotechnical Engineering in Taiwan, Kaohsiung, Taiwan. 本人為第一作者、通訊作者.
 22. O.L.A. Kwok, Y.-H. Kao, Y.-C. Li, T.-C. Lai (2015, Sep). Dynamic Properties of Soil Mixture. The 16th Conference on Current Researches in Geotechnical Engineering in Taiwan, Kaohsiung, Taiwan. 本人為第一作者、通訊作者.
 23. O.L.A. Kwok, P.C. Guan, C.T. Sun, J.H. Jiang, W.H. Tsou (2015, Jul). Modeling of Wave-Induced Slump Using Reproducing Kernel Particle Method. 13th U.S. National Congress on Computational Mechanics, San Diego, California, USA. 本人為第一作者.
 24. O.L.A. Kwok, T.-C. Lai, Y.-H. Gao (2014, Nov). Medium to Large-strain dynamic property of mixed soils. Proceedings of The Twenty-Seventh KKHTCNN Symposium on Civil Engineering, November 9-12, 2014, Shanghai, China. 本人為第一作者、通訊作者.
 25. O.L.A. Kwok and H.-C. Chiu (2014, Jul). Developing correlation relationships of Vs30 for use in site classification in Taiwan. 10th National Conference on Earthquake Engineering, Alaska, Anchorage. 本人為第一作者、通訊作者. (EI)
 26. P.C. Guan and O.L.A. Kwok (2014, Apr). Use of Semi-Lagrangian Reproducing Kernel Particle Method for the Simulations of Gravity Flow and Earthquake-Induced Landslide. APACM Thematic Conference & IACM Special Interest Conference : Computational Engineering and Science for Safety and Environmental Problems (COMPSAFE 2014), Sendai, Japan.

技術報告

1. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2018 年 08 月）。核能電廠耐震先導技術研發計畫第二次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。
2. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2017 年 08 月）。核能電廠耐震先導技術研發計畫第一次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。

邱俊翔 助理教授 Jiunn-Shyang Chiou

Assistant Professor

學歷/ 國立臺灣大學博士

Ph.D., NTU

專長/基礎工程、大地地震工程、基礎耐震設計、土壤結構互制分析

Foundation Engineering, Geotechnical Earthquake Engineering, Seismic Design of Foundations, Soil-Structure Interaction

期刊論文 (Journal Paper)

1. Chiou, J.S.*, and Tsai, C.C. (2019, Sep). Analysis of in situ bridge columns with exposed caisson foundations in a gravel stratum under lateral loading. *Advances in Structural Engineering*, DOI: 10.1177/1369433219872441. (SCI). MOST 100-2221-E-492-017. 本人為第一作者、通訊作者.
2. Hwang, Y.W., Chiou, J.S.*, and Ge, Louis (2019, Sep). Application of system identification for dynamic characteristics of rocking foundations. *Journal of GeoEngineering*, 14(3), 167-178. (EI). MOST 140-2221-E-002-218. 本人為通訊作者.
3. Chiou, J.S. (2019, Aug). Simplified plastic settlement analysis of nonballasted slab railroad track foundations on fine-grained soil. *Journal of the Chinese Institute of Engineers*, 42(7), 632-642. (SCI). 本人為第一作者、通訊作者.
4. Chiou, J.S.*, Jheng, Y.W., and Hung, H.H. (2019, Jun). Numerical simulation of bridge piers with spread footings under earthquake excitation. *Earthquakes and Structures*, 16(6), 691-704.. (SCI). MOST 104-2221-E-002-218. 本人為第一作者、通訊作者.
5. Chiou, J.S.*, and You, J.Q. (2019, Jun). Theoretical solutions of laterally loaded fixed-head piles in elastoplastic soil considering pile-head flexural yielding. *Canadian Geotechnical Journal*. (SCI). MOST 104-2221-E-002-218. 本人為第一作者、通訊作者.
6. Chiou, J.S.*, Xu, Z.W., Tsai, C.C., and Hwang, J.H. (2018, May). Lateral cyclic response of an aluminum model pile in sand. *Marine Georesources & Geotechnology*. (SCI). 本人為第一作者、通訊作者.
7. Chiou, J.S.*, Chen, C.H., and Hwang, Y.W. (2018, Apr). Pushover and shaking table tests on a rocking-governed column-footing model on dry dense sand. *Journal of the Chinese Institute of Engineers*, 41(3), 247-258.. (SCI). MOST 102-2625-M-492-001. 本人為第一作者、通訊作者.
8. Chiou, J.S.*, You, T.R., Tsai, C.C., and Hwang, J.H. (2017, Oct). Performance of laterally loaded piles in improved coal ash deposit. *Soils and Foundations*, 57, 882-891. (SCI). 本人為第一作者、通訊作者.
9. Tsai, C.C., Chang, W.S., and Chiou, J.S.* (2017, Oct). Enhancing prediction of ground response at the Turkey Flat geotechnical array. *Bulletin of the Seismological Society of America*, 107(5), 2043–2054. (SCI).

10. Chiou, J.S.*, Lin, H.S., Yeh, F.Y., and Sung, Y.C. (2016, Aug). Plastic settlement evaluation of embedded railroads under repeated train loading. *Journal of GeoEngineering*, 11(2), 97-107. (EI). 本人為第一作者、通訊作者。
11. Tsai, C.C., Lin, W.C., and Chiou, J.S.* (2016, Apr). Identification of dynamic soil properties through shaking table tests on a large saturated sand specimen in a laminar shear box . *Soil Dynamics and Earthquake Engineering*, 83, 59-68. (SCI).
12. 邱俊翔 (2019 年 06 月)。日本鐵路基礎構造物設計規範簡介與橋梁群樁基礎耐震性能分析示範例。地工技術，160(6),5-14。本人為第一作者、通訊作者。
13. 陳正興、柯永彥、邱俊翔 (2015 年 03 月)。沉箱基礎設計規範之評析與側向阻抗之簡化分析模式。地工技術，143(3), 7-20。

研討會論文 (Conference Paper)

1. Chen, C.L. and Chiou, J.S.* (2019, Oct). Determination of nonlinear dynamic properties of sand from centrifuge shaking table testing. The 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea.
2. Fu, Y.W. and Chiou, J.S.* (2019, Oct). Seismic damage analysis of pile foundations considering ground movement. The 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea.
3. Chiou, J.S.*, Huang, T.J., and Chen, C.H. (2019, Jun). Shaking table testing on pile response due to lateral spreading. 7th International Conference on Earthquake Geotechnical Engineering, Roma, Italy. MOST 105-2625-M-002-024. 本人為第一作者、通訊作者。
4. Jheng, Y.W., Hu, W.S., and Chiou, J.S.* (2018, Nov). Simulation of seismic responses of a column-footing model under shaking table tests. The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
5. Chiou, J.S.*, Hung, W.Y., Lee, Y.T., and Young, Z.H. (2018, Jun). Analysis of dynamic responses of an extended pile under centrifuge shaking table testing. The Eleventh U.S. National Conference on Earthquake Engineering , Los Angeles, California, USA.. MOST 106-2221-E-002-087. 本人為第一作者、通訊作者。
6. Jheng, Y.W., Chiou, J.S.* , and Hung, H.H. (2017, Nov). Simulation of rocking responses of bridge piers with spread foundations. The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.
7. Tsai, C.C., and Chiou, J.S.* (2017, Nov). Simulation of in situ laterally loaded on caisson foundations. The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.
8. Chiou, J.S.*, Huang, Y.W., and Ge, L. (2017, Jul). Identification of dynamic characteristics of a rocking foundation model on shaking table testing. 3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering (PBD-III), Vancouver, Canada. MOST 104-2221-E-002-218. 本人為第一作者、通訊作者。
9. Hwang, Y.W., Chiou, J.S.* , and Ge, L. (2016, Sep). Evaluation of effective damping for a rocking foundation model under shaking table testing. 7th Japan-Taiwan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall, PingTung, Taiwan.
10. Chiou, J.S.*, Chen, C.H., Huang, Y.W., and Chen, C.H. (2015, Nov). Shaking table testing on a column-footing model. 6th International Conference on Earthquake Geotechnical Engineering, Christchurch, New Zealand. MOST 102-2625-M-492-001. 本人為第一作者、

通訊作者.

11. 游家奇、邱俊翔（2018 年 11 月）。側向荷載群樁之模擬分析。中華民國第 14 屆結構工程及第 4 屆地震工程研討會，台中。
12. 李奕霆、楊宗翰、邱俊翔、洪汶宜（2017 年 09 月）。離心機振動台樁基礎模型受振反應之數值分析。第十七屆中華民國大地工程研討會，宜蘭。

洪宏基 教授 Hong-Ki Hong

Professor

學歷/ 美國哥倫比亞大學博士

Ph.D., Columbia University

專長/ 力學、結構、聲學、振動學、邊界元素法

Structural Mechanics, Sound & Vibration, Boundary Element Method

期刊論文 (Journal Paper)

1. Hong-Ki Hong, Yi-Chuan Kao, Jia-Wei Lee, Li-Wei Liu, and Jeng-Tzong Chen, 2018.06, Quaternion boundary element method for coupled exterior and interior Magnetostatic fields, IEEE Transactions on Magnetics, Vol. 54, Issue 6, pp.1-10. (SCI & EI)
2. L.-W. Liu and H.-K. Hong, 2018.02, Clifford algebra valued boundary integral equations for three-dimensional elasticity, Applied Mathematical Modelling, Vol.54, pp.246-267. (SCI)
3. L.-W. Liu and H.-K. Hong, 2017.11, A Description of Three-Dimensional Yield Surfaces by Cubic Polynomials, ASCE, Journal of Engineering Mechanics, Vol.143, No.11, 04017129. (SCI & EI)
4. Jia-Wei Lee, Li-Wei Liu, Hong-Ki Hong, and Jeng-Tzong Chen, 2016, Applications of the Clifford algebra valued boundary element method to electromagnetic scattering problems, Engineering Analysis with Boundary Elements, Vol. 71, pp.140-150. (SCI & EI)
5. Chein-Shan Liu, Li-Wei Liu, and Hong-Ki Hong, 2016, A scheme of automatic stress-updating on yield surfaces for a class of elastoplastic models, International Journal of Non-Linear Mechanics, Vol. 85, pp. 6-22. (SCI & EI)
6. L.-W. Liu, H.-K. Hong, and C.-S. Liu, 2015, Accelerated bidirectional modifications of the steepest descent method for ill-posed linear algebraic systems with dynamics-theoretical and optimization interpretation. Journal of Mathematics Research, Vol. 7, No. 48, pp. 112-129.
7. J.T. Chen, W.S. Huang, J.W. Lee, and H.-K. Hong, 2015, On the free terms of the dual BIE for N-dimensional Laplace problems, Engineering Analysis with Boundary Elements, Vol. 59, pp. 123-128. (SCI & EI)
8. J.W. Lee, H.-K. Hong, and J.T. Chen, 2015, Generalized complex variable boundary integral equation for stress fields and torsional rigidity in torsion problems, Engineering Analysis with Boundary Elements, Vol. 54, pp. 86-96. (SCI & EI)

研討會論文 (Conference Paper)

1. Hong-Ki Hong, 2018.11, Some Introductions of Clifford algebra & analysis and applications, 2018 November Special Week – Scientific Gathering, Seminars on Applied Mathematics, Inst. Math. Academia Sinica, NCTS, Room 617, Astro.-Math. Building, NTU, 22-27 November 2018.
2. Hong-Ki Hong, 2017.12, A Study of Singular BIEs and Plasticity using Clifford Algebras, The 8th Workshop on Boundary Element Methods, Integral Equations and Related Topics in Taiwan, National Ilan University, Ilan, Taiwan, 20 December 2017.
3. Hong-Ki Hong, 2016.11, A talk on Clifford analysis in boundary elements and yield surfaces, Plenary Lecture, 2016 Taiwan-Japan Joint Workshop on Numerical Analysis and Scientific Computation, NCTS-National Center for Theoretical Sciences, 26-28 November 2016.
4. Li-Wei Liu and H.-K. Hong, 2016, A general solution for three dimensional problems of anisotropic elasticity, The 24th International Congress of Theoretical and Applied Mechanics (ICTAM 2016), Montreal, Canada, 21-26 August 2016.
5. Y.-C. Kao, H.-K. Hong, J.-W. Lee, Li-Wei Liu and J.-T. Chen, 2016, Boundary element method for quaternion valued Laplace equation in coupled exterior and interior magnetostatic fields, The 40th National Conference on Theoretical and Applied Mechanics, Hsinchu, Taiwan, 25-26 November 2016. (Excellent Work, Best Student Paper)
6. Li-Wei Liu, H.-K. Hong, 2015, A new method for three-dimensional problems of anisotropic elasticity, The 39th National Conference on Theoretical and Applied Mechanics, National Taiwan University of Science and Technology, Taipei, Taiwan, 20-21 November 2015.
7. Li-Wei Liu, Hong-Ki Hong, 2015, Three-dimensional Yield Surfaces Described by Cubic Polynomials. The 10th International Symposium on Advanced Science and Technology in Experimental Mechanics, Matsue, Japan, 1-4 November 2015.
8. Li-Wei Liu, Chein-Shin Liu, Hong-Ki Hong, 2015, A return-free integration for elastoplastic models. First Computational Mechanics Conference in Taiwan, Taipei, 22-23 October 2015.
9. Li-Wei Liu, Hong-Ki Hong, 2015, Modeling of aluminum alloy AL6061 using an elastoplastic model with distortion hardening. The 4th International Conference on Material Modeling, Berkeley, California, USA, 27-29 May 2015.
10. Li-Wei Liu, H.-K. Hong, 2015, Solving three-dimensional elasticity by Clifford valued boundary integral equations. Engineering Mechanics Institute International Conference, Hong Kong, 7-9 January 2015.

技術報告及其他(Research Reports and Others)

1. Hong-Ki Hong and Chung-Chun Huang, 2019, Multiple Interaction of Mechanical Dissipation and Plastic Experiments, First Year Midterm Report to Ministry of Science and Technology, Grant MOST 107-2221-E-002-024-MY3, Department of Civil Engineering, National Taiwan University, 2 August 2019.
2. 洪宏基, 鍾孟剛, 2018.12, 旋量彈塑性理論於降伏面演化實驗, Technical Report MOST 106-2221-E-002-122-, 106年08月01日至107年11月30日, 科技部補助專題研究計畫成果報告.
3. 洪宏基, 劉立偉, 鍾孟剛, 黃仲均, 2018.07, 軸扭環降伏面演化實驗紀錄, 國立台灣大學土木工程學系.
4. 洪宏基, 2017.11, 彈塑性超複變組成律定量定性研究, Technical Report MOST 103-2221-E-002-283-MY3, 105年8月1日至106年7月31日, 科技部補助專題研究計畫成果報告.
5. 洪宏基, 劉立偉, 張睿成, 黃鉅家, 鍾孟剛, 2017.10, 軸扭環降伏面演化實驗紀錄, 國立台灣大學土木工程學系.
6. Hong-Ki Hong and Li-Wei Liu, 2016, Qualitative and quantitative study of hypercomplex constitutions of elastoplasticity, Second Year Midterm Report to Ministry of Science and Technology, Grant MOST 103-2221-E-002-283-MY3, Department of Civil Engineering, National Taiwan University, 2 June 2016.
7. Hong-Ki Hong and Li-Wei Liu, 2015, Qualitative and quantitative study of hypercomplex constitutions of elastoplasticity, Midterm Progress Report to Ministry of Science and Technology, Grant MOST 103-2221-E-002-283-MY3, Department of Civil Engineering, National Taiwan University, 11 July 2015.
8. Hong-Ki Hong, Li-Wei Liu, and Hsiao-Wei Lee, 2015, A multi-symplectic analysis of structural mechanics, Midterm Progress Report to Ministry of Science and Technology, Grant MOST 103-2221-E-002-244-MY2, Department of Civil Engineering, National Taiwan University, 9 July 2015.

張國鎮 教授 Kuo-Chun Chang

Professors

學歷/ 美國紐約州立大學水牛城分校博士

Ph.D., SUNY, Buffalo

專長/ 結構控制、耐震設計、結構動力試驗

Passive Structural Control, Dynamic Structural Tests, Earthquake Resistance Design

期刊論文 (Journal Paper)

1. Ping-Hsiung Wang, Kuo-Chun Chang, Samuel Yen-Liang Yin, Jui-Chen Wang, Yu-Chen Ou (2019). A simplified finite element analysis method for axial compression behavior of rectangular concrete columns with interlocking multi-spiral reinforcements. *Journal of Structural Engineering, ASCE*, 146(1): 04019176
2. Hsu, Ting-Yu; Valentino, Arygiani; Liseikin, Aleksei; Krechetov, Dmitry ; Chen, Chun-Chung ; Lin, Tzu-Kang; Wang, Ren-Zuo ; Chang, Kuo-Chun ; Seleznev, Victor, "Continuous structural health monitoring of Sayano-Shushenskaya Dam using off-site seismic station data accounting for environmental effects", *Measurement Science and Technology* (2019). Accepted Manuscript online 7 August 2019.
3. Yung-Bin Lin ,Tzu-Kang Lin ,Cheng-Chun Chang ,Chang-Wei Huang ,Ben-Ting Chen ,Jihn-Sung Lai and Kuo-Chun Chang (2019), Visible Light Communication System for Offshore Wind Turbine Foundation Scour Early Warning Monitoring, *Water* 2019, 11(7), 1486.
4. Wang SJ, Chiu IC, Yu CH, QY Zhang, Chang KC. Experimental beyond design and residual performances of full-scale viscoelastic dampers and their empirical modelling. *Earthquake Engineering and Structural Dynamics* 2019; 48(10): 1093-1111.
5. Ping-Hsiung Wang, Kuo-Chun Chang, Yu-Chen Ou (2019). Capacity-based inelastic displacement spectra for reinforced concrete bridge columns. *Earthquake Engineering and Structural Dynamics*, June 2019;48:1536-1555
6. Wang SJ, Lee BH, Chuang WC, Chiu IC, Chang KC. (2019), Building mass damper design based on optimum dynamic response control approach. *Engineering Structures*; 187: 85-100. DOI: 10.1016/j.engstruct.2019.02.053
7. Bonopera M., Chang K.C., Chun C.C., Lee Z.K., Sung Y.C. and Tullini N. (2019). Fiber Bragg grating-differential settlement measurement system for bridge displacement monitoring: Case study. *Journal of Bridge Engineering, ASCE*, 24 (10) , 1–12, 05019011.
8. Bonopera M., Chang K.C., Chen C.C., Sung Y.C. and Tullini N. (2019). Experimental study on the fundamental frequency of prestressed concrete bridge beams with parabolic unbonded tendons. *Journal of Sound and Vibration*, 455, 150–160.
9. Witarto Witarto, Wang SJ, Yang CY, Wang J, Mo YL, Chang KC, Tang Y. Three-dimensional periodic materials as seismic base isolator for nuclear infrastructure. *AIP Advances* 2019; 9(4): 045014. DOI: 10.1063/1.5088609.

10. 吳逸軒、汪向榮、張國鎮、陳東陽（2019 年）。類型複合地震超材料之寬頻帶設計與分析。中國土木水利工程學刊，第三十卷，第一期，103-118。
11. 王柄雄、張國鎮、歐昱辰（2018）。容量位移雙反應譜—基於損傷之鋼筋混凝土橋梁耐震設計與評估法。結構工程，中華民國結構工程學會，第三十三卷，第四期，第 91-112 頁（民國一〇七年十二月）。
12. 葉芳耀、李柏翰、李政寬、許家銓、陳俊仲、李路生、江奇融、宋裕祺、張國鎮、劉光晏，“0206 美濃地震橋梁震害探討及因應對策”，中國土木水利工程學刊 (EI)，第 31 卷，第 5 期，2019 年 10 月，第 431-441 頁。
13. Bonopera, M., Chang, K.C., Chen, C.C., Lin, T.K. and Tullini, N. (2018), Bending tests for the structural safety assessment of space truss members, *Int. J. Space Struct.*, 33(3–4), 138–149.
14. Bonopera, M., Chang, K.C., Chen, C.C., Lee, Z.K. and Tullini, N. (2018), Axial load detection in compressed steel beams using FBG-DSM sensors, *Smart Struct. Syst.*, 21 (1) 53–64.
15. Bonopera, M., Chang, K.C., Chen, C.C., Sung, Y.C. and Tullini, N. (2018), Prestress force effect on fundamental frequency and deflection shape of PCI beams, *Struct. Eng. Mech.*, 67 (3) 255–265.
16. Bonopera, M., Chang, K.C., Chen, C.C., Lin, T.K. and Tullini, N. (2018), Compressive column load identification in steel space frames using second-order deflection-based methods, *Int. J. Struct. Stab. Dy.*, 18 (7), art. ID 1850092.
17. Bonopera, M., Chang, K.C., Chen, C.C., Sung, Y.C. and Tullini, N. (2018), Feasibility study of prestress force prediction for concrete beams using second-order deflections, *Int. J. Struct. Stab. Dy.*, 18 (10), art. ID 1850124.
18. Witarto W, Wang SJ, Yang CY, Nie X, Mo YL, Chang KC, Tang Y, Kassawara R. Seismic isolation of small modular reactors using metamaterials. *AIP Advances* 2018; 8(4): 045307.
19. Wang SJ, Lee BH, Chuang WC, Chang KC,(2018) , Optimum dynamic characteristic control approach for building mass damper design. *Earthquake Engineering and Structural Dynamics*, 47(4): 872-888. DOI: 10.1002/eqe.2995.
20. Wang SJ, Chiu IC, Yu CH, Chang KC. Experimental and analytical study on design performance of full-scale viscoelastic dampers. *Earthquake Engineering and Engineering Vibration* 2018; 17(4): 693-706. DOI: 10.1007/s11803-018-0469-2.
21. Ping-Hsiung Wang, Yu-Chen Ou, Kuo-Chun Chang,(2017), A new smooth hysteretic model for the ductile flexural-dominated reforced concrete bridge columns, *Earthquake Engineering and Structural Dynamics*, 46:2237-2259. (published on line 2/16/2017).
22. 王柄雄、歐昱辰、尹衍樑、王瑞禎、吳振維、陳智軒、張國鎮,(2017), 方螺箍混凝土梁耐震行為研究，結構工程 125(第 32 卷第 1 期)
23. Yu-Chi Sung, Fang-Yao Yeh, and Kuo-Chun Chang, Design concept and verification of temporary rescue bridge using lightweight composite materials, *International Journal of Bridge Engineering (IJBE)*, Special Issue 2017, pp. 151-170
24. Yu-Chi Sung, Hsiao-Hui Hung; Kuan-Chen Lin; Chi-Rung Jiang; and Kuo-Chun Chang (2017), Experimental Testing and Numerical Simulation of Precast Segmental Bridge Piers Constructed with a Modular Methodology, *Journal of Bridge Engineering*, ASCE, 22(11): 04017087
25. Fan-Ru Lin, Juin-Fu Chai, Zih-Yu Lai, Ming-Yi Chen, Yin-Nan Huang, Kuo-Chun Chang (2017). A simplified method for the evaluation of Seismic demands on in-cabinet equipment in motor control center type cabinets in Nuclear Power Plants. *Journal of the Chinese Institute of Engineers*, 40:3, 179-190.

26. Wang SJ, Yu CH, Lin WC, Hwang JS, Chang KC. (2017), A generalized analytical model for sloped rolling-type isolation bearings. *Engineering Structures*, 138, 434-446.
27. Lin, Z.Y., Lin, F.R., Chai, J.F. and Chang, K.C., (2016), Experimental Studies of a Typical Sprinkler Piping System in Hospitals, *Bulletin of the New Zealand Society for Earthquake Engineering*. Vol. 49, No. 1, pp 1-12
28. Ting-Yu Hsu, Rih-Teng Wu, and Kuo-Chun Chang (2016), Two Novel Approaches to Reduce False Alarm Due to Unknown Events for On-Site Earthquake Early Warning System, *Computer-Aided Civil and Infrastructure Engineering*, 31(7).
29. Hsiao-Hui Hung, Yu-Chi Sung, Kuo-Chun Chang, Shih-Hsun Yin, Fang-Yao Yeh, (2016), Experimental testing and numerical simulation of a temporary rescue bridge using GFRP composite materials, *Construction and Building Materials*, Vol. 114, pp 181-193
30. Yu-Chi Sung, Tzu-Kang Lin, Yi-Tsung Chiu, Kuo-Chun Chang, Kuo-Long Chen, Chung-Ching Chang (2016), A bridge safety monitoring system for pre-stressed composite box-girder bridges with corrugated steel webs based on in-situ loading experiments and a long-term monitoring database, *Engineering Structures*, Volume 126, pages 571–585.
31. 劉光晏、曾子俊、楊卓諺、江奇融、鍾立來、張國鎮,(2016),橋梁功能性支承系統之位移解析與振動台實驗研究, 中國土木水利工程學刊, 第二十八卷, 第一期, 第 1-10 頁。
32. Fang-Yao Yeh, Kuo-Chun Chang, Wen-Cheng Liao,(2015), Experimental Investigation of Self-sensing Carbon Fiber Reinforced Cementitious Composite for Strain Measurement of an RC Portal Frame, *International Journal of Distributed Sensor Networks*, on-line publication, November 2015, pp 1-13
33. 宋裕祺、葉芳耀、洪曉慧、張國鎮、邱毅宗、許哲愷、李政寬、周中哲、劉楨業、莊瑞彰、潘威佑，救災用鋼與玻璃纖維複合材料非對稱斜張橋之研究與開發，結構工程，第30期，No. 1，2015年3月，第53-92頁。
34. Yung-Yen Ko, Wei-Kuang Chang, Kuang-Yen Liu, Hsiao-Hui Hung, and Kuo-Chun Chang,(2015), Damage evaluation for RC bridge piers using vibration measurement, *Advances in Structural Engineering*, Vol. 18, No. 9, pp.1501-1516.
35. Fang-Yao Yeh, Kuo-Chun Chang, Yu-Chi Sung, Hsiao-Hui Hung and Chung-Che Chou, (2015), A noval composite bridge for emergency disaster relief: Concept and verification; *Composite Structures*, 127, Volume 127, pp 199-210 199-210.
36. Kuang-Yen Liu, Witarto, Kuo-Chun Chang,(2015), Composed Analytical Models for Seismic Assessment of Reinforced Concrete Bridge Columns, *Earthquake Engineering and Structural Dynamics*, Volume 44, Issue 2, pp. 265-281.
37. 林凡茹、張國鎮、黃振綱、柴駿甫，醫院消防撒水系統機械式接頭之耐震行為與評估分析，結構工程，29卷4期，88 - 109，2014/12。
38. Shiou-Chun Wang, Kuang-Yen Liu, Chia-Han Chen, and Kuo-Chun Chang, (2015), Experimental Investigation on Seismic Behavior of Scoured Bridge with Pile Foundation, *Earthquake Engineering and Structural Dynamics*, Vol.44, Issue 6, pp.849-864.

研討會論文 (Conference Papers)

1. Fang-Yao Yeh, Yao-Yu Yang, Bo-Han Lee, Chia-Ming Chang, Kuo-Chun Chang, Shih-Chung Kang, "Study on truss type segmental composite structure for temporary rescue bridge," 22nd International Conference on Composite Materials (ICCM22), 11-16 August, 2019, Melbourne, Australia.

2. Fang-Yao Yeh, Kuo-Chun Chang, Yu-Chi Sung, "Study on GFRP and steel hybrid temporary rescue bridge for emergency disaster relief," International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, 15-19 September, 2019, Taipei, Taiwan.
3. Bo-Han Lee, Fang-Yao Yeh, Chun-Chung Chen, Sheng-Yuan Shiao and Kuo-Chun Chang (2019), "Influence of vehicle impact load on isolated bridge," 13th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures (16WCSI), 1-6 July, 2019, St. Petersburg, Russian Federation.
4. Marco Bonopera, Kuo-Chun Chang, Chun-Chung Chen, Zheng-Kuan Lee (2019). An investigation into the compression-softening effect in post-tensioned steel beams. Proceedings of the Asian Pacific Congress on Computational Mechanics (APCOM 2019), Taipei, Taiwan, Dec 18-20.
5. Marco Bonopera, Kuo-Chun Chang, Chun-Chung Chen (2019). Review on prestress loss evaluation in concrete beams. Proceedings of the International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19.
6. Marco Bonopera, Kuo-Chun Chang, Nerio Tullini (2019). Bending tests to estimate the axial force in steel bridge members. Proceedings of the 12th Taiwan-Japan Workshop on Structural and Bridge Engineering, Kyoto, Japan, April 2-3.
7. Bo-Han Lee, Fang-Yao Yeh, Yu-Chi Sung, Kuo-Chun Chang, Effect of vehicle-induced bridge vibration on nearby structures, 9th European Workshop on Structural Health Monitoring, July 10-13, 2018, Manchester, United Kingdom.
8. Fang-Yao Yeh, Kuo-Chun Chang, Yu-Chi Sung, Design concept and verification of temporary rescue bridge using lightweight composite and steel hybrid structures, 26th annual International Conference on Composites/Nano Engineering (ICCE-26), July 15-21, 2018, Paris, France.
9. 李柏翰、葉芳耀、宋裕祺、張國鎮，橋梁車輛振動對鄰房結構之影響，中華民國力學學會第四十二屆全國力學會議，2018年11月23日~24日，國立台北科技大學，臺北市。
10. F.-R. Lin, C.-C. Yeh , P.-W. Hu, J.-F. Chai , and K.C. Chang, (2018), Fragility analysis of typical sprinkler piping systems in hospitals Eleventh U.S. National Conference on Earthquake Engineering, Los Angeles, California.
11. J.-F. Chai, C.-C. Yeh, F.-R. Lin and K.C. Chang (2018), Simplified seismic evaluation methods of sprinkler-piping systems in buildings Eleventh U.S. National Conference on Earthquake Engineering, Los Angeles, California.
12. J.-F. Chai, F.-R. Lin, C.-C. Yeh, Yung-An Tsai and K.C. Chang, (2018), Simplified Seismic Evaluation Method of a Typical Sprinkler-piping System in Hospitals, the 7th Asia Conference on Earthquake Engineering, Bangkok, Thailand.
13. Yung-An Tsai, Fan-Ru Lin, Juin-Fu Chai and Kuo-Chun Chang (2018), Seismic Performance Evaluation of Strengthened Typical Sprinkler Piping Systems in Hospitals, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
14. 林凡茹、葉昶辰、柴駿甫、張國鎮(2018)，醫院消防管線系統耐震性能評估，中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。
15. 蔡詠安、林凡茹、柴駿甫、張國鎮(2018)，醫院消防管線系統耐震性能補強評估，中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。

16. 汪向榮、游忠翰、卓忠陽、黃震興，設計參數與地震特性對於斜面滾動隔震支承之位移反應影響，第六屆海峽兩岸地震工程青年學者研討會，大連，中國，2018 年 9 月 7-10 日。
17. Wang SJ, Yu CH, Chiu IC, Chang KC. Beyond design performance of viscoelastic dampers. The 7th World Conference on Structural Control and Monitoring (7WCSCM), Qingdao, China, July 22-25, 2018.
18. Yu Ch, Chiu IC, Chang KC, Wang SJ. Performance of full-scale viscoelastic dampers under beyond design deformation. The 11th U.S. National Conference on Earthquake Engineering, Los Angeles, U.S.A., June 25-29, 2018.
19. Wang SJ, Lee BH, Chuang WC, Lin WC, Chang KC, Hwang JS. Optimum dynamic response control approach for building mass damper design. The 11th U.S. National Conference on Earthquake Engineering, Los Angeles, U.S.A., June 25-29, 2018.
20. Witarto W, Wang SJ, Yang CY, Nie X, Mo YL, Chang KC, Tang Y, Kassawara R. Periodic foundations for seismic base isolation of small modular reactors. The 11th U.S. National Conference on Earthquake Engineering, Los Angeles, U.S.A., June 25-29, 2018.
21. Witarto W, Wang SJ, Yang CY, Nie X, Mo YL, Chang KC, Tang Y, Kassawara R. Periodic material-based passive control systems for engineering structures. ASCE Earth & Space Conference, Cleveland, U.S.A., April 9-12, 2018.
22. Chang KC, Wang SJ, Hwang JS, Huang YN, Lin WC, Yang CY. Recent progress in Taiwan on seismic isolation, energy dissipation, and active vibration control. New Zealand Society for Earthquake Engineering (NZSEE) Annual Conference and Anti-seismic Systems International Society (ASSISi) 15th World Conference on Seismic Isolation, Energy Dissipation, and Active Vibration Control of Structures, Wellington, New Zealand, April 27-29, 2017.
23. Chang KC, Hwang JS, Wang SJ, Chen PC, Yu CH, Lin WC, Yang CY. Recent research and applications of passive structural control at NCREE. The Structural Engineering Frontier Conference (SEFC 2017), Yokohama, Japan, March 17, 2017.
24. Wang SJ, Lee BH, Chang KC, Hwang JS, Yu CH, Chang YW. Optimum dynamic characteristic control approach for building mass damper design. New Zealand Society for Earthquake Engineering (NZSEE) Annual Conference and Anti-seismic Systems International Society (ASSISi) 15th World Conference on Seismic Isolation, Energy Dissipation, and Active Vibration Control of Structures, Wellington, New Zealand, April 27-29, 2017.
25. 林凡茹、胡佩文、柴駿甫、張國鎮，(2016)，”醫院消防撒水系統耐震易損性分析研究”，中華民國第十三屆結構工程研討會暨第三屆地震工程研討會，桃園市，台灣，論文編號 1202。
26. Wang SJ, Yu CH, Lin WC, Hwang JS, Chang KC. Effect of vertical excitation on horizontal performance of sloped rolling-type seismic isolation bearings. International Conference on Smart Infrastructure and Construction (ICSIC) and 12th International Workshop on Advanced Smart Materials and Smart Structures Technology (12ANCRiSST), Cambridge, UK, June 27-30, 2016.
27. 游忠翰、汪向榮、林旺春、黃震興、張國鎮，斜面式滾動隔震支承之隔震位移探討，中華民國第十三屆結構工程研討會暨第三屆地震工程研討會，桃園，台灣，2016 年 8 月 24-26 日。
28. Witarto W, Wang SJ, Mo YL, Chang KC, Tang Y. Periodic material-based design of seismic support isolation for industrial facilities. The World Congress on Engineering (WCE 2016),

London, U.K., June 29-July 1, 2016.

29. Fang-Yao Yeh, Kuo-Chun Chang, Yu-Chi Sung, Hsiao-Hui Hung, "Application of Steel-GFRP Hybrid Composite to Asymmetric Cable-stayed Bridge for Emergency Disaster Relief," *ECCM17, 17th European Conference on Composite Materials*, 26 - 30 June, 2016, Munich, Germany.
30. Wei H.C., Bonopera M, Chang K.C., Chen C.C. and Tullini N (2016). Monitoring on prestress load in PCI beam-type bridge using non-destructive testing methods. Proceedings of the Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China, December 3-5.
31. Yu-Chi Sung, Chun-Chung Chen and Kuo-Chun Chang (2016) ,Extended Bridge Inspection Module of a Life-cycle Based Bridge Management System, 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016), July 6-8, Osaka, Japan.
32. Chun-Chung Chen, Yu-Chi Sung and Kuo-Chun Chang (2016), An Application Example under Meinong Earthquake of Bridge Inspection Module of a Life-cycle Based Bridge Management System, The Scientific Practical Conference on Earthquake Engineering, Moscow, Russia, December 1-2.
33. 陳俊仲、張國鎮、樊鵬、Marco Bonopera、李政寬、Nerio Tullini (2016)，應用位移量測技術於預力梁預力識別之研究，第十三屆結構工程研討會暨第三屆地震工程研討會，105年8月24日-26日，桃園，臺灣。
34. Marco Bonopera, Nerio Tullini, Chun-Chung Chen, Tzu-Kang Lin, Kuo-Chun Chang (2015, Oct). Identification of the pre-stress force in bridge beams using their first natural frequency. 1st Association of Computational Mechanics Taiwan (ACMT) Conference, Taipei, Taiwan
35. Ming-Jing Wang, Wei-Ting Chou, Tzu-Kang Lin, Kung-Chun Lu, Kuo-Chun Chang (2016, Jun). Application of wireless module for mobile bridge health monitoring system. International Conference on Smart Infrastructure and Construction (ICSIC) Conference, Cambridge, Britain.
36. Chang KC, Chen PC, Lin WC, Wang SJ. New loading machine at NCREE: the dynamic biaxial testing system (BATS) and its future potential application. Symposium on Full-Size Member Test Facility to Apply Critically Large Multi-Direction Forces, Velocities and Deformations - For resilient society under increased threat of stronger earthquakes, Tokyo, Japan, December 10, 2015.
37. Fang-Yao Yeh, Kuo-Chun Chang, and Wen-Cheng Liao, Application of CFRC for Strain Measurement and Damage Detection, *The 8th Taiwan-Japan Workshop on Structural and Bridge Engineering*, April 2 - April 4, 2015, Kyoto, Japan.
38. Fang-Yao Yeh, Kuo-Chun Chang, and Yu-Chi Sung, A Novel Composite Cable-stayed Bridge for Emergency Disaster Relief, *Taiwan-Japan Symposium on Earthquake Engineering 2015*, November 30, 2015, Tainan, Taiwan.
39. Fang-Yao Yeh, Kuo-Chun Chang, and Wen-Cheng Liao, Experimental Study on Carbon Fiber Reinforced Concrete for Strain Measurement of RC Portal Frame, *Concrete 2015, 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM Week*, August 30 - September 2, 2015, Melbourne, Australia.
40. Fang-Yao Yeh, Kuo-Chun Chang, Yu-Chi Sung, and Hsiao-Hui Hung, Application of FRP Composite to Self-anchored Cable-stayed Bridge for Emergency Disaster Relief, *Concrete 2015, 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM Week*, August 30 - September 2, 2015, Melbourne, Australia.
41. 葉芳耀、游忠翰、張國鎮、陳宗斌，填充剪切稠變流體阻尼器之特性試驗與設計研究，

第四屆海峽兩岸地震工程青年學者研討會暨第六屆臺灣邊界元素法會議，2015 年 10 月 18~19 日，台灣台北，第 1-10 頁。

42. 汪向榮、游忠翰、林旺春、黃震興、張國鎮，垂直擾動對於斜面式滾動隔震支承水平隔震性能之影響探討(Effect of Vertical Excitation on Horizontal Performance of Sloped Rolling-type Isolation Bearings)，第四屆海峽兩岸地震工程青年學者研討會暨第六屆臺灣邊界元素法(6th Taiwan EM)會議，台北，台灣，2015 年 10 月 18-20 日。
43. Lin WC, Yu CH, Wang SJ, Hwang JS, Chang KC. Generalized exact and simplified analytical models for sloped rolling-type isolation bearings. The 14th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures (14WCSI), San Diego, U.S.A., September 9-11, 2015.
44. Chang KC, Hwang JS, Wang SJ, Lin WC. Progress of seismic isolation and energy dissipation in Taiwan – application, research and design. The 14th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures (14WCSI), San Diego, U.S.A., September 9-11, 2015.
45. Witarto W, Yan Y, Wang SJ, Mo YL, Chang KC, Tang Y, Barry K. Analytical study of 1D periodic foundations for structural vibration isolation. The 2015 ASME Pressure Vessels & Piping Conference (PVP2015), Boston, U.S.A., July 19-23, 2015.
46. Yan Y, Witarto W, Wang SJ, Mo YL, Chang KC, Tang Y, Barry K. Periodic material based seismic isolation for small modular reactors. The 2015 ASME Pressure Vessels & Piping Conference (PVP2015), Boston, U.S.A., July 19-23, 2015.
47. Chang KC, Chuang WC, Wang SJ, Hwang JS. From seismic isolation to building mass damper - an experimental and analytical study. The Structural Engineering Frontier Conference (SEFC 2015), Yokohama, Japan, March 18-19, 2015.
48. Fan-Ru Lin, Juin-Fu Chai, Pei-Wen Hu, Chang-Chen Yeh, Kou-Chun Chang, Seismic Fragility Analysis of Fire Protection Sprinkler Piping Systems in Hospital, The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand, 2015/11.
49. Wang SJ, Yang YH, Yang CY, Lin FR, Hwang JS, Chang KC, Experimental study on seismic performance of mechanical/electrical equipment with vibration isolation systems, The 10th Pacific Conference on Earthquake Engineering (10PCEE), Sydney, Australia, 2015/11.
50. 林凡茹、胡佩文、柴駿甫、張國鎮，醫院消防撤水系統數值模擬與耐震易損性分析研究，第四屆海峽兩岸地震工程青年學者研討會暨第六屆臺灣邊界元素法(6th BEM)會議，台北，台灣，2015/10。
51. Chang, K.C., Sung, Y.C., Lin, T.K., Hung, H.H., Lee, Z.K., Chen, C.C., Field Tests and Long-Term Monitoring of Bridge Performance ,2015 Taiwan-USA Bridge Engineering Workshop, June 10-11, 2015, Pittsburgh, USA
52. Y. C. Sung, H.H. Hung, K. C. Lin, C. R. Jiang, and K. C. Chang, Seismic Behavior of Precast Segmental Bridge Piers with Shear Resistance Provided by Shear Keys, International Bridge Conference 2015, June 8-11, 2015, Pittsburgh, PA, USA
53. Yu-Chi Sung, Hsiao-Hui Hung, Kuan-Chen Lin, Kuo-Chun Chang, Chi-Rung Jiang, Experimental Study on Precast Segmental Bridge Columns with Semi-rigid Connections, 2015 National Accelerated Bridge Construction Conference, December 7-8, 2015, Miami, USA
54. Chang, Kuo-Chun, Sung, Yu-Chi, Liu, Kuang-Yen, Wang, Shiou-Chun, Experimental investigation and FEM simulation of a bridge pier with scoured pile foundation from

其他著作

- 葉芳耀、張國鎮、宋裕祺、洪曉慧、周中哲、劉楨業、尹世洵 (2015.11)，「複合材料輕量化便橋技術研發(II)」，國家地震工程研究中心，報告編號：NCREE-15-009。
- 陳志豪、張國鎮、陳俊仲、林其穎，「考量等效沖刷載重之橋梁可靠度設計方法研究」，國家地震工程研究中心，NCREE-14-015。

專利 Patent

- 張國鎮、黃震興、李兆治、李森柟，”隔震支承平台”，中華民國發明專利，I258545 (2004/04/09 - 2024/04/09)。
- 黃志鴻、李森柟、張國鎮，”隔震支撐單元”，中華民國發明專利，I243879 (2005/11/21 - 2024/09/02)。
- Kuo-Chun Chang、Jenn-Shin Hwang、George C. Lee、Sen-Nan Lee，”Seismic isolation bearing assembly with a frame unit for supporting a machine body thereon”，美國發明專利，US6955467。
- 李森柟、黃志鴻、張國鎮，”高分子複合材料減震系統”，中華民國發明專利，I309686。
- 李森柟、黃志鴻、張國鎮，”複合金屬阻尼器”，中華民國發明專利，I298768。
- 林詠彬、張國鎮、黃震興、李路生、李宗銘、陳學禮，”剪力增稠流體阻尼器”，中華民國發明專利，I317789 (2009/12/01 - 2027/11/07)。
- 張國鎮、黃震興、汪向榮、黃志鴻、蔡木森，”可調阻尼隔震系統”，中華民國新型專利，M500175 (2015/05/01 - 2024/11/30) (已資本化)。
- 宋裕祺、張國鎮、林冠禎、洪曉慧、江奇融、賴明俊，”預鑄節塊及包含該預鑄節塊之橋柱結構”，中華民國新型專利，M501448 (2015/05/21 - 2025/03/12) (已資本化)。
- 賴進松、盧昭堯、林詠彬、趙以明、張國鎮、譚義績、洪健豪、樸順忠、李豐佐，”橋墩減緩局部沖刷裝置”，中華民國發明專利，I509129 (2015/11/21-2032/4/16)。
- 賴進松、盧昭堯、林詠彬、趙以明、張國鎮、譚義績、洪健豪、樸順忠、李豐佐、盧志晃，”河床沖刷深度及水流流速泥砂濃度之監測系統及方法”，中華民國發明專利，I435061 (2014/4/21-2031/1/16)。
- 賴進松、盧昭堯、林詠彬、趙以明、張國鎮、譚義績、洪健豪、張文鎰、樸順忠、李豐佐、盧志晃，”河道減沖促淤裝置及其配置方法”，中華民國發明專利，I429808 (2014/3/11-2030/7/5)。
- 陳學禮、林詠彬、張國鎮，”太陽能電池”，中華民國發明專利，I355751 (2012/1/1-2027/3/19)。
- 林詠彬、李志成、張國鎮、賴進松、王柄雄、陳俊仲、李路生，”地貌及結構監測系統、該系統之感壓器及其製造方法”，美國發明專利，US7373828B2 (2007/02/15 - 2027/02/15)。
- 林詠彬、李志成、張國鎮、賴進松、王柄雄、陳俊仲、李路生，”地貌及結構監測系統、該系統之感壓器及其製造方法”，中華民國發明專利，I302600 (2008/11/01 - 2026/06/15)。

- 15.林詠彬、張國鎮、陳振川、許志璋，”具有表面光柵之光學裝置及其製作方法”，中華民國發明專利，I294046 (2004/6/21-2023/1/19)。
- 16.林詠彬、張國鎮、李路生，”應用光纖位移計之道路超速超載監測系統及方法”，中華民國發明專利，I283376 (2007/07/01 - 2025/03/10)。
- 17.林詠彬、張國鎮、李路生，”感測裝置及其應用於大地與河川監測系統”，中華民國發明專利，I265303 (2006/11/01 - 2025/03/10)。
- 18.林詠彬、張國鎮、李哲賢，”光學波導化學檢測裝置及其檢測方法”，中華民國發明專利，I254129 (2006/5/1-2024/1/29)。
- 19.林詠彬、張國鎮、陳學禮，”聲波偵測結構及裝置”，中華民國發明專利，I249024 (2008/3/1-2023/1/29)。
- 20.林詠彬、張國鎮、李哲賢、吳信宏，”纜線式光纖感測裝置及其製作方法”，中華民國發明專利，I235826 (2005/07/11 - 2024/06/29)。
- 21.張國鎮、張順賓，”加勁板複材補強施工法”，中華民國發明專利，I233459 (2005/06/01 - 2023/10/21)。
- 22.李有豐、陳錫勳、吳傳威、張國鎮，”鋼筋混凝土構造之鋼纜修復補強施工法”，中華民國發明專利，577952 (2004/03/01 - 2022/12/24)。
- 23.張國鎮、林詠彬、陳俊仲，”水系監測裝置及其監測方法”，中華民國發明專利，I230218 (2005/4/1-2023/9/1)。
- 24.葉芳耀、張國鎮、陳宗斌、游忠翰，“Micro-Nano Fluid Damper,”美國發明專利，Patent No.: US 9,422,997 B2, (2016.08.23~2034.04.27) (已資本化)
- 25.葉芳耀、宋裕祺、張國鎮、洪曉慧，“輕量便橋系統及其建造方法”，中華民國發明專利第 I 564452 號。(2017.01.01~2034.12.02) (已資本化)
- 26.林詠彬、陳佑杰、廖泰杉、張國鎮、李柏翰、王永康、古孟晃，”複合式水文監測系統”，中華民國發明專利第 I577966 號。(2017/04/11 - 2036/04/10) (已資本化)

蔡克銓 教授 Keh-Chyuan Tsai

Professor

學歷/ 美國柏克萊加州大學博士

Ph.D., UC Berkeley

專長/ 鋼結構、耐震設計、結構動力

Steel Structure, Structural Dynamics, Earthquake Resistance Design

期刊論文 (Journal Paper)

1. Lin JL, Kek MK, Tsai, KC (2019), “Stiffness configuration of strongbacks to mitigate inter-story drift concentration in buildings”, *Engineering Structures*, 199, 109615.
2. Chen LW, Tsai KC, Tsai CY, Wu AC (2019), “Evaluating out-of-plane stability for welded BRBs considering flexural restrainer and gusset rotations”, *J. of Constructional Steel Research*, 159(8):161-175.
3. Lin JL, Tsaur CC, Tsai KC (2019), “Two-degree-of-freedom modal response history analysis of buildings with specific vertical irregularities”, *Engineering Structures*, 184: 505-523.
4. 楊依璇、黃彤、李昭賢、蔡青宜、蔡克銓(2019)「雙向鋼板剪力牆邊界梁柱耐震設計與分析研究」，*結構工程*，第 34 卷，第 1 期，第 5-26 頁。
5. 張舉虹、蔡克銓 (2019)「含鋼板阻尼器構架最佳化設計」，*結構工程*，第 34 卷，第 1 期，第 27-56 頁。
6. Lin, JL, Dai, JY, Tsai, KC (2019), “Optimization approach to uniformly distributed peak inter-story drifts along building heights”, *ASCE, Journal of Structural Engineering*, 145 (5), 04019032.
7. Wang, KJ, Chuang, MC, Tsai, KC, Li, CH, Chin, PY, Chueh, SY (2018), “Hybrid testing with model updating on steel panel damper substructures using a multi-axial testing system”, *Earthquake Engng Struct. Dyn.*, 2019;48:347–365.<https://doi.org/10.1002/eqe.3139>.
8. Li, CH, Tsai, KC, Su, L, Lin, PC, Lin, TH (2018), “Experimental investigations on seismic behavior and design of bottom vertical boundary elements in multi-story steel plate shear walls”, *Earthquake Engng Struct. Dyn.*, DOI: 10.1002/eqe.3106.
9. Tsai, CY, Tsai, KC, Chen, LW, Wu, AC (2018), “Seismic performance analysis of BRBs and gussets in a full-scale 2-story BRB-RCF Specimen,” *Earthquake Engng Struct. Dyn.*, 47(12): 2366-2389.
10. Tsai, KC, Hsu, CH, Li, CH, Chin, PY (2018), “Experimental and analytical investigations of steel panel dampers for seismic applications in steel moment frames”, *Earthquake Engng Struct. Dyn.*, 47(6):1416-1439, DOI: 10.1002/eqe.3023.

11. Chuang, MC, Hsieh, SH, Tsai, KC, Li, CH, Wang, KJ, Wu, AC (2018), "Parameter identification for on-line model updating in hybrid simulations using a gradient-based method", *Earthquake Engng Struct. Dyn.*, 47(2): 269-293.
12. 郭銘桂、林瑞良、蔡克銓 (2018)「強脊結構系統之耐震行為研究」，*結構工程*，第 33 卷，第 4 期，第 5-28 頁。
13. 吳忠哲、李昭賢、蔡青宜、林克強、莊勝智、蔡克銓 (2018)「鋼梁接箱型柱之內橫隔斷裂試驗與有限元素模型分析研究」*結構工程*，第 33 卷，第 4 期，第 29-61 頁。
14. 林庭立、吳安傑、王孔君、蔡克銓，2018，「採托架支承配置挫屈束制支撐之新建 RC 構架設計、試驗與抗震性能分析」，*結構工程*，第 33 卷，第 1 期，第 84-102 頁。
15. 曹智嘉、林瑞良、蔡克銓，2017，「立面不規則建築受震反應簡化分析方法」，*結構工程*，第 32 卷，第 4 期，第 88-109 頁。
16. Li, CH, Tsai, KC, Hwang, HY, Tsai, CY (2017), "Cyclic Tests of Steel Plate Shear Walls Using Box-shape Vertical Boundary Elements With or Without Infill Concrete", *Earthquake Engng Struct. Dyn.*, 46(14): 2537-2564, DOI: 10.1002/eqe.2917.
17. Chen, PC, Lai, CT, Tsai, KC (2017), "A Control Framework for Uniaxial Shaking Tables Considering Tracking Performance and System Robustness", *Structural Control and Health Monitoring*, DOI: 10.1002/stc.2015, 24:e2015.
18. Wu, AC, Tsai, KC, Yang, HH, Huang, JL, Li, CH, Wang, KJ, Khoo, HH (2017), "Hybrid experimental performance of a full-scale two-story buckling restrained braced RC frame", *Earthquake Engng Struct. Dyn.*, 46(8): 1223–1244, DOI: 10.1002/eqe.2853.
19. 許仲翔、李昭賢、金步遠、蔡克銓，2017，「含鋼板阻尼器構架耐震設計與分析」，*結構工程*，第 32 卷，第 2 期，第 5-34 頁。
20. Sen, AD, Roeder, CW, Berman, JW, Lehman, DE, Li, CH, Wu, AC, Tsai, KC (2016), "Experimental investigation of chevron concentrically braced frames with yielding beams", *Journal of Structural Engineering*, 142 (12), DOI: 10.1061/(ASCE)ST.1943-541X.0001597.
21. 楊巽閎、黃潔倫、吳安傑、李昭賢、蔡青宜、王孔君、蔡克銓，2016，「新建含挫屈束制支撐之實尺寸兩層樓鋼筋混凝土構架耐震設計、試驗與分析研究：一、試體設計與耐震試驗」，*結構工程*，第 31 卷，第 2 期，第 91-114 頁。
22. 楊巽閎、黃潔倫、吳安傑、李昭賢、蔡青宜、王孔君、蔡克銓，2016，「新建含挫屈束制支撐之實尺寸兩層樓鋼筋混凝土構架耐震設計、試驗與分析研究：二、試驗結果與模擬分析」，*結構工程*，第 31 卷，第 2 期，第 115-136 頁。
23. Pan, KY, Wu, AC, Tsai, KC, Li, CH, Khoo, HH (2016), "Seismic retrofit of reinforced concrete frames using buckling-restrained braces with bearing block load transfer mechanism", *Earthquake Engng Struct. Dyn.*, 45 (14): 2303-2326.
24. 潘冠宇、吳安傑、蔡克銓、李昭賢、林保均、王孔君、楊季軒，2016，「屈曲約束支撐鋼框架補強的鋼筋混凝土框架結構耐震性能試驗」，*建築鋼結構進展*，第 18 卷，第 1 期，第 29-36 頁。
25. Khoo, HH, Tsai, KC, Tsai, CY, Tsai, CY, Wang, KJ (2016), "Bidirectional substructure pseudo-dynamic tests and analysis of a full-scale two-story buckling-restrained braced frame", *Earthquake Engng Struct. Dyn.*, 45:1085–1107, DOI: 10.1002/eqe.2696.
26. Lin, PC, Tsai, KC, Chang, CA, Hsiao, YY, Wu, AC (2016), "Seismic design and testing of buckling-restrained braces with a thin profile", *Earthquake Engng Struct. Dyn.*, 45:339–358, DOI: 10.1002/eqe.2660.

27. Lin, JL, Wang, WC, Tsai, KC (2016), "Suitability of using the torsional amplification factor to amplify accidental torsion", *Engineering Structures*, 127: 1-17.
28. Dowden, DM, Clayton, PM, Li, CH, Berman, JW, Bruneau, M, Lowes, LN, Tsai, KC (2016), "Full-Scale Pseudodynamic Testing of Self-Centering Steel Plate Shear Walls", *ASCE, Journal of Structural Engineering*, 142(1), DOI:10.1061/(ASCE)ST.1943-541X.0001367.
29. 潘冠宇、吳安傑、李昭賢、蔡克銓，2015，「挫屈束制支撐鋼框補強鋼筋混凝土構架之研究」，*結構工程*，第 30 卷，第 4 期，第 41-64 頁。
30. 吳安傑、林保均、莊明介、蔡克銓，2015，「挫屈束制支撐構架設計概要與工程應用」，*結構工程*，第 30 卷，第 1 期，第 11-33 頁。
31. Lin, PC, Tsai, KC, Wu, AC, Chuang, MC, Li, CH, Wang, KJ (2015), "Seismic Design and Experiment of Single and Coupled Corner Gusset Connections in a Full-scale Two-story Buckling-restrained Braced Frame", *Earthquake Engng Struct. Dyn.*, 44(13):2177–2198.
32. Sritharan, S, Aaleti, S, Henry, RS, Liu, KY, Tsai, KC (2015), "Precast concrete wall with end columns (PreWEC) for earthquake resistant design", *Earthquake Engng Struct. Dyn.*, 44(12):2075–2092.
33. Chuang, MC, Tsai, KC, Lin, PC, Wu, AC (2015), "Critical Limit States in Seismic Buckling-Restrained Brace and Connection Designs", *Earthquake Engng Struct. Dyn.*, 44(10):1559–1579.
34. Mahrenholtz, C, Lin, PC, Wu, AC, Tsai, KC, Hwang, SJ, Lin, RY, Bhayusukma, MY (2015), "Retrofit of Reinforced Concrete Frame with Buckling-Restrained Brace", *Earthquake Engng Struct. Dyn.*, 44(1):59-78.
35. Chen, PC, Chang, CM, Spencer, FB, Tsai, KC (2015), "Adaptive model-based tracking control for real-time hybrid simulation", *Bulletin of Earthquake Engng*; 13(6):1633–1653, DOI 10.1007/s10518-014-9681-2
36. Lin, JL, Liu, TH, Tsai, KC (2015), "Real-valued modal response history analysis for asymmetric-plan buildings with nonlinear viscous dampers", *Soil Dynamics and Earthquake Engineering*, 77: 97-110.
37. Lin, JL, Wang, WC, Tsai, K.C. (2015), "Evaluating the reliability of using the deflection amplification factor to estimate design displacements with accidental torsion effects", *Earthquakes and Structures*, 8 (2): 443-462.

研討會論文 (Conference Papers)

1. Tsai KC (2019) "Researches on BRBs and BRBFs", *Proceedings of SHAKE International Conference, Smart Technologies & Advanced Knowledge in Earthquake Engineering*, Nov. 14-16, Manila Philippines.
2. Takeuchi T, Matsui R, Koizumi K, Lin PC, Iwanaga M, Wu AC, Tsai KC (2019) "Lateral Buckling Performance Test of Roof Beam Braced with Grid-purlin System", *Proceeding of The Pacific Structural Steel Conference*, Nov. 16-18, Tokyo, Japan.
3. Chen C and Tsai KC (2019) "Global Stability of BRBs using Truss Restrainer", *Proceedings of The 32nd KKHTCNN Symposium on Civil Engineering*, October 24-26, Daejeon, Korea.
4. Tsai KC, Chang CH (2019) "Optimization of Steel Panel Damper Design for Seismic Moment Frames", *Proceedings of the International Conference on Sustainable Civil Engineering and Architecture 2019*, Oct. 25-26, Ho Chi Minh City, Vietnam.
5. 蔡克銓(2019) 「建築勘災及重建」，921 地震二十週年回顧與省思研討會論文集，2019

年9月19-20日，中國土木水利工程學會，台北，台灣。

6. Tsai CY, Wu CC, Li CC and Tsai KC (2019) "Fracture Assessment of Electro-Slag Welding Connection In Steel Beam-To-Box Column Joints", *Proceedings* of International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, September 15-19.
7. Chuang MC, Wang KJ and Tsai KC (2019) "Online Model Updating for the Advanced Hybrid Simulations of a Steel Panel Damper Substructure", *Proceedings*, International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, September 15-19, Taipei, Taiwan.
8. Lin, JL, Tsaur, CC, and Tsai, KC (2019) "Simplified Seismic Analysis of Buildings with Setbacks", International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan. September 15-19.
9. Matsui R, Koizumi K, Lin PC, Iwanaga M, Wu AC, Tsai KC, Takeuchi T. (2019) "Plastic Ductility Performance Of Grid-Purlin System Connected To Wide Flange Beam", *Proceedings* of International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, September 15-19.
10. Wang KJ, Chuang MC, Li CH, Tsai KC (2019) "A Distributed Computing Platform for Conventional Hybrid Simulation" *Proceedings*, 7th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, June 24-26, Crete, Greece.
11. Wang KJ, Chuang MC, Tsai KC, Li CH, Chin PY, Chueh SY (2019) "Advanced Hybrid Simulation with Model Updating of a Spatial Structure with Steel Panel Dampers" *Proceedings*, 16th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, July 1-6, St. Petersburg, Russian Federation.
12. Wu AC, Tsai KC and Chen LW (2019) "Experimental Study on Out-of-plane Stability of Buckling-restrained Braces", *Proceedings* of 16th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures St. Petersburg, Russian Federation, July 1-6
13. Tsai, KC, Li, CH, Tsai, CY, Wu, CC, Lin, KC, Jhuang, SJ (2018), "Electro-Slag Weld Fractures in Seismic Steel Beam-To-Box Column Moment Connections", *Proceedings*, 9th Ninth International Conference on Advances in Steel Structures (ICASS'2018), December 5-7, 2018, Hong Kong, China.
14. Tsai, CY, Ibarra S, Wu, AC, Wang, KJ, Sen, A, Berman, J, Lehman, D, Roeder, C, Tsai, KC (2018), "Seismic Testing of a 3-story Special Concentrically Braced Frame with Yielding Beams", *Proceedings*, The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
15. Wu, AC, Tsai, KC (2018), "Experimental study of RC beam-to-column joint in buckling-restrained braced frame", *Proceedings*, 7th Asia Conference on Earthquake Engineering, November 22-25, 2018, Bangkok, Thailand.
16. Chuang, MC, Wang, KJ, Tsai, KC (2018), "Advanced Hybrid Simulations with Online Model Updating on a Steel Panel Damper Substructure", *Proceedings*, 7th Asia Conference on Earthquake Engineering, November 22-25, 2018, Bangkok, Thailand.
17. 蔡克銓、許仲翔、張舉虹，2018，「鋼板阻尼器接抗彎構架邊界梁之耐震與優化設計」，第十屆海峽兩岸及香港鋼結構技術交流會論文集，2018年11月2-3日，杭州，中國。
18. Lin, TH, Tsai, KC, Lin, KC (2018), "The Bi-Axial Testing System in Tainan Laboratory of Taiwan NCREE", *Proceedings*, 11th US National Conference on Earthquake Engineering,

- June 25-29, 2018, Los Angeles, CA.
19. Li, CH, Wu, CC, Tsai, KC, Lin, KC, Jhuang SJ (2018), "Fracture Behavior of Electro-Slag Welded Joint in Steel Beam-To-Box Column Connection", *Proceedings*, 11th US National Conference on Earthquake Engineering, June 25-29, 2018, Los Angeles, CA.
 20. Wu, AC, Tsai, KC, Chen, LW, Lin, TH (2018), "Cyclic loading tests for out-of-plane stability investigation of buckling-restrained braces", *Proceedings*, 11th US National Conference on Earthquake Engineering, June 25-29, 2018, Los Angeles, CA.
 21. Wu, AC, Tsai, KC, Lin, TL (2018), "Seismic Testing of the Connecting Joint in a Buckling-restrained K-braced RC Frame", *Proceedings*, STESSA'18, Feb. 2018, Christchurch, New Zealand.
 22. 林瑞良、王韋竣、蔡克銓，2017，「以靜力分析法計算含意外扭矩效應之彈性結構受震位移的可靠度評估」，第五屆海峽兩岸地震工程青年學者研討會暨第五屆工程結構抗震減震新技術研討會，2017年11月17-19日，中國上海。
 23. Tsai, KC, Wu, AC, Pan, KY, Yang, HH (2017), "Buckling restrained braces for existing and new reinforced concrete frames", *Proceedings*, The 2017 International Conference on Earthquakes and Structures (ICEAS17), The 2017 World Congress on Advances in Structural Engineering and Mechanics (ASEM17), Ilsan (Seoul), Korea.
 24. Zhong, YJ, Hsu, SC, Chen, PC, Tsai, KC (2017), "Semi-Active Control of a Base-Isolated Raised Floor System Subjected to Earthquakes Part1: Numerical Simulation", *Proceedings*, The Thirtieth KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
 25. Hsu, SC, Zhong, YJ, Chen, PC, Tsai, KC (2017), "Semi-Active Control of a Base-Isolated Raised Floor System Subjected to Earthquakes Part2: Real-time Hybrid Simulation", *Proceedings*, The Thirtieth KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
 26. Chen, PC, Lai, CT, Tsai, KC (2017), "Development of Advanced Experimental Technology on Reproducing Floor Response of High-rise Buildings subjected to Ground Motions", *Proceedings*, The 7th International Conference on Advances in Experimental Structural Engineering, September 6-8, 2017, Pavia, Italy.
 27. Wu, AC, Tsai, KC (2017), "Hybrid tests of a full-scale two-story buckling restrained braced RC frame" *Proceedings*, Eurosteel2017 September 2017, Copenhagen.
 28. Wang, KJ, Tasi, KC (2017), "A General-purpose Platform for Hybird Simulation with Model Updating", *Proceedings*, The 7th International Conference on Advances in Experimental Structural Engineering, September 6-8, 2017, Pavia, Italy.
 29. 蔡克銓、黃宣諭、李昭賢、蔡青宜，2017，「使用填充型與未填充型鋼骨箱型柱之鋼板剪力牆耐震設計與試驗」，第九屆海峽兩岸及香港鋼、組合及金屬結構技術研討會，2017年1月5-6日，香港。
 30. Lai, CT, Chen, PC, Tsai, KC (2016), "Shaking Table Control Strategy on Floor Response Reproduction of High-rise Buildings Subjected to Earthquakes", *Proceedings*, The 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 31. Chen, LW, Tsai, CY, Tsai, KC (2016), "Analytical investigation on the out-of-plane stability of BRBs in a full scale two-story RC frame", *Proceedings*, The 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
 32. Chin, PY, Hsu, CH, Wang, KJ, Chuang, MC, Li, CH, Tsai, KC (2016), "Hybrid tests of steel panel damper substructures in a 6-story moment resisting frame", *Proceedings*, The 29th

- KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China.
33. Wu, AC, Tsai, KC (2016), "Pseudo-dynamic performance of a full-scale two-story buckling-restrained braced RC frame", *Proceedings*, International Symposium on Sustainability and Resiliency of Infrastructure, Taipei, Taiwan.
 34. Wu, AC, Tsai, KC (2016), "Seismic performance of a full-scale two-story buckling-restrained braced RC frame", *Proceedings*, 6th Asia Conference on Earthquake Engineering, September 22-24, 2016, Cebu City, Philippines.
 35. Lin, JL, Liu, TH, Tsai, KC (2016), "Real-Valued Modal Response History Analysis for Asymmetric-Plan Buildings with Nonlinear Viscous Dampers", *Proceedings*, 6th Asia Conference on Earthquake Engineering, 22-24 Sep. 2016, Cebu, Philippine.
 36. 賴晉達、陳沛清、蔡克銓，2016，「以振動台系統控制方法重現高樓層樓版受震反應歷時之研究」，第七屆海峽兩岸四地高校師生土木工程監測與控制研討會，2016年7月5-8日，臺灣台北。
 37. 蔡克銓、楊巽閎、黃潔倫、吳安傑、李昭賢、蔡青宜、王孔君，2016，「地震工程模擬實驗以助結構工程實務：以一足尺雙層構架擬動態實驗為例」，第七屆海峽兩岸四地高校師生土木工程監測與控制研討會，2016年7月5-8日，臺灣台北。
 38. 蔡克銓、楊巽閎、黃潔倫、吳安傑、王孔君，2016，「實尺寸雙層含挫屈束制支撐之鋼筋混凝土構架耐震設計與擬動力實驗」，2016 國際工程科技發展戰略高端論壇：工程結構創新與發展暨結構模態測試和應用，2016年5月14-17日，重慶，中國。
 39. Tsai, KC, Yang, HH, Hwang, JL, Wu, AC, Tsai, CY, Li, CH, Wang, KJ (2015), "Design, analysis and hybrid tests of a full-scale 2-story RC frame with buckling restrained braces", International Workshop on Advanced Earthquake Engineering Testing and Simulation for Near-Fault Ground Motions, Taipei, Taiwan.
 40. Li, CH, Wu, AC, Tsai, KC (2015), "Experimental Investigation on Seismic Retrofit of Existing Reinforced Concrete Buildings using Steel Plate Shear Walls", *Proceedings*, 2nd ATC-SEI Conference on Improving Seismic Performance of Existing Buildings and other Structures, December 10-12, 2015, San Francisco, USA.
 41. Lai, CT, Chen, PC, Tsai, KC (2015), "Improved Tracking Performance of a Uni-axial Seismic Shaking Table by Introducing Control Theory", *Proceedings*, the 28th KKHTCNN Symposium on Civil Engineering, November 16-18, 2015, Bangkok, Thailand.
 42. Tsai, KC, Wu, AC, Wang, KJ (2015), "Hybrid tests of a full-scale two-story reinforced concrete frame with buckling restrained braces," *Proceedings*, EU-US-Asia Workshop on Hybrid Simulation, October 5-6, 2015, Ispra, Italy.
 43. Tsai, KC, Li, CH (2015), "Seismic Behavior and Design of Bottom Boundary Columns in Steel Plate Shear Walls," *Proceedings*, 2015 World Congress on Advances in Structural Engineering and Mechanics (ASME15), August 25-29, 2015, Incheon, Korea.
 44. Wu, AC, Pan, KY, Tsai, KC, Li, CH, Lin, PC, Wang, KJ, Yang, CH (2015), "Seismic Performance of RC Structure Retrofitted with Steel Buckling-Restrained Braced Frame," *Proceedings*, The 8th international conference on Behaviour of Steel Structures in Seismic Areas (STESSA'15), July 1-3, 2015, Shanghai, China.
 45. Chuang, MC, Tsai, KC, Lin, PC, Wu, AC (2015), "A Cloud Service for Automated Design of Seismic Buckling-Restrained Braces and Connections," *Proceedings*, The 8th international conference on Behaviour of Steel Structures in Seismic Areas (STESSA'15), July 1-3, 2015, Shanghai, China.
 46. Clayton, PM, Dowden, DM, Li, CH, Berman, JW, Bruneau, M, Lowes, LN, Tsai KC (2015),

2015-2019 教師著作目錄集

“Self-Centering Steel Plate Shear Walls for Improving Seismic Resilience,” *Proceedings*,
The 8th international conference on Behaviour of Steel Structures in Seismic Areas
(STESSA’15), July 1-3, Shanghai, China.

呂良正 教授 Liang-Jenq Leu

Chairman&Professor

學歷/ 美國康乃爾大學博士

Ph.D., Cornell University

專長/ 結構非線性分析與設計、計算力學、結構最佳化設計

Nonlinear Analysis & Design of Structures, Computational Mechanics, Structural Optimization

期刊論文 (Journal Paper)

- 呂良正(2014)。臺大土木系 Capstone 課程經驗分享。評鑑雙月刊，49，21-24。
- 詹鵬台、鄭至伸、呂良正(2016)，黏性阻尼器應用於二維與三維建築結構之最佳化設計，結構工程，第三十一卷，第四期， pp. 59-67。
- 彭瑞麟、何崇銘、李文進、呂良正 (2017) ， SRC 結構營造施工安全問題之探討，結構工程，第三十二卷，第二期，pp. 91-107。
- 唐瑢書、呂良正 (2018)，以實驗及建築耗能模擬軟體評估建築外殼節能措施之效益，中國土木水利工程學刊，第三十卷，第二期，pp. 93-105。

研討會論文 (Conference Papers)

- Leu, L.-J., Shih, K.-W. and Ke, C.-Yu. (2014), "Improved Element Exchange Method for Topology Optimization," *The 5th International Conference on Computational Methods (ICCM 2014)* , 28-30 July 2014; Fitzwilliam College, Cambridge, UK.
- Liu, M. and Leu, L.-J. (2015), "Applying Capstone Course to Assess Graduate Attributes: A New IEET Accreditation Requirement," *The Third FEIAP Convention*, July 5-7, 2015, Taipei, Taiwan.
- Leu, L.-J., Shih, K.-W., Lee, C.-H., Guo, J.-Y., Ke, C.-Y., and Chang, J.-T. (2016), "Optimal Design of Structures," *Proceedings of the 14th East-Asia Pacific Conference on Structural Engineering and Construction Management.* (EASEC-14). Ho Chi Minh , Viet Nam, January 6-8.
- Liu, M., Leu, L.-J. and Than, C. (2016), " IEET's Mentoring of Myanmar in Engineering Accreditation System," *ASEE 2016 Annual Conference and Exposition*, June 25-29 New Orleans, LA, USA.
- 洪郁珊、蕭祥佑、呂良正 (2016), "分布式多頻調諧質量阻尼器之最佳化設計與減振效能

之探討，”第十三屆中華民國結構工程暨第三屆中華民國地震工程研討會論文集，8月24日-26日，桃園。

6. Chan, P.-T., Cheng, C.-S. and Leu, L.-J. (2016), “Optimal Design of Viscous Dampers for Two and Three-Dimensional Building Structures,”第十三屆中華民國結構工程暨第三屆中華民國地震工程研討會論文集，8月24日-26日，桃園。
7. Leu, L.-J. (2016), “Educating the Future Civil Engineers for a Sustainable World: An Integration of Cornerstone, Keystone, and Capstone Courses on Engineering Design at the National Taiwan University,” Civil Engineering Conference in the Asia Region (CECAR 7), Hawaii, US, Aug. 30-Sept. 2.
8. Leu, L.-J., Shih, K.-W, Tseng, Y.-L., and Ke, C.-Yu. (2016), “Topology Optimization by Improved Element Exchange Method,” *The 2nd Association of Computational Mechanics Taiwan Conference*, 20-21 October; Taipei, Taiwan.
9. Chan, P.-T., Huang, C.-F., Cheng, C.-S. and Leu, L.-J. (2016), “Optimal Design of Viscous Dampers for Two-Dimensional Building Structures,” *Proceedings of the 29th KKHTCNN Symposium on Civil Engineering*, December 3-5, Hong Kong.
10. 詹鵬台、鄭至伸、呂良正(2017)，黏性阻尼器應用於二維與三維建築結構之最佳化設計，第九屆海峽兩岸及香港鋼、組合及金屬結構技術研討會論文集，1月5-6日，香港。
11. Hsu, M.-S., Tang, J.-S., and Leu, L.-J. (2017), “Numerical Analysis of Free Cooling and Ventilation System with Multiple PCMs for Building,” *Proceedings of the 30th KKHTCNN Symposium on Civil Engineering*, November 2-4, Taipei, Taiwan.
12. Lin, H.-L., Lian, J.-W., and Leu, L.-J. (2017), “Implementation of Shell and Plate Structural Optimization by Finite Element Package ABAQUS,” *Proceedings of the 30th KKHTCNN Symposium on Civil Engineering*, November 2-4, Taipei, Taiwan.
13. Lu, Y., Huang, C.-F., and Leu, L.-J. (2017), “Optimal Placement of Viscous Dampers for Two-Dimensional Building Structures,” *Proceedings of the 30th KKHTCNN Symposium on Civil Engineering*, November 2-4, Taipei, Taiwan.
14. Lu, S.-H., Leu, L.-J., and Lin, C.-C. (2018), “Using Finite Element Package ABAQUS in Stability Analysis of Hand-Dug Retaining Piles,” *Proceedings of the Thirty-First KKHTCNN Symposium on Civil Engineering*, November 22-24, Kyoto, Japan.

技術報告及其他等

1. 呂良正 (2014)，臺 15 線關渡橋吊索檢測暨橋梁微振動量測報告，共 34 頁。
2. 呂良正、楊慕忠 (2014)，善豐花園事件補充調查工作及修復方案，共 65 頁。
3. 呂良正 (2014)，具計算效率之建築結構阻尼器最佳化配置方法 (2/2)，國科會研究計畫期末報告，計畫編號，NSC 101-2221-E-002-207-MY2，共 30 頁。
4. 呂良正 (2015)，雙塔斜張橋橋塔型式及鋼索配置最佳化研究，共 120 頁。
5. 呂良正 (2016)，橋梁美學設計準則建立與實際案例探討，共 146 頁。
6. 呂良正 (2017)，元素交換法之發展及其於結構初步設計及微觀結構設計之應用 (2/2)，科技部研究計畫期末報告，計畫編號，MOST 103-2221-E-002-072-MY2，共 58 頁。

專利

專利名稱	國別	專利號碼	發明人	專利 權人	專利期間	國科會計畫 編號
風力輔助的溫溼度調節裝置	中華民國	I 346266	王安邦、李佳峯 蔡文欽、林怡君 路非遙、陳志傑 呂良正、陳俊杉 施文彬	國立臺灣大學	2011..08.01 ~ 2027.10.29	NSC94-2218-E-002 -073 -; NSC95-2218-E-002 -037 -; NSC96-2218-E-002 -006 -

專利名稱	國別	專利號碼	發明人	專利 權人	專利期間	國科會計畫 編號
風力輔助的溫溼度調節裝置	中華民國	I 346266	王安邦、李佳峯 蔡文欽、林怡君 路非遙、陳志傑 呂良正、陳俊杉 施文彬	國立臺灣大學	2011..08.01 ~ 2027.10.29	NSC94-2218-E-002 -073 -; NSC95-2218-E-002 -037 -; NSC96-2218-E-002 -006 -

詹穎雯 教授 Yin-Wen Chan

Professor

學歷/ 美國密西根大學博士

Ph.D., University of Michigan

專長/ 混凝土材料、破壞力學、纖維複合材料

Concrete Materials, Fiber Reinforced Composites, Fracture Mechanics

期刊論文 (Journal Paper)

1. Wang, P.-F., Tsai, M.-T., Chan, Y.-W., "A study on critical chloride ion concentration for corrosion of reinforcing steel in mortar," Journal of the Chinese Institute of Civil and Hydraulic Engineering"(2014)
2. Liu, Y.-W., Yang, C.-C., Chan, Y.-W., Cho, S.-W., "The abrasion resistance of repair materials for Ren-Yi-Tan Reservoir Zhu-Shan Weir," Journal of the Chinese Institute of Civil & Hydraulic Engineering, (2014) .
3. Chen, Y.-S., Chiu, H.-J., Chan, Y.-W., Chang, Y.-C., Yang, C.-C., The correlation between air-borne salt and chlorides cumulated on concrete surface in the marine atmosphere zone in North Taiwan,"Journal of Marine Science and Technology, 21(1),24-34 pp. 299-310 (2013).
4. Hoang, V.-L., Chan, Y.-W., Self-healing ability of high-volume fly ash pastes cracked by drying shrinkage," Journal of the Chinese Institute of Civil and Hydraulic Engineering"24(4),429-438(2012)
5. Ming-Chih Li, Yu-Shen Chen, Yin-Wen Chan, Vihn Long Hoang, A STUDY OF STATISTICAL MODELS APPLICATION FOR MIXTURE OF HIGH-FLOWING CONCRETE," Journal of Marine Science and Technology 20(3) · June 2012
6. Ing Lim, Jenn-Chuan Chern, Tony C. Liu, and Yin-Wen Chan, Effect of ground granulated blast furnace slag on mechanical behavior of PVA-ECC " Journal of Marine Science and Technology 20(3) · (2012)

研討會論文 (Conference Papers)

A. 國外會議論文

1. Lim, Ing, J.C. Chern, tony C. Liu, and Y.W. Chan, "Effect of Ground Granulated blast furnace Slag on Mechanical Behavior of PVA-ECC," *The 4th ACF International Conference*, Taipei, Nov. 29-30 (2010).
2. Chan, Y.W., C.C. Yang, Y.S. Chen, and Y.C. Chang, "Prediction Model of Air-Borne Salt Distribution in the Coastal Region of Northern Taiwan," *The 1st International Seminar on Sustainable Infrastructure and Built Environment in Developing Countries*, Bandung, Indonesia, November 2-3 (2009).
3. Chan, Y.W. and J.C. Chern, "Development and Applications of SCC in Taiwan," 2008 KCI-JCI-TCI Symposium on "Assessment of Existing Concrete Structures & Recent

- Advancements in Concrete Technology," Ilsan, Korea, Nov. 6-8 (2008).
4. Chen, Y.J., J.C. Chern, and Y.W. Chan, "Study of Mechanical Behaviors of the Fiber Reinforced Concrete at Elevated Temperatures," The 3rd ACF International Conference, Ho Chi Minh City, Nov. 11-13 (2008).
 5. Chan, Y.W. and J.C. Chern, "Recent Applications of SCC in Taiwan," *Taiwan Session*, ACI 2008 Fall Convention, St. Louis, USA, November 2-6 (2008).
 6. Chan, Y.W., S.H. Hsieh, and W.T. Chang, "On the rheological Behavior of Self-Compacting Concrete Mortar using Discrete Element Method," *The 5th International RILEM Symposium on Self-Compacting Concrete*, Ghent, Belgium, Sept. 3-5 (2007).
 7. Chan, Y.W. and M.C. Lee, "Application of Basic Oxygen Furnace Slag in Self-Compacting Concrete – Development and Behavior," *The 1st International Conference of European Asian Civil Engineering Forum (EACEF)*, Jakarta, Indonesia, Sept. 26-27 (2007).
 8. Chan, Y.W., "Application of Self-Compacting Concrete in Taiwan," *ACI China Chapter Convention*, Wu Han, China, Jan. 19-20 (2007).
 9. Chan, Y.W. and M.C. Lee, "Application of Basic Oxygen Furnace Slag On Medium Strength Self-Compacting Concrete," *The 19th KKCNN Symposium on Civil Engineering*, Kyoto, Japan, Dec. 10-12 (2006).
 10. Chan, Y.W. and Y.S. Chen, "Life-cycle consideration for Design and Maintenance of Concrete Structures," *International Workshop of cSUR* (International Center for Sustainable Urban Regeneration, University of Tokyo), Tokyo, Japan, Nov. 24-25 (2006).

B. 國內會議論文

1. 詹穎雯, 「氯鹽相關之混凝土耐久性能探討與橋梁設計建議 –以台灣北部沿海區域為例」, 氯鹽環境下鋼筋混凝土橋梁之生命週期管理與耐久性設計研討會, 國家地震工程研究中心主辦, 台北市(2010)。
2. 詹穎雯、李銘智、廖同柏、鄭瑞濱, 「應用統計模型於高流動性混凝土之配比研究」, 台灣混凝土學會 2009年混凝土工程研討會, 台中市 (2009)。
3. 詹穎雯、楊仲家、陳育聖、張永昌, 「台灣沿海地區大氣中氯鹽預測模式之研究」, 台灣混凝土學會 2009年混凝土工程研討會, 台中市 (2009)。
4. 陳振川、詹穎雯、楊仲家、陳育聖、張永昌, 「北台灣地區鋼筋混凝土腐蝕劣化受大氣中氯鹽影響之研究」, 第九屆中華民國結構工程研討會, 高雄市 (2008)。
5. 詹穎雯、李銘智、林暉峰, 「應用轉爐石粉於中低強度自充填混凝土」, 台灣混凝土學會 2007年混凝土工程研討會, 台北市 (2007)。
6. 陳振川、詹穎雯、楊仲家、陳育聖、張永昌、鄒安凱(2007), 「北台灣地區橋梁腐蝕劣化受大氣中氯」。

其他著作

1. 詹穎雯主編,「水工結構之永續性」, TCI401-001, 台灣混凝土學會研討會論文集, 139 頁 (2008)。

2. 詹穎雯、張大鵬、鄭瑞濱主編，「台灣混凝土學會(TCI)2007 年混凝土工程研討會」，論文集(一)(二)，1412 頁(2007)。
3. 詹穎雯主編，「混凝土工程施工規範與解說」，土木 402-94a，中國土木水利工程學會混凝土工程委員會施工規範編審小組審定，中興工程顧問社出版，203 頁 (2007)。

黃世建 教授 Shyh-Jiann Hwang

Professor

學歷/ 美國加州大學柏克萊分校 博士

Ph.D., UC Berkeley

專長/ 鋼筋混凝土結構行為、結構耐震設計、鋼筋混凝土抗剪力學行為、預力混凝土

期刊論文 (Journal Paper)

1. Mogili, S., Kuang, J. S., and Hwang, S. J. (2019). "Predicting Shear Strength of Reinforced Concrete Knee Joints in Closing and Opening Actions," accepted by Journal of Structural Engineering, ASCE. (SCI , EI)
2. Li, Y. A., Weng, P. W., and Hwang, S. J. (2019). "Seismic Performance of RC Intermediate Short Columns Failed in Shear," ACI Structural Journal, V. 116, No. 3, May, pp. 195-206. (SCI , EI)
3. Puranam, A. Y., Irfanoglu, A., Pujol, S., Chiou, T. C., and Hwang S. J. (2018). "Evaluation of Seismic Vulnerability Screening Indices Using Data from the Taiwan Earthquake of 6 February 2016," Bulletin of Earthquake Engineering, DOI: 10.1007/s10518-018-0519-1. (SCI , EI)
4. 曾建創、陳力平、黃世建, (2018)「含開口鋼筋混凝土牆非韌性構架試驗研究」, 結構工程, 第三十三卷, 第一期, 第68-83頁。
5. Yeh, R. L., Tseng, C. C., and Hwang, S. J. (2018). "Shear Strength of Reinforced Concrete Vertical Wall Segments under Seismic Loading," ACI Structural Journal, V. 115, No. 5, September, pp. 1485-1494. (SCI , EI)
6. Tseng, C. C., Hwang, S. J., and Lu, W. Y. (2017). "Shear Strength Prediction of Reinforced Concrete Deep Beams with Web Openings," ACI Structural Journal, V. 114, No. 6, November-December, pp. 1569-1579. (SCI , EI)
7. Hwang, S. J., Tsai, R. J., Lam, W. K., and Moehle, J. P. (2017). "Simplification of Softened Strut-and-Tie Model for Strength Prediction of Discontinuity Regions," ACI Structural Journal, V. 114, No. 5, September-October, pp. 1239-1248. (SCI , EI)
8. Weng, P. W., Li, Y. A., Tu, Y. S., and Hwang, S. J. (2017). "Prediction of Lateral Load Displacement Curves for Reinforced Concrete Squat Walls Failed in Shear," Journal of Structural Engineering, ASCE, 143(10), DOI: 10.1061/(ASCE)ST.1943-541X.0001872, 04017141. (SCI , EI)
9. Li, Y. A., and Hwang, S. J. (2017). "Prediction of Lateral Load Displacement Curves for Reinforced Concrete Short Columns Failed in Shear," Journal of Structural Engineering, ASCE, 143(2), DOI: 10.1061/(ASCE)ST.1943-541X.0001656, 04016164. (SCI , EI)

10. Mo, Y. L., Luu, C. H., Nie, X., Tseng, C. C., and Hwang, S. J. (2017). "Seismic Performance of a Two-story Unsymmetrical Reinforced Concrete Building under Reversed Cyclic Bi-directional Loading," *Engineering Structures*, 145 (2017), pp. 333-347. (SCI, EI)
11. Lim, E., Hwang, S. J., Cheng, C. H., and Lin, P. Y. (2016). "Cyclic Tests of Reinforced Concrete Coupling Beam with Intermediate Span-to-Depth Ratio," *ACI Structural Journal*, V. 113, No. 3, May-June, pp. 515-524. (SCI, EI)
12. Lim, E., Hwang, S. J., Wang, T. W., and Chang, Y. H. (2016). "An Investigation on the Seismic Behavior of Deep Reinforced Concrete Coupling Beams," *ACI Structural Journal*, V. 113, No. 2, March-April, pp. 217-226. (SCI, EI)
13. Lim, E., and Hwang, S. J. (2016). "Modeling of the Strut-and-Tie Parameters of Deep Beams for Shear Strength Prediction," *Engineering Structures*, 108 (2016), pp. 104-112. (SCI, EI)
14. Hsiao, F. P., Oktavianus, Y., Ou, Y. C., Luu, C. H., and Hwang, S. J. (2015). "A Pushover Seismic Analysis and Retrofitting Method Applied to Low-Rise RC School Buildings," *Advances in Structural Engineering*, Vol. 18, No. 3, pp. 311-324. (SCI)
15. Bayhan, B., Moehle, J. P., Yavari, S., Elwood, K. J., Lin, S. H., Wu, C. L., Hwang, S. J. (2015). "Seismic Response of a Concrete Frame with Weak Beam-Column Joints," *Earthquake Spectra*, Vol. 31, No. 1, pp. 293-315. (SCI)
16. 翁樸文、李翼安、蔡仁傑、黃世建，(2015)「低矮型鋼筋混凝土剪力牆之側力位移曲線預測」，*結構工程*，第三十一卷，第一期，第37-60頁。
17. 李翼安、黃世建，(2015)「高強度鋼筋混凝土短柱之剪力強度預測」，*中國土木水利工程學刊*，第二十七卷，第二期，第151-161頁。(EI)
18. Chiou, T. C., and Hwang, S. J. (2015). "Tests on Cyclic Behavior of Reinforced Concrete Frames with Brick Infill," *Earthquake Engineering and Structural Dynamics*, 44(12):1939 – 1958, Wiley Online Library, DOI: 10.1002/eqe.2564. (SCI, EI)

研討會論文（Conference Papers）

1. Li, Y. A. and Hwang, S. J., (2019) "Shear Behavior Prediction of Non-ductile Reinforced Concrete Members in Earthquake," *Concrete Structures in Earthquake*, Editors: Hsu, Thomas T. C., Springer Singapore, pp. 17-27.
2. Chiou, T. C., Hwang, S. J., and Pujol, S. (2018). "Comparison of Seismic Vulnerable Indices by Building Data of the 2016 Taiwan Earthquake." *Proceedings of the 11th National Conference in Earthquake Engineering*, Los Angeles, CA., Paper No. 1372.
3. 蔣佳愷、林筱菁、林佳蓁、鍾立來、黃世建，(2018)「臺灣校舍耐震補強暨 0206 花蓮地震之校舍表現」，*地工技術*，第 156 期， 第 49-56 頁。
4. 鍾立來、翁樸文、蕭輔沛、邱聰智、沈文成、李翼安、黃世建、趙汶欣、楊耀昇、邱建國，(2018)「0206 花蓮地震中高樓建築物倒塌之勘察」，*地工技術*，第 156 期， 第 35-46 頁。
5. 黃世建、鍾立來、邱世彬、陳信村，(2018)「私有建築物耐震補強工作立法之建議」*土木水利學會會刊*，第四十五卷，第一期，第 8-14 頁。
6. 鍾立來、邱世彬、吳俊霖、邱聰智、陳家漢、黃世建，(2018)「0206 花蓮地震：下一次

- 地震來襲前之作為？」土木水利學會會刊，第四十五卷，第一期，第 44-45 頁。
7. 孫宗梅、黃世建，(2018)「鋼筋混凝土梁之最大剪力鋼筋量研究」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：5002。
 8. 徐侑呈、黃世建，(2018)「開孔鋼筋混凝土剪力牆側力位移曲線之研究」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：5003。
 9. 曹君婕、曾建創、黃世建，(2018)「鋼筋混凝土剪力牆破壞與倒榻行為研究」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：5001。
 10. 楊元森、張長菁、黃尹男、周煥、黃世建、吳俊霖，(2018)「牆之影像式裂縫分析與損傷分析之初步比對」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：15023。
 11. 蕭輔沛、翁樸文、沈文成、李翼安、Tirza Paramitha、蔡仁傑、黃世建，(2018)「近斷層地震下鋼筋混凝土結構振動台倒榻實驗平台」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：15021。
 12. 周煥、邱聰智、黃世建，(2018)「RC 構架含填充磚牆之耐震補強研究」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：13008。
 13. 沈文成、翁樸文、李翼安、黃世建，(2018)「鋼筋混凝土長柱於剪力破壞下之側力位移曲線」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：13003。
 14. 林煜衡、邱聰智、黃世建，(2018)「鋼筋混凝土住宅建築之耐震能力初步評估方法」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：13013。
 15. 李翼安、翁樸文、黃世建，(2018)「鋼筋混凝土中短柱於剪力破壞下之耐震行為研究」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：13002。
 16. 蔣佳愾、林筱菁、林佳蓁、陳孟妘、鍾立來、黃世建，(2018)「台灣校舍耐震補強暨 0206 花蓮地震之校舍表現」，中華民國第十四屆結構工程研討會暨第四屆地震工程研討會，台中，論文編號：24003。
 17. Weng, P. W., Li, Y. A., and Hwang, S. J. (2017) "Prediction of the Lateral Load Displacement Curves for Reinforced Concrete Squat Walls Failing in Shear," Proceedings of International Workshop on Performance-Based Seismic Design of Structures, Tongji University, Shanghai, China, October 13-15, pp. 161-170.
 18. Li, Y. A., Hsu, T. T. C., and Hwang, S. J. (2017) "Shear Strength of Prestressed and Nonprestressed Concrete Beams." Concrete International, American Concrete Institute, September, pp. 53-57.
 19. Chiou, T. C., and Hwang, S. J. (2017) "Verification on Seismic Rapid Evaluation Using the Building Data of the 2016 Meinong Taiwan Earthquake." Third International Conference on Sustainable Infrastructure and Built Environment, SIBE, Bandung, Indonesia, Paper No. 1-24.
 20. Chiou, T. C., Hwang, S. J., Chung, L. L., Tu, Y. S., Shen, W. C., and Weng, P. W. (2017). "Preliminary Seismic Assessment of Low-Rise Reinforced Concrete Buildings in Taiwan." 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago, Chile, Paper No. 2977.
 21. Chiou, T. C., Tu, Y. S., Shen, W. C., Li, Y. A., Weng, P. W., Yang, Y. S., Chung, L. L., and Hwang, S. J. (2016) "Seismic Retrofit for an Existing Apartment by Core Wall." 7th Civil Engineering Conference in the Asian Region (7CECAR), Waikiki, Oahu, Hawaii, USA, Paper No. 267896.

- 22.Chiou, T. C., Tu, Y. S., Shen, W. C., Weng, P. W., Hwang, S. J., and Chung, L. L. (2016) "Seismic Preliminary Evaluation of Low-rise Residential Buildings in Taiwan." 6th Asia Conference on Earthquake Engineering (6ACEE), Marco Polo Plaza Cebu, Cebu City, Philippines, Paper No. SS8.
- 23.Chiou, T. C., Hwang, S. J., Tu, Y. H., and Tu, Y. S. (2016) "A Simplified Assessment Model of Masonry Infill Piers." Brick and Block Masonry: Proceedings of the 16th International Brick and Block Masonry Conference, Padova, Italy, pp. 1163-1171.
- 24.邱聰智、沈文成、李翼安、翁樸文、楊耀昇、涂耀賢、漆志剛、鍾立來、黃世建，(2015)「既有公寓補強設計示範例」，低矮鋼筋混凝土建築耐震設計、評估與補強技術及政策推動研討會，臺北，2015/11/6。
- 25.Luu, K., Tseng, C. C., Yang, H. C., Witarto, W., Wu, C. L., Hwang, S. J., Mo, Y. L., Hsu, T. T.-C., (2015) "Near-Fault Effect on Seismic Performance of 3D Reinforced Concrete Complex Structures," International workshop on Advanced Earthquake Engineering Testing & Simulation for Near-Fault Ground Motions, Taipei, Taiwan, November 19-20.
- 26.Li, Y. A., and Hwang, S. J., (2015) "Prediction of Lateral Load Deflection Curves for RC Short Columns Failed in Shear," The 17th Taiwan-Korea-Japan Seminar on Earthquake Engineering for Building Structures SEEBUS-2015, Yokohama, Japan, September 18-19, pp. 197-205.

其他論著

- 1.邱聰智、蕭輔沛、鍾立來、翁健煌、李其航、劉建均、強薛、何郁姍、陳幸均、楊智斌、翁樸文、沈文成、涂耀賢、楊耀昇、李翼安、葉勇凱、黃世建，(2018)「臺灣結構耐震評估側推分析法 (TEASPA V3.1)」，國家地震工程研究中心研究報告，NCREE-18-015，台北。
- 2.林敏郎、游雅喬、樂大誠、邱聰智、蕭輔沛、鍾立來、王勇智、黃世建，(2015)「鋼構造校舍結構耐震初步評估」，國家地震工程研究中心研究報告，NCREE-15-012，台北。

周中哲 教授 Chung-Che Chou

Professor

學歷/ 美國加州大學聖地牙哥分校博士

Ph.D., University of California, San Diego, USA

專長/ 地震工程，結構耐震設計、分析與實驗，預力橋梁建築工程，結構衝擊爆炸實驗，結構補強

Earthquake Engineering, Earthquake-Resistant Design, Analysis, and Test of Structures,

Post-tensioned Precast Concrete Bridges and Steel Buildings, Field Blast Test for

Structures, Seismic Assessment and Rehabilitation of Structures

期刊論文 (Journal Paper)

* corresponding author

1. Pham, D. H., Chou, C. C.* (2019). “Strong-Axis Instability of Sandwiched Buckling Restrained Braces in a Steel Two-Story X-BRBF: Tests and Finite Element Analyses. *Thin-Walled Structures* (5-Year IF= 3.583, IF=3.488SCI, EI, in reviewing)
2. Chou, C. C.*, Tseng, W. H., Huang, C. H., Tsuang, S., Chang, L. M., Chen, Y. H. (2019). “Development and Validation Testing of a Steel Lever Viscoelastic Wall with Amplified Damper Force and Friction for Wind and Seismic Resistance. *Engineering Structures* (5-Year IF= 3.345, IF=3.084, SCI, EI, in re-reviewing, 2018 臺灣國際創新發明暨設計競賽金牌獎, 臺灣知識創新學會及國立臺南大學所主辦)
3. Chou, C. C.*, Hsiao, C. H, Chen, Z. B, Chung, P. T, Pham, D. H. (2019). “Seismic Loading Tests of Full-scale Two-story Steel Building Frames with Self-centering Braces and Buckling-restrained Braces. *Thin-Walled Structures*, 140, 168-181. (5-Year IF= 3.583, IF=3.488, SCI, EI, 2019 台灣創新技術博覽會傑出發明館, 經濟部智慧財產局主辦)
4. Chou, C. C.*, Wu S. C. (2019). “Cyclic Lateral Load Test and Finite Element Analysis of High-strength Concrete-filled Steel Box Columns under High Axial Compression. *Engineering Structures*, 189(15), 89-99. (5-Year IF= 3.345, IF=3.084, SCI, EI)
5. Chou, C. C.*, Beato Ovalle, R.A. (2018). “Gusset Design Considering Buckling Forces in Frame and Brace Action Directions: Test and Finite Element Analysis of a Self-Centering

- Braced Frame for Verification” *Engineering Structures*, 173, 643-655. (5-Year IF= 3.345, IF=3.084, SCI, EI)
6. Chou, C. C.*, Lee, C. S., Wu, K. Y., Chin, V. L. (2018). “Development and Validation of a FRP-Wrapped Spiral Corrugated Tube for Seismic Performance of Circular Concrete Columns” *Construction and Building Materials*, 170, 498-511 (11/125, 5-Year IF=4.685, IF=4.046, SCI, EI) (中華民國尖端材料技協會 106 年度學生論文比賽產品創新競賽組特優獎)
 7. Wang, J. F.*, Li, B. B., Chou, C. C., Chen, L, (2018). “Cyclic Experimental and Analytical Studies of Buckling-Restrained Braces with Various Gusset Connections”. *Engineering Structures*, 163, 38-50. (5-Year IF= 3.345, IF=3.084, SCI, EI)
 8. Chou, C. C.*, Tsai, W. J., Chung, P. T. (2016). “Development and Validation Tests of a Dual-Core Self-Centering Sandwiched Buckling-Restrained Brace (SC-SRRB) for Seismic Resistance.” *Engineering Structures*, 121, 30-41. (20/126, 5-Year IF= 2.637, SCI, EI, Times Cited =20 (Google), 2016 台北國際發明暨技術交易展金牌獎 (22 國參展、超過 1,300 項專利技術作品)
 9. Chou, C. C.*, Chung, P. T., Wu, T.H., Beato Ovalle, R.A. (2016). “Validation of a Steel Dual-Core Self-Centering Brace (DC-SCB) for Seismic Resistance: from Brace Member to One-Story One-bay Braced Frame Tests.” *Frontiers of Structural and Civil Engineering*, 10, 1-9, online August 10 2016 (90/134, SCI, EI, IF=1.272, Invited Paper).
 10. Chou, C. C.*, Chung, P. T., Cheng, Y. T. (2016). “Experimental Evaluation of Large-Scale Dual-Core Self-Centering Braces and Sandwiched Buckling-Restrained Braces.” *Engineering Structures*, 116, 12-25. (5-Year IF= 3.060, IF=2.755, SCI, EI, Times Cited =21)
 11. Chou, C. C.*, Wu, T. H., Beato Ovalle, R.A., Chung, P. T., Chen, Y. H. (2016). “Seismic Design and Tests of a Full-Scale One-Story One-Bay Steel Frame with a Dual-Core Self-Centering Brace.” *Engineering Structures*, 111, 435-450 (5-Year IF= 3.060, IF=2.755, SCI, EI). (2017 韓國首爾國際發明展金牌獎及特別獎(30 國參展、632 件專利作品, Times Cited =26)
 12. Hou, H.T., Chou, C. C.*, Zhou, J., Wu, M. L., Liu, H. N., Li, J. J., Ye, H. D. (2016). “Cyclic Tests of Steel Frames with Composite Lightweight-Infill Walls.” *Earthquakes and Structures, An International Journal*, 10(1), 163-178 (SCI, EI, Times Cited =4)
 13. Chou, C. C.*, Chen, Y. C. (2015). “Development of Steel Dual-Core Self-Centering Braces: Quasi-Static Cyclic Tests and Finite Element Analyses” *Earthquake Spectra*, 31(1), 247-272. (2/35, 5-Year Impact Factor=2.467, Impact Factor=2.981, ENGINEERING, GEOLOGICAL, SCI, EI, 2015 台北國際發明暨技術交易展鉑金獎, 2018 經濟部國家發明創新金牌獎, Times Cited =32 (Google))

14. Yeh, F. Y., Chang, K. C., Sung, Y. C.*, Hung H. H., Chou, C. C. (2015). "A Novel Composite Bridge for Emergency Disaster Relief: Concept and Verification" *Composite Structures*, 127, 199-210. (5-Year Impact Factor=3.442, Impact Factor=3.12, MATERIALS SCIENCE, COMPOSITES, SCI, EI, Times Cited =8)
15. 李中生, 周中哲*, 譚皓祥, 陳威霖(2019)「玻璃纖維包覆加勁螺紋管圍束混凝土軸壓力學模型與試驗」, 結構工程 (2019/11 under review)。
16. 周中哲*, 鍾秉庭, 粘評, 陳威霖, 劉郁芳, 柯鎮洋, 王志誠, 陳景誠(2019)「板橋浮洲新建高層住宅結構補強實驗及 ETABS 非線性動力耐震評估」, 結構工程(accepted for publication)。
17. 周中哲*, 汪家銘, 黃漠見(2019) 「地牛翻身也不怕-大橋抗震新標準」, 科學月刊 12 月號第 600 期, 62-65 頁。(前瞻未來專欄)
18. 周中哲*, 林德宏(2019) 「懸吊拱橋的結構與破壞緣由」, 科學月刊 11 月號第 599 期, 12-13 頁 。(思辨之評)
19. 周中哲*, 蔡文璟, 鍾秉庭 (2019)「鋼造自復位挫屈束制斜撐(SC-SRB)發展及耐震試驗」, 結構工程, 第三十四卷, 第一期, 57-76 頁 。
20. 周中哲*, 曾冠霖, 凌郁婷(2018)「新竹科學園區 1990 年代之十層樓鋼構造標準廠房微振動長期監測及耐震能力評估」, 結構工程, 第三十三卷, 第一期, 5-27 頁 。
21. 周中哲*, 蕭佳宏, 陳澤邦, 鍾秉庭, 范廷海(2017)「全尺寸二層樓雙核心自復位斜撐構架與夾型挫屈束制斜撐構架之耐震試驗與非線性動力歷時分析」, 結構工程, 第三十二卷, 第二期, 35-64 頁 (in Chinese)。(2017 韓國首爾國際發明展金牌獎及特別獎(30 國參展、632 件專利作品)
22. 周中哲*, 吳松城(2017)「高強度混凝土充填箱型鋼柱於高軸力下之耐震試驗」, 結構工程, 第三十二卷, 第一期, 25-48 頁 (in Chinese)。
23. 周中哲*, 吳愷毅, 李中生(2016)「玻璃纖維包覆螺紋管圍束無箍筋之鋼筋混凝土圓柱發展與耐震試驗」, 結構工程, 第三十一卷, 第二期, 71-90 頁 (in Chinese)。(中華民國尖端材料技協會 106 年度學生論文比賽產品創新競賽組特優獎)
24. 周中哲*, 鍾秉庭, 鄭宇岑(2016)「全尺寸雙核心自復位斜撐及夾型挫屈束制斜撐耐震試驗」, 結構工程, 第三十一卷, 第一期, 93-111 頁 (in Chinese)。
25. 周中哲*, 吳宗翰, 陳澤邦, 陳映全, Alexis Rafael Ovalle Beato, 鍾秉庭(2015)「創新鋼造雙核心自復位斜撐抗震構架於臺灣的發展:由斜撐至實尺寸構架實驗驗證」, 鋼結構工程, 第 55 期, 54-76 頁 (in Chinese, 中華民國鋼結構協會第 5 屆徵文比賽得獎文章)。
26. 周中哲*, 鍾秉庭, 吳宗翰, 陳澤邦, 蕭佳宏, D.H. Pham, Alexis Rafael Ovalle Beato (2015) 「鋼造夾型挫屈束制斜撐及雙核心自復位斜撐構架耐震設計及實驗」, 土木水利, 第四十二卷, 第二期, 61-71 頁 (in Chinese, Invited Paper)。

27. 宋裕祺*, 葉芳耀, 洪曉慧, 張國鎮, 尹世洵, 邱毅宗, 許哲愷, 李政寬, 周中哲, 劉楨業, 莊瑞彰, 潘威佑(2015)「救災用鋼與玻璃纖維複合材料非對稱斜張橋之研究與開發」, 結構工程, 第三十卷, 第一期, 53-92 頁(in Chinese)。(2016 中華民國結構工程學會工程論著獎)

研討會文章(Conference Paper)

1. Lin, T. H., Chou, C. C., Chen, G. W. (2020). A Seven-Story Steel BRBF under Far-Field and Near-Fault Earthquakes: Loading Protocols and Seismic Tests of Columns. *8th International Conference on Advances in Experimental Structural Engineering*, February 3-5, Christchurch, New Zealand. (**Invited Speaker for Special Session**)
2. Chou, C. C., Huang, C. H., Tseng W. H., Tsuang S., Chang, L. M., Chen, Y. H., (2019). Development and Seismic Tests of a Novel Steel Lever Viscoelastic Wall with Friction as a Seismic-Resisting Damper. *12th Pacific Structural Steel Conference*, NOVEMBER 9 -11, TOKYO, JAPAN.
3. Chou, C. C., (2019). Seismic Design and Validation of Steel Braced Frames: Buckling-Restrained Brace and Self-Centering Brace. *University of Michigan, Ann Arbor*, October 2-3, USA. (**Invited Speaker**)
4. Pham, D. H. and Chou, C. C. (2019). Test of a Full-Scale Two-Story Steel X-BRBF: Strong-Axis Instability of Buckling Restrained Brace Associated with Out-of-Plane Bending of Gusset Connection. *Proceedings of the International Conference on Sustainable Civil Engineering and Architecture*, October 24-26, Ho Chi Minh, Vietnam._
5. Chou, C.C., Lin, T. H., Xiong, H. C., Lai, Y. C., Uang, C. M., El-Tawil, S., McCormick, J. P., Mosqueda G. (2019). “US-Taiwan Collaborative Research on Steel Columns: Cyclic Lateral Testing of Two-Story Subassemblages”, *NRC-MOST/NCREE Taiwan Workshop on Earthquake Engineering Technologies*, 7-8 October 7-8, Ottawa, Canada. (**Invited Speaker**)
6. Chou, C. C., Lin, T. H., Xiong, H. C., Lai, Y. C., Uang, C. M., El-Tawil, S., McCormick, J. P., Mosqueda G. (2019). “US-Taiwan Collaborative Research on Steel Columns: Cyclic Testing of Two-Story Subassemblages”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
7. Chou, C. C., Chung, P. T., Ling, Y. T., Huang, C. H., Tseng, W. H., Tsuang, S., Chang, L. M., Chen, Y. H. (2019). “Development and Validation of Seismic-Resisting Dampers: Buckling-Restrained Brace, Self-Centering Brace and Lever Viscoelastic Wall Device”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.

8. Lin T. H., Chou, C. C., Chen, G. W. (2019). “A Seven-Story Steel Braced Frame under Far-Field and Near-Fault Earthquakes: Loading Protocol and Seismic Test of High-Strength Steel H-Shaped Columns”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
9. Chou, C. C., Kuo, M. C. (2019). “Seismic Test and Analysis of Wind-Turbine Hollow Steel Round Columns with a Large Diameter-to-Thickness Ratio”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
10. Lee, C. S., Chou, C. C., Tan, H. H., Wu, K. Y., Chen, V. L. (2019). “Mechanical Response of Concrete-Filled FRP-Wrapped Steel Corrugated Tube Column”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
11. Liu, J. H., Chang, Y. C., Chou, C. C., Chung, P. T. (2019). “Design and Application of SBRB Frames for Steel Tall Buildings in Taiwan: Brace Orientation and Connection”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
12. Liu, Y. F., Lin, J. L., Chou, C. C., Weng, Y. T., Chao, S. H., Kuo, C. H. (2019). “Analytical Modeling of a Half-Scale Seven Story Reinforced Concrete Building Shaken Near-Fault Earthquake Motions”, *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake*. Taiwan. Sep. 15-19.
13. Chou, C. C. (2018). “Smart Monitoring and Earthquake Reduction Technologies for High-Tech Fabs”, *SEMICON Japan*, 13-14 December 2018, Tokyo, Japan. (**Invited Speaker**)
14. Chou, C. C., Wu, S. C. (2018). “Test and Finite Element Analysis of High-Strength Concrete Filled Steel Box Columns under Combined High-Axial Load and Cyclic-Lateral Load”, *Proceedings of the Ninth International Conference on Advances in Steel Structures (ICASS'2018)*, 5-7 December 2018, Hong Kong, China.
15. Pham, D. H. and Chou, C. C. (2018). “Stability of Sandwiched Buckling Restrained Brace in Full-Scale Two-Story X-BRBF Tests”, *7th International Doctoral Symposium*, November 19-21, Sapporo Japan. (**Funded by Hokkaido University**)
16. Chou, C. C., Hsiao, C. H., Chen, Z. B., Chung, P. T., Pham, D. H. (2018). “Seismic Tests of Full-Scale Two-Story Steel Frames with Self-Centering Braces and Buckling-Restrained Braces”, *Proceedings of the 11th National Conference on Earthquake Engineering*, Earthquake Engineering Research Institute, Los Angeles, CA.
17. Weng, Y. T., Jhuang, S. J. and Chou, C. C. (2018). “Analytical studies of a half-scale 3-story non-seismic detailing reinforced concrete building shaken to near-fault earthquakes”, *Proceedings of the 11th National Conference on Earthquake Engineering*, Earthquake Engineering Research Institute, Los Angeles, CA.

18. Shen, W. C. Hsiao, F. P., Weng, P. W., Li, Y. A., Chou, C. C., Chung, L. L. (2018). “Seismic Tests of a Mixed-Use Residential and Commercial Building Using a Novel Shaking Table”. *Proceedings of the 11th National Conference on Earthquake Engineering*, Earthquake Engineering Research Institute, Los Angeles, CA.
19. Chou, C. C. (2018). “Collaboration Research at NTU: Example of Earthquake Engineering”, *The 8th Asian Engineering Deans’ Summit*, Tokyo Institute of Engineering, Tokyo, Japan. (**Invited Speaker**)
20. Chou, C. C. (2018). “Self-Centering Structures: from Member to System Level Development and Validation”, *Meijo Science Technology Seminar*, Meijo University, Nagoya, Japan. (**Invited Speaker**)
21. Pham, D. H., Chou, C. C. (2017). Stability of Sandwiched Buckling Restrained Braces in Full-Scale Two-Story Steel X-BRB Tests. *The Thirtieth KKHTCNN Symposium on Civil Engineering*, November 2-4, Taipei.
22. Chou, C. C. (2017). Smart Monitoring and Earthquake Reduction Technologies for High-Tech fabs. *High-Tech Facility International Forum of SEMICON Taiwan 2017*, September 14th, Taipei. (**Keynote Speech**)
23. Capart, H., Chou, C. C., Kuo, P. H., Yu, W. L., Hsu, T. H., Hsieh, S. H., Lu, L. H., Tomita, M. (2017). Education of future builders through footbridge design to construction projects. *6th International Footbridge Conference*, September 6-8, Berlin.
24. Chou, C. C., Lee, C. S., Wu, K. Y., Chin, V. L. (2017). Development of a FRP-Wrapped Spiral Corrugated Tube for Seismic Performance of Reinforced Concrete Columns. *2017 International Conference on Earthquakes and Structures*, Aug. 28-Sep. 1, Seoul, Korea.
25. Chung, P. T., Chou, C. C. (2017). Seismic test and finite element analysis of a high-performance dual-core self-centering brace with a friction gusset connection. *2017 International Conference on Earthquakes and Structures*, Aug. 28-Sep. 1, Seoul, Korea.
26. Chou, C. C., Lee, C.S., Wu, K.Y. and Chen, V. L. (2016). Seismic tests of reinforced concrete columns confined with a FRP-wrapped spiral corrugated tube (FWSCT). *18th Japan-Korea-Taiwan Joint Seminar on Earthquake Engineering for Building Structures*, December 2-3, Tainan, Taiwan.
27. Chen C., Gong H., Chou, C. C. (2015). Seismic behavior and application of buckling-restrained braces in China and Taiwan. *14th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures*, September 9-11, San Diego, USA.
28. Chou, C. C., Sun, P. F., Chang, K. C., Yeh F. Y. (2015). Structural testing and behavior of multi-bolted joints in pultruded fiber reinforced polymer (FRP) I-Beams. *17th*

Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures,
September 18-19, Japan.

29. Chou, C. C., Chung, P.T., Wu, T.H., Beato Oval, R.A. (2015). Development and validation of a steel dual-core self-centering brace for seismic resistance: from brace member to one-story one-bay braced frame tests. *8th International Conference on Behavior of Steel Structures in Seismic Areas*, July 1-3. Shanghai, China.
30. 周中哲(2019)「長週期脈衝地震與自復位結構」，台科大高階科技研發碩士學程，5月18日，臺北市(**Invited Speaker**)
31. 周中哲，鍾秉庭，粘評，陳威霖，劉郁芳，柯鎮洋，王志誠，陳景誠(2019)「板橋鋼筋混凝土高層建築鋼構件補強效益:實驗及 ETABS 非線性動力分析」，2019 高層建築發展及補強研討會，臺北市
32. 周中哲，萬家汶，鍾秉庭(2018)「含消能鋼筋之自復位斜撐發展及試驗驗證」，中華民國第 14 屆結構工程及第 4 屆地震工程研討會，11 月 6~8 日，臺中市
33. 周中哲，曾文豪，黃俊翔，曾冠霖 (2018)「新槓桿黏彈制震壁的研發及試驗」，中華民國第 14 屆結構工程及第 4 屆地震工程研討會，11 月 6~8 日，臺中市
34. 周中哲，鍾秉庭，陳威霖，粘評(2018)「板橋浮洲高樓層住宅全尺寸補強構件試驗」，中華民國第 14 屆結構工程及第 4 屆地震工程研討會，11 月 6~8 日，臺中市
35. 周中哲，吳松城，吳愷毅，陳威霖，李中生(2018)「鋼與混凝土複合柱於高軸力下抗震實驗」，第 16 屆結構穩定與疲勞學術交流會暨教學研討會，8 月 25-28 日，青島，中國(**Invited Speaker**，in Chinese)
36. 周中哲(2018)「鋼造建築構架靜態載重與震動台試驗：自復位斜撐與挫屈束制斜撐對構架抗震影響」，第六屆土木工程結構試驗與檢測技術暨結構實驗教學研討會，8 月 2~4 日，北京，中國(**Invited Speaker**，in Chinese)
37. 周中哲，凌郁婷，曾冠霖，鍾秉庭(2017) 「新竹科學園區鋼構造廠房微振動監測及抗震能力評估」，第七屆全國結構抗振控制與健康監測學術會議，11 月 10~12 日，武漢市(**Invited Speaker**，in Chinese)
38. 李中生，周中哲，陳威霖，吳楷毅(2017) 「玻璃纖維包覆加勁金屬螺紋管圍束混凝土行為研究」，2017 創新鋼構造耐震技術研討會，9 月 29，台北市
39. 周中哲，鍾秉庭，凌郁婷，鄭宇岑，劉佳豪，張盈智(2017) 「夾型挫屈束制斜撐與自復位斜撐構架設計與試驗:新竹廠房案例」，2017 創新鋼構造耐震技術研討會，9 月 29，台北市
40. 周中哲，吳松城(2017) 「高強度混凝土充填 SM570M 箱型鋼柱於高軸力下之耐震行為」，2017 創新鋼構造耐震技術研討會，9 月 29，台北市

41. 周中哲(2017) 「預力組裝之鋼造建築抗震設計與實驗性能」，第四屆全國金屬減震技術研討會及 2017 中國南通裝配式建築暨金屬減震產業發展人才峰會，8 月 16-18 日，南通，中國(**Keynote Speaker** , in Chinese)
42. 周中哲，鍾秉庭，蔡文璟，陳澤邦，蕭佳宏(2016) 「自復位抗震斜撐系統發展：由 DC-SCB 與 SC-SBRB 至全尺寸二層樓構架實驗」，第九屆全國防震減災工程學術研討會，10 月 27-29 日，合肥，中國(**Keynote Speaker** , in Chinese)
43. 周中哲，鍾秉庭，凌郁婷 (2016) “Gold Medal”. Taiwan International Invention and Design Fair. 7 月 5~8 日，高雄，台灣(in Chinese)
44. 周中哲，李中生，陳威霖，吳愷毅(2016) 「玻璃纖維包覆螺紋管圍束無箍筋之圓形橋柱剪力設計與試驗驗證」，第十三屆結構工程研討會暨第三屆地震工程研討會，8 月 24~26 日，桃園，台灣(in Chinese)
45. 周中哲，蕭佳宏，陳澤邦，鍾秉庭，Pham D.H. (2016) 「兩層樓雙核心自復位斜撐及夾型挫屈束制斜撐實尺寸鋼構架耐震試驗」，第十三屆結構工程研討會暨第三屆地震工程研討會，8 月 24~26 日，桃園，台灣(in Chinese)
46. 周中哲，曾冠霖，凌郁婷(2016) 「新竹科學園區十層樓鋼構造標準廠房微振動長期監測及耐震能力評估」，第十三屆結構工程研討會暨第三屆地震工程研討會，8 月 24~26 日，桃園，台灣(in Chinese)
47. 周中哲，鍾秉庭，吳宗翰，Beato Ovalle Alexis Rafael (2015)「鋼造雙核心自復位抗震斜撐發展：由斜撐構件至全尺寸一層樓構架試驗驗證」，第八屆鋼結構抗震國際會議/中國研討會暨減隔震技術展覽會，7 月 1~3 日，上海，中國。(Keynote Speech, in Chinese)
48. 周中哲，鍾秉庭，吳宗翰，陳澤邦，蕭佳宏，Pham D.H., Beato Ovalle Alexis Rafael. (2015) 「鋼造夾型挫屈束制斜撐及雙核心自復位斜撐構架耐震設計及實驗」，3 月 20 日，2015 臺灣鋼結構耐震工程會議，台北，台灣。(in Chinese)

研究報告(Research Report)

1. 周中哲、林德宏、劉琨耀、謝承翰(2019) 「南方澳大橋鋼箱梁現場勘察期初報告」，國立臺灣大學嚴慶齡工業研究中心。
2. 周中哲、鍾秉庭 (2019) 「廣慈博愛園區 D 標大樓夾型鋼骨挫屈束制消能支撐試驗」，成果報告，國立臺灣大學工學院地震工程研究中心。
3. 粘評 (2019) 「鋼筋混凝土高層住宅鋼造雙 K 型斜撐框架補強試驗」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。
4. 趙廣上(2019) 「鋼造雙 K 型斜撐框架有限元素模擬分析」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。
5. 陳冠維(2019) 「高強度鋼箱型柱之耐震試驗與背骨曲線發展」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。

6. 郭泯辰(2019) 「高寬厚比之風機鋼管圓柱耐震試驗與非線性地震歷時分析」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。
7. 洪經富(2019) 「應用於鋼筋混凝土建築物之純壓雙核心自復位斜撐發展與驗證」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。
8. 周中哲、鍾秉庭，陳威霖，粘評，趙廣上(2018) 「板橋浮洲合宜住宅 A2、A3 及 A6 區之補強構件實體試驗驗證」，成果報告，國立臺灣大學工學院地震工程研究中心。
9. 曾文豪 (2018) 「新型槓桿黏彈性制震壁之動力特性及試驗」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。
10. 萬家汶(2018)「含消能鋼筋之自復位斜撐發展及試驗驗證」，碩士論文指導教授：周中哲，國立臺灣大學土木工程系。
11. 連奕婷(2018)「槓桿黏彈性制震壁之配置對高科技廠房耐震行為影響」，碩士論文指導教授：周中哲，國立臺灣大學土木工程系。
12. 林春霖(2018)「評估抗彎構架跨數對斜撐構架之耐震性能：挫屈束制與自復位斜撐震動台試驗與分析」，碩士論文指導教授：周中哲，國立臺灣大學土木工程系。
13. 周中哲、鍾秉庭 (2017)「華邦電子竹北大樓夾型鋼骨挫屈束制消能支撐試驗成果報告」，東鋼鋼結構股份有限公司，2017/10/16，國立臺灣大學地震工程研究中心。(in Chinese)
14. 黃俊翔(2017)「槓桿黏彈性制震壁之發展與實驗驗證及其在高科技廠房之應用評估」，碩士論文指導教授：周中哲，國立臺灣大學土木工程系(in Chinese)
15. 周中哲、紀宣臣、陳威霖(2017)「鋼骨鋼筋混凝土柱與鋼筋混凝土梁梁柱接頭研究計畫」報告，冠德建設股份有限公司，國立臺灣大學地震工程研究中心。(in Chinese)
16. 周中哲、陳威霖、鍾秉庭、趙廣上、紀宣臣(2017)「鋼板撓曲補強梁構件梁柱接頭試驗」報告，板橋浮洲合宜住宅 A2、A3 及 A6 區之補強構件實體試驗驗證，國立臺灣大學地震工程研究中心。(in Chinese)
17. 周中哲、鍾秉庭、陳威霖、趙廣上、紀宣臣(2017)「鋼框菱形斜撐補強試驗」報告，板橋浮洲合宜住宅 A2、A3 及 A6 區之補強構件實體試驗驗證，國立臺灣大學地震工程研究中心。(in Chinese)
18. 周中哲、鍾秉庭、陳威霖、趙廣上、紀宣臣(2017)「連梁剪力補強試驗」報告，板橋浮洲合宜住宅 A2、A3 及 A6 區之補強構件實體試驗驗證，國立臺灣大學地震工程研究中心。(in Chinese)
19. 周中哲、陳威霖、鍾秉庭、趙廣上、紀宣臣(2017)「鋼板剪力補強鋼筋混凝土簡支梁試驗」報告，板橋浮洲合宜住宅 A2、A3 及 A6 區之補強構件實體試驗驗證，國立臺灣大學地震工程研究中心。(in Chinese)
20. 周中哲、蕭佳宏、陳澤邦、鍾秉庭、Dinh-Hai Pham、陳映全 (2017)「自復位斜撐防震構架發展及實驗」3 年期期末報告，科技部計畫編號:**MOST 102-2221-E-002-101-MY3**(in Chinese)

21. 周中哲、凌郁婷、鍾秉庭、Dinh-Hai Pham (2016) 「應用高性能鋼材之耐震構造技術研發一子計畫:應用高性能鋼材之雙核心自復位斜撐動態耐震試驗及分析(II)」，科技部計畫編號:**MOST 104-2625-M-002-028** (in Chinese)
22. 凌郁婷(2016)「雙核心自復位斜撐與夾型挫屈束制斜於高層建築之應用與評估：耐震實驗與地震歷時分析」，碩士論文指導教授：周中哲，國立臺灣大學土木工程系(in Chinese)
23. 陳威霖(2016)「玻璃纖維包覆螺紋管圍束鋼筋混凝土圓柱剪力設計與實驗驗證」，碩士論文指導教授：周中哲，李中生，國立台灣大學土木工程系。(in Chinese)
24. 吳愷毅(2015)「玻璃纖維包覆螺紋管圍束鋼筋混凝土柱耐震實驗」，碩士論文指導教授：周中哲，李中生，國立台灣大學土木工程系。(in Chinese)
25. 吳松城(2015)「高強度混凝土充填箱型鋼柱於大軸力下之耐震行為」，碩士論文指導教授：周中哲，國立台灣大學土木工程系。(in Chinese)
26. 陳澤邦(2015)「鋼造實尺寸二層樓雙核心自復位斜撐構架耐震試驗與有限元素分析」，碩士論文指導教授：周中哲，國立台灣大學土木工程系。(in Chinese)
27. 蕭佳宏(2015)「雙核心自復位斜撐與夾型挫屈束制斜撐對構架影響：耐震實驗與動力分析」，碩士論文指導教授：周中哲，國立台灣大學土木工程系。(in Chinese)
28. 周中哲，吳松城(2015)「高強度鋼柱及複合柱耐震行為研究」，科技部計畫編號:**MOST 103-2625-M-002-012**，科技部專題研究計畫(in Chinese)
29. 周中哲，蔡文璟(2015)「受震自復位結構之研究--子計畫:自復位斜撐構架耐震行為研究 -雙核心自復位挫屈束制斜撐(II)」，科技部計畫編號: **MOST 102-2625-M-002-002**，科技部專題研究計畫(in Chinese)
30. 李中生，周中哲，譚皓祥，吳愷毅(2015)「建築物之抗爆能力評估技術研究(II) - 複合材料管圍束混凝土柱之抗爆函數實驗」，科技部計畫編號：**MOST 102-2221-E-865-001**，科技部專題研究計畫(in Chinese)

學術專書

1. 周中哲，劉郁芳，鍾秉庭 主編 (2019)「2019 高層建築發展及補強研討會」，ISBN 978-986-05-9049-4，國立臺灣大學地震工程研究中心出版。
2. 周中哲，劉郁芳，鍾秉庭 主編 (2019)「2019 高層建築發展及補強研討會」，國家地震工程研究中心出版。
3. 周中哲，陳芷琳 主編 (2017)「2017 創新鋼構造耐震技術研討會」，ISBN 978-986-05-3678-2，國立臺灣大學地震工程研究中心出版
4. 中華民國結構工程學會/中國土木水利工程學會等 (2015)「鋼造建築耐震設計技術手冊」，編審召集人: 周中哲，ISBN 978-957-655-530-5，科技圖書出版.(in Chinese)
5. 中華民國結構工程學會/中國土木水利工程學會等 (2015)「鋼造橋梁設計技術手冊」，編審召集人: 周中哲，ISBN 978-957-655-531-2，科技圖書出版.(in Chinese)

6. 周中哲 專輯客座主編 (2015) 「鋼結構創新與挑戰專輯」，土木水利，Vol. 42, No. 2，ISSN 0253-3804，中國土木水利工程學會出版. (in Chinese)
7. 周中哲，陳澤邦，蕭佳宏，鍾秉庭 主編 (2015) 「2015 Taiwan Seminar on Earthquake Resistant Steel Structures」，2015 TSERSS，ISBN 978-986-04-4477-3，臺灣大學地震工程研究中心出版. (in Chinese)

中華民國及國外專利

1. 周中哲，李中生，譚皓祥，吳愷毅(2018)「用於支撐結構的複合管及其製法」，中華民國發明專利 I623672 (March 10, 2018 審核通過), MOST-103-2119-M-002-101
2. Chou, C. C., Lee, C. S., Tan, H. H., Wu, K.Y. (2017). FRP Composite Wrapped Grooved-Wall Lining Tubular Structure, and Method of Manufacturing. USA 發明專利(US 9566748 B2, accepted on 2/14/2017)
3. 周中哲，李中生，譚皓祥，吳愷毅(2017)「用於支撐結構的複合管及其製法」，中國發明專利審核中(案號 201410066541.4, accepted on December 8, 2017 審核通過)_
4. 周中哲，曾冠霖，陳永祥，張陸滿 (2016)「槓桿粘彈制震壁」，日本發明專利 (Japanese Patent, 特願 2014-147714, accepted on May 31, 2016)
5. Chou C-C, Tsuang S, Chen Y-H, Chang L-M (2016). Lever Viscoelastic Damping Wall Assembly. 紐西蘭發明專利 (New Zealand Patent No. 628246)
6. Chou C-C, Tsuang S, Chen Y-H, Chang L-M (2016). Lever Viscoelastic Damping Wall Assembly，美國發明專利(USA patent No. US9316014 B2)
7. 周中哲，鍾秉庭，蕭佳宏 (2015)「具檢驗功能之夾型鋼骨挫屈束制消能支撐裝置」，中華民國新型專利 M494185
8. 周中哲，曾冠霖，陳永祥，張陸滿(2017)「制震裝置」，中國發明專利審核通過(案號 TW103101846，accepted on Nov. 28, 2017, 審核通過)
9. 周中哲，曾冠霖，陳永祥，張陸滿(2017)「制震裝置」，發明 I571550，中華民國發明專利
10. 周中哲，鍾秉庭，蔡文璟(2016). 「雙核心預力拉伸自復位挫屈束制斜撐減震裝置」，中國發明專利號 CN104018593 B。
11. Chou, C. C., Chung, P. T., Tsai, W. J. (2015). Dual-Core Self-Centering Buckling-Restrained Brace. No. US 8763320 B1，美國發明專利。
12. Chou, C. C., Chen, Y. C., Chung, P. T. (2015). Dual-Core Self-Centering Energy Dissipation Brace Apparatus. Patent No. 5511731，日本發明專利。

專利技術移轉

技術名稱	專利名稱	授權單位	被授權單位	簽約日期	技轉金額	科技部計畫編號
槓桿粘彈制震裝置	制震裝置	臺大	台灣高科技生產 環境顧問 股份有限公司	2016/1	五十萬元 整	102-17-A-15-S1-223 103-2119-M-002-010
夾型挫屈束制消能斜撐	夾型挫屈束制 消能斜撐	臺大	鴻舜機械 有限公司	2016/6	三十萬元 整	98-2625-M-002-017 100-2625M-002-012
拆解式夾型鋼骨挫屈 束制消能支撐裝置	夾型挫屈束制 消能斜撐	臺大	東鋼鋼結構 股份有限公司	2017/9	六十萬元 整	98-2625-M-002-017 100-2625M-002-012
拆解式夾型鋼骨挫屈 束制消能支撐裝置	夾型挫屈束制 消能斜撐	臺大	長榮鋼鐵 股份有限公司	2018/9	一百一十 萬元 整	98-2625-M-002-017 100-2625M-002-012

歐昱辰 教授 Yu-Chen Ou

Professor

學歷/ 美國紐約州立大學水牛城分校土木、結構與環境工程系博士

Ph.D., Department of Civil, Structural and Environmental Engineering, University at Buffalo

專長/ 鋼筋混凝土結構 (RC 結構)、預力混凝土結構 (PC 結構)、地震工程、橋梁工程

Journal Publications

- 1.Ou, Y.C., Yin, S.Y.L., Liu, Y.Q., and Wang, J.C. (2019). "Cyclic behavior of a reinforced concrete column with unstressed seven-wire steel strands as longitudinal reinforcement." *ACI Special Publication* (In Press)
- 2.Ou, Y.C., Hoang, L., and Roh, H. (2019). " Cyclic behavior of squat reinforced concrete walls with openings typical of exterior walls of row houses in Taiwan." *Engineering Structures*. 195, 231-242. [SCI]
- 3.Chou, J.S., Ou, Y.C., Lin, K.Y. (2019). "Collapse mechanism and risk management of wind turbine tower in strong wind." *Journal of Wind Engineering & Industrial Aerodynamics*. 193, 103962. (SCI)
- 4.Wang, P.H., Chang, K.C., Ou, Y.C. (2019). "Capacity-based inelastic displacement spectra for reinforced concrete bridge columns. *Earthquake Engineering and Structural Dynamics*. (In Press) (SCI)
- 5.Wang, P.H., Chang, K.C., Yin, S.Y.L., Wang, J.C., Ou, Y.C. (2019). A simplified finite element analysis method for axial compression behavior of rectangular concrete columns with interlocking multi-spiral reinforcements. *Journal of Structural Engineering, ASCE*. (In Press) (SCI)
- 6.Ou, Y.C., Hashlamon, I., Kim, W.S., Roh, H. (2019). "Development of basic technique to improve seismic response accuracy of tributary area-based lumped-mass stick models." *Earthquake Engineering and Engineering Vibration*. 18(1), 113–127. (SCI)
- 7.Ou, Y.C., and Truong, A.N. (2018). "Cyclic behavior of reinforced concrete L- and T-columns retrofitted from rectangular columns." *Engineering Structures*. 177, 147-159. (SCI)
- 8.Ou, Y.C., and Truong, A.N. (2018). "Cyclic shear and flexural behavior of L- and T-columns." *ACI Structural Journal*, 115(6), 1603-1613. (SCI)
- 9.Ou, Y.C., Pratiwi, A.Y., and Song, J. (2018). "Pseudo-dynamic testing and inelastic displacement ratios of self-centering precast concrete segmental bridge columns." *Journal of Structural Engineering, ASCE*. 144(9), 04018158. (SCI)
- 10.Chou, J.S., Ou, Y.C., Lin, K.Y., and Wang, Z.J. (2018). "Structural failure simulation of onshore wind turbines impacted by strong winds." *Engineering Structures*, 162, 257-269.(SCI)
- 11.Zhou, Y., Ou, Y.C., and Lee, G.C. (2017). "Bond-slip responses of stainless reinforcing bars in grouted ducts." *Engineering Structures*, 141, 651-665. (SCI)
- 12.Moon, D.Y., Ou, Y.C., and Roh. H. (2017). "Interlaminar shear capacity of thermally damaged GFRP bars under alkaline concrete environment." *Construction and Building Materials*, 152, 105-114. (SCI)

13. Han, Q., Zhou, Y., Ou, Y.C., and Du, X. (2017). "Seismic behavior of reinforced concrete sacrificial exterior shear keys of highway bridges." *Engineering Structures*, 139, 59-70. (SCI)
14. Ou, Y.C., Canseco, H.A., and Kurniawan, D.P. (2017). "Anchorage performance of headed deformed bars in exterior beam-column joints under cyclic loading." *KSCE Journal of Civil Engineering*, 21(7), 2837-2849. (SCI)
15. Wang, P.H., Ou, Y.C., and Chang, K.C. (2017). "A new smooth hysteretic model for ductile flexural-dominated reinforced concrete bridge columns." *Earthquake Engineering and Structural Dynamics*, 46(14), 2237-2259. (SCI)
16. Ou, Y.C., and Nguyen, D.N. (2016). "Modified axial-shear-flexure interaction approaches for uncorroded and corroded reinforced concrete beams." *Engineering Structures*, 128, 44-54. (SCI)
17. Ou, Y.C., and Nguyen, D.N. (2016). "Influences of location of reinforcement corrosion on seismic performance of corroded reinforced concrete beams." *Engineering Structures*, 126, 210-223. (SCI)
18. Kim, W.S., Laman, J.A., Jeong, Y., Ou, Y.C., and Roh, H. (2016). "Comparative study of integral abutment bridge structural analysis methods." *Canadian Journal of Civil Engineering*, 43(4), 378-389. (SCI)
19. Ou, Y.C., and Ngo, S.H., (2016) "Discrete shear strength of two- and seven-circular-hoop and spiral transverse reinforcement." *ACI Structural Journal*, 113(2), 227-238. (SCI)
20. Bu, Z.Y., Ou, Y.C., Song, J., and Lee, G.C. (2016). "Hysteretic Modeling of unbonded post-tensioned precast segmental bridge columns with circular section based on cyclic loading test." *Journal of Bridge Engineering, ASCE*, 21(6), 04016016. (SCI)
21. Ou, Y.C., Susanto, Y.T.T., and Roh, H. (2016) "Tensile behavior of naturally and artificially corroded steel bars." *Construction and Building Materials*. 103, 93-104. (SCI)
22. Bu, Z.Y., Ou, Y.C., Song, J., Zhang, N., and Lee, G.C. (2016). "Cyclic loading test of unbonded and bonded posttensioned precast segmental bridge columns with circular section." *Journal of Bridge Engineering, ASCE*, 21(2), 04015043. (SCI)
23. Ou, Y.C., and Ngo, S.H., (2016) "Discrete computational shear strength models for five- six- and eleven-circular-hoop and spiral transverse reinforcement." *Advances in Structural Engineering*, 19(1), 23-37. (SCI)
24. Ou, Y.C., Alrasyid, H., Haber, Z.B., and Lee, H.J., (2015) "Cyclic behavior of precast high-strength reinforced concrete columns." *ACI Structural Journal*, 112(6), 839-850. (SCI)
25. Ou, Y.C., Tran, N.M., Chen, C.C., and Lee, H.J. (2015). "Panel zone shear behavior of through flange connections for steel beams to circular concrete-filled steel tubular columns." *Journal of Structural Engineering, ASCE*, 141(9), 04014216. (SCI)
26. Hsiao, F.P., Oktavianus, Y., and Ou, Y.C. (2015). "A pushover seismic analysis method for asymmetric and tall buildings." *Journal of the Chinese Institute of Engineers*, 38(8), 991-1001. (SCI)
27. Ou, Y.C., Ngo, S.H., Roh, H., Yin, S. Y.L., Wang, J.C., and Wang, P.H. (2015). "Seismic performance of concrete columns with innovative seven- and eleven-spiral reinforcement." *ACI Structural Journal*, 112(5), 579-592. (SCI)
28. Lee, H., Ou, Y.C., Roh, H., and Lee, J.S. (2015), "Simplified model and seismic response of integrated nuclear containment system based on frequency adaptive lumped-mass stick modeling approach." *KSCE Journal of Civil Engineering*, 19(6), 1757-1766. (SCI)
29. Ou, Y.C., and Kurniawan, D.P. (2015) "Effect of axial compression on shear behavior of high-strength reinforced concrete columns." *ACI Structural Journal*, 112(2), 209-219. (SCI)
30. Ou, Y.C., and Kurniawan, D.P. (2015) "Shear behavior of reinforced concrete columns with high-strength steel and concrete." *ACI Structural Journal*, 112(1), 35-45. (SCI)
31. Hsiao, F.P., Oktavianus, Y., Ou, Y.C., Luu, C.H., and Hwang, S.J. (2015). "A pushover seismic analysis and retrofitting method applied to low-rise RC school buildings." *Advances in Structural Engineering*, 18(3), 311-324. (SCI)

- 32.周瑞生, 歐昱辰, 曾惠斌, 陳瑞鈴, 蔡綽芳, 吳昀臻, 陳育銘. (2019). “都會區私有建築物震損評估與耐震補強成本效益分析-以臺南市幸福及維冠龍樓為例.” 中國土木水利工程學刊, 31(5), 455-471.
- 33.周瑞生, 歐昱辰, 曾惠斌, 陳瑞鈴, 蔡綽芳, 張人傑. (2019). “臺灣私有建築物耐震評估補強經費之財務供需規劃暨其配套措施研議.” 營建管理季刊, 111, 16-38.
- 34.歐昱辰, 蔡東均. (2018). “高強度鋼筋混凝土柱之設計.” 中國土木水利工程學刊, 30(3), 223-229.
- 35.歐昱辰, 蔡東均. (2018). “鋼筋混凝土柱最大可能彎矩強度.” 結構工程, 33(1), 29-67. 歐昱辰, (2018). “混凝土結構設計規範預鑄混凝土構材之重要修訂內容.” 混凝土科技, 12(1), 43-47.
- 36.王柄雄, 張國鎮, 歐昱辰. (2018). “容量位移雙反應譜--基於損傷之鋼筋混凝土橋梁耐震設計與評估法.” 結構工程, 33(4), 91-112.
- 37.歐昱辰, (2017). "新版混凝土結構設計規範草案於特殊抗彎矩構架耐震設計之重要變更." 土木水利, 44(1), 1-6.
- 38.歐昱辰, 蔡東均. (2016). “高強度鋼筋混凝土柱軸力與彎矩強度互制關係電腦程式-New RC-PM.” 結構工程, 31(4), 107-120.
- 39.王柄雄, 歐昱辰, 尹衍樑, 王瑞禎, 吳振維, 陳智軒, 張國鎮. (2016). "方螺箍混凝土梁耐震行為研究." 結構工程.

Conference Publications

- 1.Ou, Y.C. (2019). " Cyclic behavior of concrete columns with unstressed Grade 1860 seven-wire strand as longitudinal reinforcement." Proceedings of the 5th Workshop with NCREE and Kyushu University, Fukuoka, Japan, April 6.
- 2.Ou, Y.C. (2019). " Cyclic Behavior of Concrete Columns with Unstressed Grade 1860 Seven-Wire Strand as Longitudinal Reinforcement." Proceedings of 2019 Taiwan-Japan Workshop on Structural and Bridge Engineering, Kyoto, Japan, April 2-April 3.
- 3.Ou, Y.C., and Nguyen-Van, B.N. (2018). "Seismic Shear Behavior of Slender High-Strength Reinforced Concrete Columns." The twentieth Taiwan-Japan-Korea Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS), Kyoto, Japan, November 2-3.
- 4.歐昱辰, Nguyen V.B.N. (2018). "高強度鋼筋混凝土柱剪力強度試驗研究." 2018 國家地震工程研究中心實驗成果研討會, 7 月 16 日, 台北市, 臺灣.
- 5.歐昱辰 (2018). "高強度鋼筋混凝土結構." 2018 國立臺灣大學工學院地震工程研究中心 40 週年慶特刊, 6 月 14 日, 台北市, 臺灣.
- 6.Ou, Y.C. (2018). "Mitigation of residual displacements of reinforced concrete bridge columns by partially unbonded nonprestressed prestressing steel strands." Proceedings of the 4th Workshop with NCREE and Kyushu University, Taipei, Taiwan, May 18.
- 7.Ou, Y.C., Pratiwi, A.Y., and Wu, J.W. (2018). "Mitigation of residual displacements of RC bridge columns by partially unbonded high-strength steel strands." Proceedings of 2018 Taiwan-Japan Workshop on Structural and Bridge Engineering, Taipei, Taiwan, April 3-4.
- 8.Ou, Y.C., and Truong, A.N. (2017). "Cyclic Behavior of Retrofitted L- and T-Shaped Reinforced Concrete Columns." The Nineteenth Taiwan-Japan-Korea Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS), Seoul, Korea, September 8-9.
- 9.Ou, Y.C. (2017). "Hysteretic damping of self-centering precast concrete segmental bridge columns." Proceedings of the 3rd Workshop with NCREE and Kyushu University, Fukuoka, Japan, April 4.

- 10.Ou, Y.C. (2017). "Shear and flexural strength predictions of prestressed concrete bridge girders with self-compacting concrete." Proceedings of 2017 Taiwan-Japan Workshop on Structural and Bridge Engineering, Kyoto, Japan, March 31-April 2.
- 11.Ou, Y.C., Pratiwi, A.Y., Bu, Z.Y., Song, J.W., and Lee, G.C. (2017). "Equivalent viscous damping for self-centering precast concrete segmental bridge columns." Proceedings of 16th World Conference on Earthquake Engineering, Santiago, Chile, Jan. 9-13.
- 12.Ou, Y.C., Alrasyid, H., Haber, Z.B., and Lee, H.J. (2017). "Cyclic behavior of precast high-strength reinforced concrete columns with grouted-spliced longitudinal and welded-spliced transverse reinforcement." Proceedings of 16th World Conference on Earthquake Engineering, Santiago, Chile, Jan. 9-13.
- 13.Ou, Y.C., Hoang, L., Huang, G.L., and Tao, Q.J. (2016). "Methods for predicting shear strength of reinforced concrete squat walls with opening." The Thirteenth National Conference on Structural Engineering/The Third National Conference on Earthquake Engineering, Taoyuan, Taiwan, August 24-26.
- 14.Ou, Y.C., Wang, P.H., and Chang, K.C. (2016). "A new smooth hysteretic model for ductile flexural-dominated RC bridge columns." Proceedings of 2016 Taiwan-Japan Workshop on Structural and Bridge Engineering, Taipei, Taiwan, May 24-25.
- 15.歐昱辰. (2015). "高強度鋼筋混凝土柱之撓曲與剪力設計." 高強度鋼筋混凝土(New RC)結構設計手冊研討會, 12月11日, 台北市, 台灣.
- 16.Ou, Y.C., and Pratiwi A. Y. (2015). "Displacement-based design for precast segmental unbonded post-tensioned concrete bridge columns with energy dissipation bars." ACI Fall Convention, Denver, USA, November 8-12.
- 17.歐昱辰, 陶其駿, 吳靖儀, Victor Luis. (2015). "低矮鋼筋混凝土沿街式新建建築屋後外牆之耐震設計與評估." 低矮鋼筋混凝土建築耐震設計、評估與補強技術與政策推動研討會, 11月6日, 台北市, 台灣.
- 18.Ou, Y.C., and Nguyen, D. N. (2015). "Influence of reinforcement corrosion on cyclic behavior of reinforced concrete beams." 2015 Symposium on Reliability of Engineering Systems (SRES), Taipei, Taiwan, October 21-24.
- 19.Ou, Y.C., and Nguyen, D. N. (2015). "Modified axial-shear-flexure interaction approach for load-displacement prediction of uncorroded and corroded reinforced concrete beams." 2015 Symposium on Reliability of Engineering Systems (SRES), Taipei, Taiwan, October 21-24.
- 20.Ou, Y.C., and Nguyen, D. N. (2015). "Lateral force-displacement prediction of uncorroded and corroded reinforced concrete beams using modified axial-shear-flexure interaction approach." The Seventeenth Japan-Korea-Taiwan Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS), Yokohama and FujiKawaguchiko, Japan, September 17-20.
- 21.Ou, Y.C. (2015). "Equivalent viscous damping for self-centering precast segmental unbonded-posttenioned concrete bridge columns." Proceedings of 2015 Taiwan-Japan Workshop on Structural and Bridge Engineering, Kyoto, Japan, April 2-4.

Reports and Dissertations

- 1.Ou, Y.C., Nhien, T.A., Zhang, R.T., Chen, Y.M., and Liu, Y.Q. (2017). "Retrofit of nonductile reinforced concrete columns of mid-rise buildings using reinforced concrete jacketing." Research Report, Architecture and Building Research Institute, ISBN: 9789860543223. (In Chinese)

2. Ou, Y.C., Tsai, T.C., Lai, Y.Y., and Wang, Z.J. (2016). "Seismic strengthening of low-rise reinforced concrete buildings using non-rectangular columns." Research Report, Architecture and Building Research Institute, ISBN: 9789860509298. (In Chinese)
3. Ou, Y.C., Wu, J.Y., Wang, Z.J., and Wu, Z.W. (2015). "Manual for seismic design of street houses." Research Report, Architecture and Building Research Institute, ISBN: 9789860468076. (In Chinese)

黃尹男 副教授 Yin-Nan Huang

Associate Professor

學歷/ 美國紐約州立大學水牛城分校博士

專長/房屋結構耐震性能設計、核能電廠耐震風險評估、結構被動控制

期刊論文 (Journal Paper)

1. 顏渝、溫欣儀、黃尹男、陳柏華（2018年10月）。尖端人工智慧於土木設施應用之展望。土木水利，第四十五卷，第五期，第51-58頁。
2. Huang, Y.-N., Whittaker, A. S., and Hamburger, R. O. (2017). "A simplified analysis procedure for performance-based earthquake engineering of building." *Engineering Structures*, 150(11), 719-735, <https://doi.org/10.1016/j.engstruct.2017.07.048>.
3. Lin, F.-R., Chai, J.-F., Lai, Z.-Y., Chen, M.-Y., Huang, Y.-N., and Chang, K.-C. (2017) "A simplified method for the evaluation of seismic demands on in-cabinet equipment in motor control center type cabinets in nuclear power plants." *Journal of the Chinese Institute of Engineers*, 40(3), 179-190. DOI: 10.1080/02533839.2017.1303403
4. Samanta, A., and Huang, Y.-N. (2017) "Ground motions scaling for seismic performance assessment of high-rise moment-resisting frame building." *Soil Dynamics and Earthquake Engineering*, 94, 125-135, <http://dx.doi.org/10.1016/j.soildyn.2017.01.013>.
5. Huang, Y.-N., Yen, W.-Y., and Whittaker, A. S. (2016). "Correlation of horizontal and vertical components of strong ground motion for response-history analysis of safety-related nuclear facilities." *Nuclear Engineering and Design*, 310(12), 273-279, <http://dx.doi.org/10.1016/j.nucengdes.2016.09.036>.
6. Huang, Y.-N., and Whittaker, A. S. (2015). "On the calculation of peak ground velocity for seismic performance assessment." *Earthquake Spectra*, 31(2), 785-794.
7. Epachachi, S., Whittaker, A. S., and Huang, Y.-N. (2015). "Analytical modeling of rectangular SC wall panels." *Journal of Constructional Steel Research*, 105, 49-59.
8. Liu, P., Chen, A. Y., Huang, Y.-N., Han, J.-Y., Lai, J.-S., Kang, S.-C., Wu, T.-H., Wen, M.-C., and Tsai, M.-H. (2014). "A Review of Rotorcraft Unmanned Aerial Vehicle (UAV) Developments and Applications in Civil Engineering." *Smart Structures and Systems*, 13(6), 1065-1094.

研討會論文

1. Huang, Y.-N., Chang, C.-C., Cheng, Y.-C., and Ho, C.-A. (2018, Nov). In-plane cyclic behavior of steel-plate composite walls with boundary elements. The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 107-2221-E-002-027.
2. Yang, Y.-H., Lin, Y.-C., and Huang, Y.-N. (2018, Nov). An experimental study of frictional-pendulum isolation system subjected to pulse-like ground motions. The 20th Taiwan-Japan-Korea Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS), Kyoto, Japan.
3. Huang, Y.-N. (2017, Sep). Seismic behavior of steel-plate composite walls.. 3rd International Conference on Sustainable Infrastructure and Built Environment (SIBE), Bandung, Indonesia.

4. Huang, Y.-N., Chang, C.-C., and Lin, B.-S. (2017, Sep). In-plane cyclic behavior of shear-critical steel-plate composite walls. The 19th Taiwan-Japan-Korea Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS), Seoul, Korea..
5. Chang, C.-C., Huang, Y.-N., Cheng, Y.-C., and Ho, C.-A. (2017, Jul). An experimental study of the in-plane cyclic behavior of steel-plate composite walls with boundary elements.. 24th International Conference on Structural Mechanics in Reactor Technology (SMiRT), Busan, Korea.
6. Huang, Y.-N. (2017, Jul). Challenges in the design of seismically isolated emergency response centers in Taiwan.. 24th International Conference on Structural Mechanics in Reactor Technology (SMiRT), Busan, Korea.
7. Huang, Y.-N. (2017, Jul). Impact of ground-motion scaling on seismic probabilistic risk assessment.. 24th International Conference on Structural Mechanics in Reactor Technology (SMiRT), Busan, Korea.
8. Huang, Y.-N., Chang, C.-C., Cheng, Y.-C., and Ho, C.-A. (2016, Dec). In-plane cyclic behavior of steel-plate composite walls with boundary elements. The 18th Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures, Tainan, Taiwan.
9. Huang, Y.-N. (2016, Aug). Cyclic Behavior of Steel-Plate Composite Wall Piers. the Second Huixian International Forum on Earthquake Engineering for Young Researchers, Beijing, China.
10. Huang, Y.-N., and Liu, C.-R. (2016, Jul). Impact of near-fault ground motions on the efficiency of viscous-damping systems.. ASME 2016 Pressure Vessels and Piping Conference, British Columbia, CA.
11. Chang, C.-C., Huang, Y.-N., and Chen, B.-A. (2015, Sep). An experimental study of the cyclic behavior of low aspect ratio SC wall piers.. The 17th Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures , Tokyo, Japan.
12. Chang, C.-C., Huang, Y.-N., Chen, B.-A., Epachachi, S., and Whittaker, A. (2015, Aug). An experimental study of the in-plane cyclic behavior of low aspect ratio SC wall piers.. 23nd International Conference on Structural Mechanics in Reactor Technology, Manchester, UK.
13. Yu, C.-C., and Huang, Y.-N. (2015, Aug). Impact of uncertainty on seismic probabilistic risk assessment of nuclear power plants.. 23nd International Conference on Structural Mechanics in Reactor Technology, Manchester, UK.
14. Chang, C.-C., Yu, C.-C., Shen, Y.-H., and Huang, Y.-N. (2014). An efficient procedure for seismic probabilistic risk assessment using response-based fragility curves.. The 5th Asia Conference on Earthquake Engineering (ACEE).
15. Chao, P.-C., and Huang, Y.-N. (2014). An assessment for the design of high-damping rubber bearings using bilinear and effective linear models.. The 16th Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS).
16. Huang, Y.-N., Chen, A., You, J.-Y., and Capart, H. (2014). From structures to automation in freshman civil engineering projects.. The Third Workshop on Design in Civil and Environmental Engineering (DCEE).
17. Huang, Y.-N., and Shen, Y.-H. (2014). Using response-based fragility curves in seismic probabilistic risk assessment of nuclear power plants.. The 3rd International Symposium on Reliability Engineering & Risk Management (ISRERM).
18. Lai, Z.-Y., Liu, Y.-F., Yu, C.-C., Chai, J.-F., Lin, F.-R., Wu, W.-F., Huang, Y.-N., and Shen, M.-Y. (2014). (2014). Cyclic loading test and numerical analysis of flanged joint and reducer of RHR piping systems.. ASME 2014 Pressure Vessels and Piping Conference, American Society of Mechanical Engineers (ASME), Pressure Vessels and Piping Division.

19. Shen, M.-Y., Lai, Z.-Y., Chai, J.-F., Lin, F.-R., Huang, Y.-N., and Yu, C.-C. (2014). Numerical analysis of a RHR piping system subjected to seismic loading.. ASME 2014 Pressure Vessels and Piping Conference, American Society of Mechanical Engineers (ASME), Pressure Vessels and Piping Division.
20. Shen, Y.-H., Huang, Y.-N., and Yu, C.-C. (2014). Seismic probabilistic risk assessment of nuclear power plants using response-based fragility curves.. ASME 2014 Pressure Vessels and Piping Conference, American Society of Mechanical Engineers (ASME), Pressure Vessels and Piping Division.
21. 楊亞衡, 林禹辰, 張長菁, 黃尹男 (2018 年 11 月)。摩擦單擺隔震系統受脈衝型地震歷時作用之振動台試驗。中華民國第十四屆結構工程研討會暨第四屆地震工程研討會, 台中, 台灣。
22. 高翊書, 詹家昕, 黃尹男, 張長菁(2018 年 11 月)。含邊界構材之鋼板混凝土複合牆之耐震行為及反覆載重試驗研究。中華民國第十四屆結構工程研討會暨第四屆地震工程研討會, 台中, 台灣。
23. 黃尹男, 高翊書, 詹家昕, 張長菁(2018 年 09 月)。含邊界構材之鋼板混凝土複合牆之耐震行為及反覆載重試驗研究。第六屆海峽兩岸地震工程青年學者研討會, 大連, 中國。科技部 : 107-2221-E-002-027。
24. 張長菁, 黃尹男, 鄭與錚, 何其安 (2016 年 08 月)。含邊界構材之鋼板混凝土複合牆之耐震行為及反覆載重試驗研究。中華民國第十三屆結構工程研討會暨第三屆地震工程研討會, 桃園。
25. 游青青、黃尹男 (2014 年)。以結構反應為易損性曲線參數之核能電廠地震機率式風險評估.。第三屆海峽兩岸地震工程青年學者研討會。

廖文正 副教授 Wen-Cheng Liao

Associate Professor

學歷/ 美國密西根大學博士

Ph.D., in Civil and Env. Eng. Univ. of Michigan

專長/ 高性能混凝土、鋼纖維混凝土、鋼筋混凝土學、混凝土結構抗震設計

High Performance Concrete, Fiber Reinforced Concrete, Reinforced Concrete, Seismic Resistant RC Structure Design

期刊論文 (Journal Paper)

1. Wisena Perceka, Wen-Cheng Liao* and Yung-Fu Wu (2019, Nov.). Shear Strength Prediction Equations and Experimental Study of High Strength Steel Fiber-Reinforced Concrete Beams with Different Shear Span-to-Depth Ratios. *Applied Sciences*, 9(22), 4790; <https://doi.org/10.3390/app9224790>. (SCI). 本人為通訊作者.
2. Liao, W., Liu, K., and Yeh, C. (2018, Dec). Behaviors of New RC Bridge Columns Made of Highly Flowable Strain-Hardening Fiber-Reinforced Concrete (HF-SHFRC) under Cyclic Loads. *Journal of Testing and Evaluation*, <https://doi.org/10.1520/JTE20180091>. ISSN 0090-3973., 47(3). (SCI). 本人為第一作者、通訊作者.
3. Louis Ge, Chien-Chih Wang, Chen-Wei Hung, Wen-Cheng Liao and Honghua Zhao (2018, Sep). Assessment of strength development of slag cement stabilized kaolinite. *Construction and Building Materials*, 184, 492-501. (SCI).
4. Wen-Cheng Liao and Chih-Chiang Yeh (2018, Jul). Implementation of Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) to New RC Bridge Columns for Sustainability Development. *Sustainable Civil Infrastructure*, pp 140-149. 本人為第一作者、通訊作者.
5. Wen-Cheng Liao, Wei-Ru Su (2018, Jan). Implementation of Highly-Flowable Strain Hardening Fiber Reinforced Concrete in New RC Beam-Column Joints. *MATEC Web of Conferences*, 147, <https://doi.org/10.1051/matecconf/201814701003>. (EI). MOST 106-2625-M-002-003. 本人為第一作者、通訊作者.
6. Wen-Cheng Liao, Wisena Perceka, Michael Wang (2017, Dec). Experimental study of cyclic behavior of high-strength reinforced concrete columns with different transverse reinforcement detailing configurations. *Engineering Structures*, 153, 290-301. (SCI, 26/125, ENGINEERING, CIVIL). MOST 105-2221-E-002-057-MY2. 本人為第一作者.
7. Wen-Cheng Liao, Yu Heng Chiang Hsieh, Subhash C. Goel (2017, Nov). Seismic evaluation and collapse prediction of RC moment frame structures by using energy balance concept. *Journal of Vibroengineering*, 19(7), 5268-5277. (SCI). 本人為第一作者、通訊作者.
8. Wen-Cheng Liao, Wisena Perceka, Li-Chen Yu (2017, Jul). Systematic Mix Procedures for Highly Flowable-Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) by Using Tensile Strain Hardening Responses as Performance Criteria. *Science of Advanced Materials*, 9(7), pp. 1157-1168. (SCI). 本人為第一作者.
9. Wisena Perceka, Wen-Cheng Liao, Yo-de Wang (2016, Apr). High Strength Concrete Columns

under Axial Compression Load: Hybrid Confinement Efficiency of High Strength Transverse Reinforcement and Steel Fibers. Materials, 9(4), 264. (SCI). MOST 104-2221-E-002-217. 本人為通訊作者。

10. Xin Kang, Louis Ge and Wen-Cheng Liao (2015, Dec). Cement Hydration-Based Micromechanics Modeling of the Time-Dependent Small-Strain Stiffness of Fly Ash-Stabilized Soils. International Journal of Geomechanics. (SCI).
11. Fang-Yao Yeh, Kuo-Chun Chang, and Wen-Cheng Liao (2015, Sep). Experimental Investigation of Self-Sensing Carbon Fiber Reinforced Cementitious Composite for Strain Measurement of an RC Portal Frame. International Journal of Distributed Sensor Networks, 25. (SCI).
12. Wen-Cheng Liao, Wisena Perceka, En-Jui Liu (2015, Aug). Compressive Stress-Strain Relationship of High Strength Steel Fiber Reinforced Concrete . Journal of Advanced Concrete Technology, 13, 379-392. (SCI). MOST 103-2625-M-002-009. 本人為第一作者。
13. Wen-Cheng Liao, Shih-Ho Chao (2015, Mar). Crack Opening Evaluation and Sustainability Potential of Highly Flowable Strain-Hardening Fiber-Reinforced Concrete (HF-SHFR). Journal of Testing and Evaluation, 43(2), 326-335. (SCI). MOST 103-2625-M-002-009. 本人為第一作者、通訊作者。
176. 陳振川, 廖文正, 劉庭愷, 秦維邑 (2018 年 03 月)。台灣混凝土潛變收縮資料庫建置及特質分析。結構工程, 33(1), 103-116。本人為通訊作者。
18. 廖文正, 胡瑋秀 (2017 年 09 月)。台灣高強度混凝土彈性模數預估公式研究。結構工程 , 32(3), 5-26。科技部 : 104-2221-E-002-217。本人為第一作者、通訊作者。
19. 周肇昱, 夏瑄, 廖文正 (2017 年 04 月)。水泥工業中減少碳排放量技術發展現況。混凝土科技, 11(2), .pp 42-48。本人為通訊作者。
20. 廖文正 (2017 年 02 月)。新世代耐震材料-高流動性應變硬化鋼纖維混凝土的研發及應用。中國土木水利工程學會會刊, 44(1), pp 52-58。本人為第一作者、通訊作者。
21. 廖文正 (2016 年 11 月)。台灣 30000psi 的活性粉混凝土技術發展現況。混凝土科技, 10(4), 38-50。本人為第一作者、通訊作者。
22. 廖文正, 林致淳, 詹穎雯 (2016 年 11 月)。台灣混凝土彈性模數建議公式研究。結構工程 , 31(3), 5-31。科技部 : 104-2221-E-002-217。本人為第一作者、通訊作者。
23. 劉光晏, 廖文正, 葉智強 (2015 年 12 月)。添加高強度端鉤型鋼纖維之高強度鋼筋混凝土橋柱之耐震行為研究。中國土木水利工程學會會刊, 42(6)。本人為通訊作者。
24. 劉光晏, 廖文正, 葉智強, 張國鎮 (2015 年 12 月)。高強度高流動性應變硬化鋼纖維混凝土單式橋墩耐震行為實驗與預測之研究。中國土木水利工程學刊, 27(4), pp 287-300 。(EI)。

研討會論文 (Conference Proceeding)

1. W. C. Liao* Y. J. Kuo and E. J. Liu (2019. Dec) A CONFINEMENT EFFICIENCY OF HOOKED STEEL FIBERS IN HIGH STRENGTH CONCRETE. 16th East Asia-Pacific Conference on Structural Engineering & Construction (EASEC16), Brisbane, Australia. 本人為第一作者、通訊作者.
2. Wen-Cheng Liao and Jenn-Chuan Chern (2019. Sep.) CODE DEVELOPMENT OF CONCRETE DEFORMATION IN TAIWAN BY ESTABLISHMENT OF ANALYSIS SYSTEM AND FAST-ACCESS CLOUD-BASED DATABASE. The 3rd ACF Symposium 2019, Sapporo Japan. 本人為第一作者、通訊作者。

3. Wen-Cheng Liao (2019. Apr). Establishment of Analysis System and Fast-Access Cloud-Based Database of Concrete Deformation. 2019 Japan-Taiwan Workshop on Structural and Bridge Engineering, Kyoto, Japan. 本人為第一作者、通訊作者.
4. Wen-Cheng Liao, Wei-Ru Su and Kai-Yueh Chang (2019. Apr.). Elimination of Transverse Reinforcement in NEW RC Beam-Column Joints by using Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFR). the 8th Civil Engineering Conference in the Asian Region (CECAR 8), Tokyo, Japan. 本人為第一作者、通訊作者。
5. Wen-Cheng Liao (2019. Mar). Experimental Study and Design
Recommendations of Beam-Column Joints with High Strength Materials and Highly Flowable Strain Hardening Fiber Reinforced Concrete. 2019 ACI Spring Convention, Quebec, Canada. 本人為第一作者、通訊作者.
6. Chia-Chun Guo, Wei-Cheng Chen and Wen-Cheng Liao (2018, Nov). Ultimate Shear Strength of High Strength Steel Fiber Reinforced Concrete Deep Beams . The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 106-2625-M-002-003.
7. Da-Zhan Huang, Kuang-Chieh Lin and Wen-Cheng Liao (2018, Nov). Corrosion Current Measurement under Different Corrosion Types of Steel Bars . The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 105-2221-E-002-057-MY2.
8. Wei-Hsiu Hu, Wei-Sheng Lin and Wen-Cheng Liao (2018, Nov). Influences of Reduced Elastic Modulus in Taiwan on the Collapse Evaluation of Structures. The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 104-2221-E-002-217.
9. Wen-Cheng Liao, Li-Wei Tseng, and Wei-Ru Su (2018, Nov). Development and Application of Highly Flowable Strain Hardening Fiber Reinforced Concrete in New RC Building Systems. The 20th Taiwan-Korea-Japan Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS 2018) , Kyoto, Japan. MOST 107-2625-M-002-011. 本人為第一作者、通訊作者.
- 10 You-Man Lin, Wei-Hsiu Hu and Wen-Cheng Liao (2018, Nov). Study of Influences of Reduced Elastic Modulus on Design Specifications for Concrete Structures in Taiwan . The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 104-2221-E-002-217.
- 11.Wen-Cheng Liao (2018, Oct). Establishment of Analysis System and Fast-Access Cloud-Based Database of Concrete Deformations. JCI and TCI Joint Workshop, Tokyo, Japan. 本人為第一作者、通訊作者.
- 12.Wen-Cheng Liao (2018, May). Development and Application of Highly-Flowable Strain Hardening Fiber Reinforced Concrete in New RC Building Systems. 2018 Workshop with NCREE and Kyushu University, Taipei, Taiwan. MOST 106-2625-M-002-003. 本人為第一作者、通訊作者.
- 13.Wen-Cheng Liao (2018, Apr). Experimental Study of the First Precast and Prestressed UHPFRC Segmental Box-Girder Bridge in Taiwan. The 11th Taiwan-Japan Workshop on Structural and Bridge Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.
- 14.Wen-Cheng Liao, Wei-Ru Su, and Kai-Yueh Chang (2018, Apr). Experimental Study of NEW RC Exterior Beam-Column Joint made of Highly-Flowable Strain Hardening Fiber Reinforced Concrete. STRUCTURES CONGRESS, ASCE SEI 2018 , Fort Worth, TX, USA. MOST 106-2625-M-002-003. 本人為第一作者、通訊作者.
- 15.Kai-Yueh Chang, Wen-Cheng Liao, Wei-Cheng Chen (2017, Nov). Shear Strength and Cyclic Behavior of High Strength Steel Fiber Reinforcement Concrete Exterior Beam-Column Joints. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. MOST 106-2625-M-002-003.

- 16.Tzu-Yu Hsu, Wen-Cheng Liao, Da-Zhan Huang (2017, Nov). Experimental Design for Mechanical Behavior of Deteriorated SFRC Beam with Working Stress Cracks by Accelerated Salt Spray Test. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. MOST 105-2221-E-002-057-MY2.
- 17.Yi-Ting He, Wen-Cheng Liao, Wei-Hsiu Hu (2017, Nov). Analysis of Surface Crack Characteristics and Compressive Behavior of Concrete under Uniaxial Compression . The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.
- 18.Wen-Cheng Liao, Wei-Ru Su (2017, Oct). Development and Application of Highly-Flowable Strain Hardening Fiber Reinforced Concrete in New RC Building Systems. The 15th East Asia-Pacific Conference on Structural Engineering and Construction, EASEC-15, Xian. MOST 106-2625-M-002-003. 本人為第一作者、通訊作者.
- 19.Wen-Cheng Liao, Wei-Ru Su (2017, Sep). Implementation of Highly-Flowable Strain Hardening Fiber Reinforced Concrete in New RC Beam-Column Joints. The 3rd International Conference on Sustainable Infrastructure and Built Environment, SIBE 2017 , Bandung, Indonesia. MOST 106-2625-M-002-003. 本人為第一作者、通訊作者.
- 20.Wen-Cheng Liao (2017, Mar). Implementation of Highly Flowable Strain Hardening Fiber Reinforced Concrete in New RC Precast Infrastructure System. 2017 Japan-Taiwan Workshop on Structural and Bridge Engineering, Kyoto, Japan. 本人為第一作者、通訊作者.
- 21.Wen-Cheng Liao, Li-Wei Tseng (2017, Jan). Application of Highly-Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) in NEW RC Columns. 16th World Conference on Earthquake, 16WCEE 2017, Santiago, Chile. MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
- 22.Wei-Ru Su, Kai-Yueh Chang, Wen-Cheng Liao (2016, Dec). Cyclic Behavior of High Strength Hook Ended Steel Fiber Reinforced Concrete Exterior Beam-Column Joints . The Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China.
- 23.Yu-Shan Ho, Yi-Ting Ho, Wen-Cheng Liao (2016, Dec). Study of Mechanical Properties after Accelerated Degradation Test for High Strength Fiber Reinforced Concrete. The Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China. MOST 105-2221-E-002-057-MY2.
- 24.Wen-Cheng Liao (2016, Nov). Implementation of Highly Flowable Strain Hardening Fiber Reinforced Concrete in Precast System for Sustainability Development. the 4th Cross-strait Forum on Sustainable Urban Development, Taipei, Taiwan. 本人為第一作者、通訊作者.
- 25.Wen-Cheng Liao, Chih-Chiang Yeh (2016, Oct). Simulation of Cyclic Behavior for New RC Bridge Columns made of Highly-Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) by OpenSees. The 2nd Association of Computational Mechanics Taiwan (ACMT) Conference, Taipei, Taiwan. 本人為第一作者、通訊作者.
- 26.Wen-Cheng Liao, Chih-Chiang Yeh (2016, Oct). Implementation of Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) to New RC Bridge Columns. the 7th International Conference of Asian Concrete Federation, Hanoi, Vietnam. MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
- 27.Wen-Cheng Liao, Li-Wei Tseng (2016, Aug). Experimental Study on Highly-Flowable Strain Hardening Fiber Reinforced Concrete Columns Subjected to Lateral Cyclic and High Axial Loading. CIVIL ENGINEERING CONFERENCE IN THE ASIAN REGION, CECAR 7, Hawaii, US. MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
- 28.Wen-Cheng Liao (2016, May). Confinement Efficiency of Hooked Steel Fibers in High Strength Concrete. The 9th Taiwan-Japan Workshop on Structural and Bridge Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.

29. Wen-Cheng Liao (2016, Apr). Lateral Cyclic Behavior of Hollow Bridge Piers made of Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) . The 2nd Workshop with NCREE and Kyushu University, Taipei, Taiwan. 本人為第一作者、通訊作者.
30. Wen-Cheng Liao and Li-Wei Tseng (2015, Dec). Application of Highly-Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) in NEW RC Columns. the Second International Conference on Performance-based and Lifecycle Structural Engineering (PLSE 2015), Brisbane, Australia . MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
31. Wei-Ru Su, Chih-Chiang Yeh and Wen-Cheng Liao (2015, Nov). Experimental Analysis of Cyclic Behavior for New RC Bridge Columns with High Strength Hooked Steel Fibers. The 28th KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand.
32. Wen-Cheng Liao and Chih-Chiang Yeh (2015, Nov). Implementation of Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC) to New Rc Infrastructures for Sustainable Urbanization. 3rd Cross-Strait Forum on Sustainable Urban Development , Chengdu, China. MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
33. Yu-Hsuan Tseng, Yu-De Wang, Wen-Cheng Liao (2015, Nov). Experimental Study of High Strength Steel Fiber Reinforced Concrete Columns subjected to Uniaxial Compression Loading. The 28th KKHTCNN Symposium on Civil Engineering. MOST 103-2625-M-002-009.
34. Wen-Cheng Liao (2015, Oct). Practice-Oriented Curriculum at NTUCE (Capstone Course). Innovative Engineering Education Forum, Taipei, Taiwan. 本人為第一作者、通訊作者.
35. Wen-Cheng Liao (2015, Apr). Cyclic Behavior of Hollow New RC Fiber Reinforced Bridge Columns . The 8th Taiwan-Japan Workshop on Structural and Bridge Engineering, Kyoto, Japan. 本人為第一作者、通訊作者.
36. Wen-Cheng Liao (2015, Jan). Sustainability Potential of Highly Flowable Strain Hardening Fiber Reinforced Concrete (HF-SHFRC). Second International Conference on Sustainable Urbanization (ICSU 2015), Hong Kong. MOST 103-2625-M-002-009. 本人為第一作者、通訊作者.
37. 胡瑋秀, 林偉聖, 廖文正(2018年11月)。台灣彈性模數折減對結構崩塌性能評估研究。中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。科技部：104-2221-E-002-217。
38. 胡瑋秀, 林佑蔓, 廖文正(2018年11月)。台灣混凝土彈性模數折減對結構設計規範的影響研究。中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。
39. 陳韋丞, 郭珈均, 廖文正(2018年11月)。高強度鋼纖維混凝土深梁極限剪力強度研究。中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。
40. 黃大展, 林廣杰, 廖文正(2018年11月)。考量鋼筋不同腐蝕型態之長期腐蝕電流模型建立實驗設計。中華民國第14屆結構工程及第4屆地震工程研討會，台中，台灣。
41. 廖文正, 王又德, 蘇韋如, 張凱越(2017年12月)。以高流動性應變硬化鋼纖維混凝土取代New RC 梁柱接頭箍筋之設計及驗證。台灣高強度鋼筋混凝土(Taiwan New RC)結構施工技術與構件耐震性能研討會，台北，台灣。科技部：106-2625-M-002-003。本人為第一作者、通訊作者。
42. 何宜庭, 廖文正, 胡瑋秀(2017年11月)。混凝土於單軸壓下表面裂縫特徵與軸壓行為分析研究。台灣混凝土學會2017年會暨混凝土工程研討會，嘉義，台灣。
43. 張凱越, 廖文正, 陳韋丞(2017年11月)。高強度鋼纖維混凝土外部梁柱接頭剪力強度與反復側推行為研究。台灣混凝土學會2017年會暨混凝土工程研討會，嘉義，台灣。科技部：106-2625-M-002-003。

44. 許祖祐, 廖文正, 黃大展 (2017 年 11 月)。具工作應力裂縫之鋼纖維混凝土梁鹽霧加速劣化後力學行為實驗設計。台灣混凝土學會 2017 年會暨混凝土工程研討會, 嘉義, 台灣。科技部 : 105-2221-E-002-057-MY2。
45. 廖文正 (2017 年 05 月)。版、牆、基礎之設計。106 年度混凝土結構技術規範修正草案研討會, 台北, 台灣。本人為第一作者、通訊作者。
46. 廖文正 (2016 年 12 月)。活性粉混凝土介紹與近期發展。活性粉混凝土應用於橋樑工程之研究成果發表會, 台北, 台灣。本人為第一作者、通訊作者。
47. 廖文正 (2016 年 12 月)。高流動性應變硬化鋼纖維混凝土於 New RC 結構系統之應用。New RC 結構設計與施工技術研討會, 台北, 台灣。科技部 : 103-2625-M-002-009。本人為第一作者、通訊作者。
48. 廖文正 (2016 年 12 月)。台灣混凝土彈性模數修正建議。混凝土結構技術規範修正草案說明研討會, 新北市, 台灣。本人為第一作者、通訊作者。
49. 廖文正, 黃仲偉 (2016 年 12 月)。自動化整合沖刷及裂縫監測影像系統。流域防災監測預警技術落實應用研討會, 台北, 台灣。科技部 : 105-3011-F-002-005。本人為第一作者、通訊作者。
50. 何郁姍, 何宜庭, 廖文正 (2016 年 08 月)。高強度鋼纖維混凝土於鹽霧加速劣化試驗力學性質研究。中華民國第十三屆結構工程研討會暨第三屆地震工程研討會, 桃園, 台北。本人為通訊作者。
51. 廖文正, 胡瑋秀 (2016 年 08 月)。台灣高強度混凝土彈性模數建議公式研究。中華民國第十三屆結構工程研討會暨第三屆地震工程研討會, 桃園, 台北。科技部 : 104-2221-E-002-217。本人為第一作者、通訊作者。
52. 李昆穎, 許祖祐, 廖文正 (2016 年 08 月)。不同相對節面積之竹節鋼筋於普通與高強度混凝土中之握裹行為研究。中華民國第十三屆結構工程研討會暨第三屆地震工程研討會, 桃園, 台北。本人為通訊作者。
53. 蘇韋如, 張凱越, 廖文正 (2016 年 08 月)。高強度鋼纖維混凝土於外部梁柱接頭之反覆側推行為研究。中華民國第十三屆結構工程研討會暨第三屆地震工程研討會, 桃園, 台北。本人為通訊作者。
54. 廖文正, 詹穎雯 (2015 年 12 月)。高強度混凝土品質及控制與添加鋼纖維之應用。高強度鋼筋混凝土 (New RC) 結構設計手冊研討會, 台北, 台灣。科技部 : 103-2625-M-002-009。本人為第一作者、通訊作者。
55. 王又德, 廖文正 (2015 年 12 月)。高強度鋼纖維鋼筋混凝土柱軸壓及韌性行為研究。台灣混凝土學會 2015 年會暨混凝土工程研討會, 台中, 台灣。科技部 : 103-2625-M-002-009。本人為通訊作者。
56. 葉智強, 劉光晏, 廖文正 (2015 年 12 月)。添加高強度端鉤型鋼纖維之高強度鋼筋混凝土橋柱之耐震行為研究。台灣混凝土學會 2015 年會暨混凝土工程研討會, 台中, 台灣。
57. 廖文正 (2015 年 10 月)。高流動性應變硬化鋼纖維鋼筋混凝土柱高軸壓下之反覆側推行為分析。第四屆海峽兩岸地震工程青年學者研討會, 台北, 台灣。科技部 : 103-2625-M-002-009。本人為第一作者、通訊作者。

專書

1. Chien-Kuo Chiu, Chung-Chan Hung, Hung-Jen Lee, Kai-Ning Chi, Ker-Chun Lin, Kuang-Yen Liu, Min-Lang Lin, Min-Yuan Cheng, Sheng-Jhih Jhuang, Shyh-Jiann Hwang, Wen-Cheng Liao, Wen-Cheng Shen, Yi-An Li, Yu-Chen Ou and Yung-Chih Wang. Design Guideline for Building of High-Strength Reinforced Concrete Structures. Taipei, Taiwan. Dec., 2018. MOST 105-2625-M-00-004.
2. 中華民國結構工程學會（2017年12月）。高強度鋼筋混凝土結構設計手冊。科技圖書股份有限公司。本人為此手冊編修小組成員。
3. 社團法人台灣混凝土學會（2017年03月）。預鑄混凝土工程施工規範與解說（ISBN：978-986-90199-2-7）(1)。台灣台北。本人為規範編審小組成員。
4. ACI 318 委員會（2016年04月）。結構混凝土建築規範與解說（ACI 318-14 Traditional Chinese）(ISBN：978-986-84012-7-3) (1)。台灣台北：科技圖書股份有限公司。本人為編譯小組成員。

張書瑋 助理教授 Shu-Wei Chang

Assistant Professor

學歷/美國麻省理工學院博士

Ph.D., Civil and Environmental Engineering, Massachusetts Institute of Technology, MA, USA

專長/多尺度計算力學、微觀力學、固體力學、分子動力學、生物力學

Computational Mechanics 、 Computational Materials 、 Biomechanics; Collagen; Mechanobiology 、 Atomic Scale Modeling 、 Multi-scale/Multi-physics Modeling

期刊論文 (Journal Paper)

- 1.Jih-Chen Yeh, Chang-Chin Wu, Cheuk-Sing Choy, Shu-Wei Chang, Jian-Chiun Liou, Kuo-Shu Chen, Tao-Hsin Tung, Wei-Ning Lin, Chih-Yu Hsieh, Chun-Ta Ho, Ting-Ming Wang, and Jia-Feng Chang (2018, Nov). Non-Hepatic Alkaline Phosphatase, hs-CRP and Progression of Vertebral Fracture in Patients with Rheumatoid Arthritis: A Population-Based Longitudinal Study. *Journal of Clinical Medicine*, 7(11), 439. [SCI]
- 2.Wen-Chin Ko, Cheuk-Sing Choy, Wei-Ning Lin, Shu-Wei Chang, Jian-Chiun Liou, Tao-Hsin Tung, Chih-Yu Hsieh and Jia-Feng Chang (2018, Sep). Galectin-3 Interacts with Vascular Cell Adhesion Molecule-1 to Increase Cardiovascular Mortality in Hemodialysis Patients. *Journal of Clinical Medicine*. [SCI]
- 3.Tsung-Hui Huang, Chuin-Shan Chen, Shu-Wei Chang (2018, Feb). Microcrack patterns control the mechanical strength in the biocomposites. *Materials and Design*, 140, 505-515. 本人為通訊作者. [SCI]
- 4.Shu-Wei Chang, Tzu-Kang Lin, Shih-Yu Kuo, Ting-Hsuan Huang (2017, Dec). Integration of High-Resolution Laser Displacement Sensors and 3D Printing for Structural Health Monitoring. *Sensors*, 18(1), 19. 本人為第一作者. [SCI]
- 5.Tsung-Hue Huang, Tzu-Hsuan Huang, Yang-Shan Lin, Chih-Hsiang Chang, Po-Yu Chen, Shu-Wei Chang, Chuin-Shan Chen (2017, Aug). Phase-Field Modeling of Microstructural Evolution by Freeze-Casting. *Advanced Engineering Materials*. 本人為通訊作者. [SCI]
- 6.Chueh-Hung Wu, Ming-Kuan Sun, Jay Shieh, Chuin-Shan Chen, Chang-Wei Huang, Chi-An Dai, Shu-Wei Chang, Wen-Shiang Chen, Tai-Horng Young (2017, Apr). Ultrasound-responsive NIPAM-based hydrogels with tunable profile of controlled release of large molecules. *Ultrasonics*. [SCI]
- 7.Bo An, Shu-Wei Chang, Cody Hoop, Jean Baum, Markus J. Buehler, David L. Kaplan (2016, Dec). Structural Insights into the Glycine Pair Motifs in Type III Collagen. *ACS Biomaterials Science and Engineering*, 3 (3), pp 269 – 278. 本人為第一作者. [SCI]
- 8.T. Li, S. W. Chang, N. Rodriguez-Florez, M. J. Buehler, S. J. Shefelbine, M. Dao, K. Zeng (2016, Aug). Studies of chain substitution caused sub-fibril level differences in stiffness and ultrastructure of wildtype and oim/oim collagen fibers using multifrequency-AFM and molecular modeling. *Biomaterials*, Vol. 107, pp. 15-22. MOST 104-2218-E-002-035. [SCI]

- 9.O. G. Andriotis, S. W. Chang, M. Vanleene, P. H. Howarth, D. E. Davies, S. J. Shefeline, M. J. Buehler, P. J. Thurner (2015, Oct). Structure-mechanics relationships of collagen fibrils in the osteogenesis imperfecta mouse model. *Journal of the Royal Society Interface*, 12(111). [SCI]
- 10.A. Masic, L. Bertinetti, R. Schuetz, S.W. Chang, T. H. Metzger, M.J. Buehler, P. Fratzl (2015). Osmotic pressure induced tensile forces in tendon collagen. *Nature Communications*, 6, 5942. [SCI]
- 11.S.W. Chang, M.J. Buehler (2014). Molecular biomechanics of collagen molecules. *Materials Today*, 17, 70-76. 本人為第一作者. [SCI]

研討會論文 (Conference Proceeding)

- 1.Deng Li, Shu-Wei Chang (2018, Nov). Mechanistic insight into the binding structural differences of aggrecan cleavage sites: a bottom -up computational mechanics approach. The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. 本人為通訊作者.
- 2.Wei-Han Hui, Shu-Wei Chang (2018, Nov). The influence of aging and disease on the mechanical and structural properties of collagen fibers in tissues: A molecular dynamics approach. The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. 本人為通訊作者.
- 3.Yi-Hsiang Chen, Chuin-Shan Chen, Shu-Wei Chang (2018, Jul). Full atomic modeling of the parathyroid hormone/parathyroid hormone-related protein type 1 receptor and its ligand binding. The 13th World Congress in Computational Mechanics. 本人為通訊作者.
- 4.Hsin-Chin Li, Shu-Wei Chang (2018, May). Structural characteristics of 8-oxoguanine during DNA replication:a molecular dynamics approach. EMI Conference, Boston. 本人為通訊作者.
- 5.Li-Wei Liu1;Shu-Wei Chang;Slavomír Parma (2018, May). On the cyclic and biaxial behaviour of carbon nanotubes by molecular dynamics simulation. EMI Conference, Boston.
- 6.Yi-Ching Lai1, Ting-Yu Shih, Shu-Wei Chang (2018, May). Molecular mechanisms of the inhibitory effect of Hya-HEAL+ on collagen degradation. EMI Conference, Boston. 本人為通訊作者.
- 7.Chien-Hui Wen, Yu-Hsuan Kuan, Shan-Hui Hsu, Shu-Wei Chang (2017, Oct). Molecular Dynamics Simulations of Waterborne Biodegradable Polyurethane Hydrogel for 3D Printing. Simulation for Additive Manufacturing, Munich, Germany. 本人為通訊作者.
- 8.Ian Ian Ng, Shu Wei Chang, Hsiang Ho Chen (2017, Jul). Effect of Temperature and hydration on the mechanical properties of collagen molecule: a computational study using molecular dynamics. XXVI Congress of the International Society of Biomechanics.
- 9.Tsu-Hsin Kao, Yi-Hsiang Chen, Shu-Wei Chang (2017, Jul). The Structural Changes of Finger 3 in the Mutated Ankyrin Repeat Domain of the Human TRPV4 Channel Alter ATP Binding Ability. 14th U.S. National Congress on Computational Mechanics (USNCCM14). 本人為通訊作者.
- 10.Chien-Hui Wen, Yin Chang, Shu-Wei Chang (2016, Jul). Full Atomistic Modeling of Novel Waterborne Biodegradable Polyurethane Hydrogel for 3D Printing. WCCM-APCOM 2016, Seoul, Korea. 本人為通訊作者.
- 11.Shu-Wei Chang, Yin Chang, Baptiste Depalle, Markus J Buehler (2016, Jul). Multiscale modeling of normal and brittle bone collagen fibril: molecular origin of brittle bone disease. WCCM-APCOM 2016, Seoul, Korea. 本人為第一作者、通訊作者.
- 12.S.W. Chang, M.J. Buehler (2015, Aug). Full atomistic simulations of normal and brittle bone collagen: molecular origin of brittle disease. ASEM-2015, Incheon, Korea. 本人為第一作者、通訊作者.

張家銘 助理教授 Chia-Ming Chang

Assistant Professor

學歷/美國伊利諾大學香檳校區博士

Ph.D. in Civil and Environmental Engineering ,University of Illinois,U.S.A

專長/ 結構健康監測、結構控制、先進結構實驗技術、地震工程

Structural Health Monitoring 、 Structural Control 、 Advanced Structural Testing 、 Earthquake Engineering

期刊論文

1. Liu, J., Wang, S., Zheng, J., **Chang, C. M.**, Wei, X., and Ren, W. (2019). “Time-frequency signal processing for integrity assessment and damage localization of concrete piles.” *International Journal of Structural Stability and Dynamics*. (**SCI, Engineering-Civil, Q2, 2018**)
2. Kang, S. C., **Chang, C. M.**, Yang, Y. Y., and Liang, C. J. (2018). “Independent hoisting system: structural components, lifting mechanism, crane control.” *Impact*, 5, 59-61.
3. **Chang, C. M.**, Lin, T. K., and Chang, C. W. (2018). “Applications of neural network models for structural health monitoring based on derived modal properties.” *Measurement*, 129, 457-470. (**SCI, Engineering-Multidisciplinary, Q2, 2017**)
4. Chou, J. Y. and **Chang, C. M.** (2018). “Decentralized damage detection of seismically-excited buildings using multiple banks of Kalman estimators.” *Advanced Engineering Informatics*, 38, 1-13. (**SCI, Engineering-Multidisciplinary, Q1, 2017**)
5. **Chang, C. M.**, Shia, S., and Lai, Y. A. (2018). “Seismic design of passive tuned mass damper parameters using active control algorithm.” *Journal of Sound and Vibration*, 426, 150-165. (**SCI, Engineering-Mechanical, Q1, 2017**)
6. **Chang, C. M.**, Shia, S, and Yang, C. Y. (2018). “Use of active control algorithm for optimal design of base-isolated buildings against earthquakes.” *Structural and Multidisciplinary Optimization*, 58(2), 613-626. (**SCI, Engineering-Multidisciplinary, Q1, 2017**)
7. **Chang, C. M.** and Chou, J. Y. (2018). “Damage detection of seismically-excited buildings based on prediction errors.” *ASCE Journal of Aerospace Engineering*, 31(4), 04018032. (**SCI, Engineering-Aerospace, Q2, 2017**)

8. Chang, C. M., Chou, J. Y., Tan, P., and Wang, L. (2017). "A sensor fault detection strategy for structural health monitoring systems." *Smart Structures and Systems*, 20(1), 43-52. (**SCI, Engineering-Civil, Q2, 2016**)
9. Tan, P., Huang, J., Chang, C. M., and Zhang, Y. (2017). "Failure mode of isolated continuous girder bridge." *Engineering Failure Analysis*, 80, 57-78. (**SCI, Engineering-Mechanical, Q2, 2016**)
10. Chang, C. M., Strano, S., and Terzo, M. (2016). "Modelling of hysteresis in vibration control systems by means of the Bouc-Wen model." *Shock and Vibration*, Article ID 3424191, 14 Pages. (**SCI, Engineering-Mechanical, Q3, 2016**)
11. Terzo, M., Chang, C. M., Dimirovski, G. M., Lang, Z. Q., and Strano, S. (2016). "Vibration control of systems in presence of hard nonlinearities - Editorial." *Shock and Vibration*, Article ID 1923574. (**SCI, Engineering-Mechanical, Q3, 2016**)
12. Shi, P., Wu, B., Spencer, B. F., Jr., Phillips, B. M., and Chang, C. M. (2016). "Real-time hybrid testing with equivalent force control method incorporating Kalman filter." *Journal of Structural Control and Health Monitoring*, 23(4), 735-748. (**SCI, Engineering-Civil, Q1, 2016**)
13. Chang, C. M., Frankie, T. M., Spencer, B. F., Jr., and Kuchma, D. A. (2015). "Multiple degrees of freedom positioning correction for hybrid simulation." *Journal of Earthquake Engineering*, 19, 277-296. (**SCI, Engineering-Civil, Q3, 2015**)
14. Tan, P., Fang, C., Chang, C. M., and Spencer, B.F., Jr. (2015) "Dynamic characteristics of novel energy dissipation systems with damped outriggers." *Engineering Structures*, 98, 128-140. (**SCI, Engineering-Civil, Q1, 2015**)
15. Asai, T., Chang, C. M., and Spencer, B. F., Jr. (2015). "Real-time hybrid simulation of a smart base-isolated building." *ASCE Journal of Engineering Mechanics*, 141(3), 04014128. (**SCI, Engineering-Mechanical, Q2, 2015**)
16. Fang, C., Tan, P., Chang, C. M., and Zhou, F. (2015). "A general solution for performance evaluation of a tall building with multiple damped and undamped outriggers." *The Structural Design of Tall and Special Buildings*, 24(12), 797-820. (**SCI, Construction and Building Technology, Q3, 2015**)
17. Chen, P. C., Chang, C. M., Spencer, B. F., Jr., and Tsai, K. C. (2015). "Adaptive model-based tracking control for real-time hybrid simulation." *Bulletin of Earthquake Engineering*, 13(6), 1633-1653. (**SCI, Engineering-Geological, Q2, 2015**)
18. 林子剛、張家銘、張至維，2018，「應用模型參數識別及類神經網路奮結構健康診斷」，土木水利學會會刊，第四十五卷第五期，101-110 頁。
19. 張世昇、陳翊翔、張書瑋、張家銘、林詠彬、張國鎮、陳俊杉*，2018，「機器學習於橋墩沖刷預測之應用」，土木水利學會會刊，第四十五卷第五期，111-122 頁。

會議論文

1. **Chang, C. M.** and Chou, J. Y. (2019). "Damage detection of seismically excited building using banks of Kalman filters." The 21st Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures, Hsinchu, Taiwan.
2. Yu, J. W., Chou, J. Y., and **Chang, C. M.** (2019). "Crack detection based on deep learning and computer vision algorithms." The 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea.
3. Wang, X. and **Chang, C. M.** (2019). "Development and experimental verification of dual-length nonlinear pendulum for seismic protection of buildings." The 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea.
4. Chou, J. Y. and **Chang, C. M.** (2019). "3D modal feature extraction based on video measurement." The 32nd KKHTCNN Symposium on Civil Engineering, Daejeon, Korea.
5. **Chang, C. M.**, Chiang, H. F., and Chou, J. Y. (2019). "Comparisons of Mode Shapes Based Damage Detection Methods for Bending- and Shear-Type Buildings." The 2019 World Congress on Advances in Structural Engineering and Mechanics (ASEM19), Jeju, Korea. [ABSTRACT Only]
6. **Chang, C. M.** and Chou, J. Y. (2019). "Dynamic characterization of seismically-excited structures using frequency-domain stochastic subspace system identification." Proceedings of 9th International Conference on Structural Health Monitoring of Intelligent Infrastructure, St. Louis, MI.
7. Yang, C. Y., Su, C. K., **Chang, C. M.**, and Hsu, C. C. (2019). "Effective use of lead rubber bearing for an isolated bridge in Taiwan through parametric study." Bridge Engineering Institute Conference 2019, Honolulu, HI.
8. Su, C. K., **Chang, C. M.**, Yang, C. Y., and Hsu, C. C. (2019). "Investigation of pounding effect for a seismically isolated bridge based on a simplified model." Bridge Engineering Institute Conference 2019, Honolulu, HI.
9. **Chang, C. M.**, Chiang, H. F., and Chou, J. Y. (2019). "Assessment of mode shapes based damage detection methods for building structures." IX ECCOMAS Thematic Conference on Smart Structures and Materials, Paris, France.
10. **Chang, C. M.** and Hsu, T. W. (2019). "Preliminary investigation of seismic isolation systems with geometric nonlinearity for important equipment." Engineering Mechanics Institute Conference 2019, Pasadena, CA. [ABSTRACT Only]
11. Yang, Y. Y., **Chang, C. M.**, Kang, S. C., and Yeh, F. Y. (2019). "Study of construction-oriented structural connectors for a temporary bridge." Proceedings of the 36th International Symposium on Automation and Robotics in Construction, Banff, Alberta, Canada.
12. Chou, J. Y. and **Chang, C. M.** (2019). "Modal property extraction based on frequency domain stochastic subspace identification." 13th International Conference on Damage Assessment of Structures, Porto, Portugal.

13. Chou, J. Y. and **Chang, C. M.** (2019). "Use of bank of Kalman estimators for damage detection of buildings." *Proceedings of the SPIE*, Denver, CO. (EI)
14. Chou, J. Y., **Chang, C. M.**, and Huang, S. K. (2018). "Automated Modal Property Extraction Based on Frequency-domain Stochastic Subspace System Identification." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
15. Chiang, H. F. and **Chang, C. M.** (2018). "Numerical Investigation of Mode Shape-Based Damage Detection Methods for Buildings." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
16. Ho, Y. C. and **Chang, C. M.** (2018). "Dynamic Behavior of Nonlinear Pendulum for Seismic Protection of Buildings." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
17. Hsu, T. W. and **Chang, C. M.** (2018). "Dynamic Characteristics of Geometrically Nonlinear Isolation Systems for Seismic Protection of Equipment." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
18. Hsieh, C. Y., Chou, J. Y., and **Chang, C. M.** (2018). "Crack Detection Based on Deep Learning and Computer Vision." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
19. Han, M. C. and **Chang, C. M.** (2018). "Investigation of Key Factors for Low Seismic Performance in Developing and Developed Countries." The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan.
20. **Chang, C. M.** and Chiang, H. F. (2018). "Numerical investigation of mode shape-based damage detection methods for buildings." The 7th Asia-Pacific Workshop on Structural Health Monitoring, Hong Kong, China.
21. Yang, Y. Y., **Chang, C. M.**, and Kang, S. C. (2018). "Framework of Automated Beam Assembly and Disassembly System for Temporary Bridge Structures." The 35th International Symposium on Automation and Robotics in Construction, Berlin, Germany.
22. Chen, P. Y., Zhuang, Z. Y., **Chang, C. M.**, and Kang, S. C. (2018). "A numerical model for the attitude manipulation of twin-hoisted object." The 35th International Symposium on Automation and Robotics in Construction, Berlin, Germany.
23. **Chang, C. M.** and Huang, S. K. (2018). "Frequency-domain damage detection of seismically-excited buildings." The 9th European Workshop on Structural Health Monitoring, Manchester, UK.
24. **Chang, C. M.** and Yang, C. Y. (2018). "Seismic design of linear passive control systems using nonsmooth H_∞ synthesis." 11th U.S. National Conference on Earthquake Engineering, Los Angeles, CA.
25. **Chang, C. M.** and Yang, C. Y. (2018). "Application of nonsmooth H_∞ synthesis to optimally design linear passive control systems." The 2018 IEEE International Conference on Applied System Innovation, Tokyo, Japan.

26. **Chang, C. M.** and Hsu, A. L. (2018). "Design of optimal nonlinear tuned mass damper for buildings against earthquakes." The 7th World Conference on Structural Control and Monitoring, Qingdao, China. [ABSTRACT Only]
27. **Chang, C. M.**, Yang, C. C., and Chou, J. Y. (2018). "Evaluation of structural integrity using vibrational image measurements." The 7th World Conference on Structural Control and Monitoring, Qingdao, China. [ABSTRACT Only]
28. **Chang, C. M.** and Huang, S. K. (2017). "Operational modal analysis using time-frequency stochastic system identification." The 8th International Conference on Structural Health Monitoring of Intelligent Infrastructure, Brisbane, Australia. (**EI**)
29. Chou, J. Y. and **Chang, C. M.** (2017). "Application of Kalman estimators for damage detection of seismically-excited buildings." The 13th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.
30. Huang, S. K., Liao, Y., **Chang, C. M.**, Loh, C. H., Kiremidjian, A., and Rajagopal, R. (2017). "Use of time-frequency damage sensitive features for structural damage diagnosis." The 11th International Workshop on Structural Health Monitoring, Stanford, CA. (**EI**)
31. **Chang, C. M.**, Shia, S., and Yang, C. Y. (2017). "Design of buildings with seismic isolation using linear quadratic algorithm." The X International Conference on Structural Dynamics, Eurodyn 2017, Rome, Italy. (**EI**)
32. **Chang, C. M.**, Shia, S., and Yang, C. Y. (2017). "Design of linear passive control systems for buildings using dynamic output feedback control method." The 3rd Huxian International Forum on Earthquake Engineering for Young Researchers, Champaign, IL.
33. **Chang, C. M.** and Huang, S. K. (2017). "Operational modal analysis of structures using frequency-domain stochastic subspace system identification." The 13th International Workshop on Advanced Smart Materials and Smart Structures Technology, Tokyo, Japan.
34. Yang, Y. Y., Chen, P. Y., Kang, S. C., **Chang, C. M.**, Chiang, Y. C., Kou, and T. Y. T. (2017). "Crane-Based autonomous erection and assembly system." 3rd International Conference on Civil and Building Engineering Informatics & 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, Taipei, Taiwan.
35. Shia, S., **Chang, C. M.**, Yang, C. Y. (2017). "Passive base isolation design of seismically-excited buildings using linear quadratic approach." 3rd International Conference on Civil and Building Engineering Informatics & 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, Taipei, Taiwan.
36. **Chang, C. M.** and Huang, S. K. (2017). "Damage diagnosis of seismically-excited buildings using dual matrix projection of time-frequency distributions." 3rd International Conference on Civil and Building Engineering Informatics & 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, Taipei, Taiwan.
37. Chou, J. Y. and **Chang, C. M.** (2017). "A sensor fault detection strategy for structural health monitoring systems." 3rd International Conference on Civil and Building

Engineering Informatics & 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, Taipei, Taiwan.

38. **Chang, C. M.** and Huang, S. K. (2017). "Stochastic subspace system identification using multivariate time-frequency distributions." *Proceedings of the SPIE*, Portland, OR. (EI)
39. **Chang, C. M.**, Shia, S., and Yang, C. Y. (2016). "Passive base isolation design of seismically-excited building using linear quadratic regulator control algorithm." The 18th Japan-Korea-Taiwan Joint Seminar on Earthquake Engineering for Building Structures, Tainan, Taiwan.
40. Shia, S. and **Chang, C. M.** (2016). "Seismic isolation design using linear-quadratic algorithm." The Twenty-Ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, China.
41. **Chang, C. M.** and Huang, S. K. (2016). "Matrix factorization to time-frequency distribution for structural health monitoring." *Proceedings of the SPIE*, Las Vegas, NV. (EI)
42. **Chang, C. M.** and Loh, C. H. (2015). "An improved system identification approach to enable structural health monitoring." 2015 Joint AESE/ANCRiSST Conference, Champaign, IL.
43. **Chang, C. M.** and Loh, C. H. (2015). "Improved stochastic subspace system identification for structural health monitoring." *Journal of Physics: Conference Series* 628, 11th International Conference on Damage Assessment of Structures (DAMAS2015), 012010. (EI)
44. 周肇昱、**張家銘**，2018，「基於時頻域子空間識別法之自動化萃取動態特性」，第十四屆結構工程及第四屆地震工程研討會，臺中，臺灣，6-8 Nov.
45. 曹文懷、**張家銘**，2018，「適用高度非線性動力系統之數值積分方法」，第十四屆結構工程及第四屆地震工程研討會，臺中，臺灣，6-8 Nov.
46. 許庭維、**張家銘**，2018，「幾何非線性設備物隔震系統之動力特性分析」，第十四屆結構工程及第四屆地震工程研討會，臺中，臺灣，6-8 Nov.
47. 江和峰、**張家銘**、周肇昱，2018，「基於第一模態振形之結構損傷診斷方法比較」，第十四屆結構工程及第四屆地震工程研討會，臺中，臺灣，6-8 Nov.
48. 許安綸、何元鈞、**張家銘**，2018，「非線性軌道式調諧質量阻尼器動力行為之研究」，第十四屆結構工程及第四屆地震工程研討會，臺中，臺灣，6-8 Nov.
49. **張家銘**、周肇昱，2018，「基於卡式濾波器組之結構損傷識別」，第十九屆非破壞檢測技術研討會，臺北，臺灣，27-28 Sep.
50. **張家銘**、周肇昱、楊青景，2018，「基於影像分析與電腦視覺之結構模態萃取」，第十九屆非破壞檢測技術研討會，臺北，臺灣，27-28 Sep.

51. 江和峰、**張家銘**，2018，「利用第一模態振形進形結構損傷診斷」，第十九屆非破壞檢測技術研討會，臺北，臺灣，27-28 Sep.
52. **張家銘**、謝承穎、周肇昱，2018，「裂縫辨識基於深度學習與影像量測」，第十九屆非破壞檢測技術研討會，臺北，臺灣，27-28 Sep.
53. **張家銘**、蘇磐石，2015，「適用於複雜結構的階段性混合實驗方法」，第四屆海峽兩岸地震工程青年學者研討會暨第六屆臺灣邊界元素法會議，臺北，臺灣，18-20 Oct.

技術報告

-
1. 葉芳耀、張國鎮、康世仲、**張家銘**、楊耀奮（2018）救災型輕便橋自動化組裝系統與創新商業模式之開發，107 年科技部補助專題研究計畫成果報告，計畫編號：MOST 107-2119-M-492-004 -
 2. 林子剛、羅俊雄、吳文華、**張家銘**、許丁友、于思婷、余以諾、周肇昱、林又、梁家瑋、郭采蓉、陳羿文、陳瑋縉、蔡易哲、蕭迦恩（2018）地震防災監測預警技術研發與測試(III)，107 年科技部補助專題研究計畫成果報告，計畫編號：107-3011-F-009 -003 -
 3. 洪振發、**張家銘**（2018）機場捷運軌道扣件系統基鈑墊片試安裝成效驗證報告，中興顧問工程顧問股份有限公司委託國立臺灣大學嚴慶齡工業發展基金會研究計畫報告書
 4. **張家銘**、周肇昱、林沛暘、江宏偉、林云媚（2018）利用卡氏濾波器組進行結構損傷識別，財團法人國家實驗研究院國家地震工程研究中心技術報告，編號：NCREE-2018-022
 5. 張國鎮、黃震興、柯鎮洋、汪向榮、**張家銘**、楊卓諺、游忠翰、黃謝恭、邱宜甄（2018）臺北小巨蛋演唱會振動對結構影響及改善之可行性評估，臺北市政府工務局新建工程處委託財團法人國家實驗研究院國家地震工程研究中心評估報告書
 6. **張家銘**、夏瑄（2017）利用最佳化控制理論設計被動隔震系統，財團法人宗倬章先生教育基金會委託國立臺灣大學嚴慶齡工業發展基金會研究計畫成果報告書
 7. 林子剛、溫國樑、羅俊雄、吳文華、**張家銘**、許丁友、林哲民、黃雋彥、呂學敏、吳宛庭、簡義修、林又、陳羿文、梁家瑋、薛汶、涂雅瀅、黃昱婷、周哲瑋、于思婷、周肇昱（2017）地震防災監測預警技術研發與測試(II)，106 年科技部補助專題研究計畫成果報告，計畫編號：106-3011-F-009 -003 -
 8. 康世仲、**張家銘**、楊耀奮（2017）自主吊裝系統：結構元件、吊裝機制、吊車控制，105 年科技部補助專題研究計畫成果報告，計畫編號：105-2628-E-002-003-MY3

9. 林子剛、溫國樑、羅俊雄、吳文華、洪振發、**張家銘**、王勝威、吳宛庭、呂學敏、周肇昱、林又、林佳樺、林易暘、林哲民、夏瑄、張永弘、陳俊達、黃昱婷、黃雋彥、楊國良、蔡鍾銘、薛汶、簡義修（2016）地震防災監測預警技術研發與測試，105年科技部補助專題研究計畫成果報告，計畫編號：105-3011-F-009 -003 -
10. **張家銘**、夏瑄、周肇昱（2016）研發結合時頻域分析與矩陣分解法的結構健康監測平台，104 年科技部補助專題研究計畫成果報告，計畫編號：MOST 104-2218-E-002-036-
11. 羅俊雄、**張家銘**、黃謝恭、陳沛清、林沛暘（2016）以磁流變阻尼器降低曝光機於地震時反應之研究，台灣積體電路製造股份有限公司委託財團法人國家實驗研究院國家地震工程研究中心研究計畫成果報告書

專利

1. **張家銘**、楊卓諺、黃謝恭、徐振豪，「垂直向隔振系統」，臺灣發明專利：107130039，美國發明專利：16/266618，申請中
2. **張家銘**、黃謝恭、楊卓諺，「幾何非線性隔振系統」，臺灣發明專利：107129527，美國發明專利：16/259318，申請中
3. 康仕仲、**張家銘**、楊耀奮、陳鵬元，「起重機負載之減盪系統」，臺灣發明專利：I671256（已獲得）；中國發明專利：201811010043.2，申請中

技術移轉

1. 「應用加速度資訊進行建築震後快速安全診斷技術」，國立臺灣大學研究成果技術移轉

吳東諭 助理教授 Tung-Yu WU

Assistant Professor

學歷/ 博士/密西根大學

專長/ 鋼結構耐震設計 / 結構崩塌模擬 / 建築物震災韌性評估

Steel Structure、Earthquake Resistance Design、Structural Collapse Simulation、Seismic Loss Assessment

期刊論文

1. Omar A. Sediek; Tung-Yu Wu; Jason McCormick; Sherif El-Tawil (2019, Nov). Collapse Behavior of HSS Columns Under Combined Axial and Lateral Loading. *Journal of Structural Engineering*. (Accepted).
2. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2019, Oct). Effect of cyclic flange local buckling on the capacity of steel members. *Engineering Structures*, 200. 本人為第一作者、通訊作者.
3. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Jun). Seismic Collapse Response of Steel Moment Frames with Deep Columns. *Journal of Structural Engineering*, 144(9). 本人為第一作者、通訊作者.
4. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Jan). Highly Ductile Limits for Deep Steel Columns. *Journal of Structural Engineering*, 144(4). 本人為第一作者、通訊作者.
5. Julie Fogarty; Tung-Yu Wu; Sherif El-Tawil (2017, Jul). Collapse Response and Design of Deep Steel Columns Subjected to Lateral Displacement. *Journal of Structural Engineering*, 143(9).

研討會論文

1. Omar A. Sediek; Tung-Yu Wu; Jason McCormick; Sherif El-Tawil (2019, Sep). Seismic behavior of HSS columns under lateral loading. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan.
2. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2019, Sep). Seismic capacity of deep steel columns and their influence on the collapse response of steel special moment frames. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan. 本人為第一作者、通訊作者.
3. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2019, Sep). Influence of seismic design code evolution on the seismic losses and resilience of steel buildings. International

Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan. 本人為第一作者、通訊作者.

4. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Jun). Ensuring highly ductile behavior for deep steel columns. 11th National Conf. on Earthquake Engineering, Oakland, CA, USA. 本人為第一作者、通訊作者.
5. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Apr). Seismic collapse response of a four-story steel special moment frame with deep columns. Structures congress 2018, Fort Worth, TX, USA. 本人為第一作者、通訊作者.
6. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Apr). Experimental study of cyclic flange local buckling. Structures congress 2018, Fort Worth, TX, USA. 本人為第一作者、通訊作者.
7. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2017, Apr). Effect of drift loading history on the collapse capacity of deep steel columns. Structures congress 2017, Denver, CO, USA. 本人為第一作者、通訊作者.
8. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2017, Jan). Behavior of steel moment frames with deep column sections under seismic loading. 16th World Conf. on Earthquake Engineering, Santiago, Chile. 本人為第一作者、通訊作者.

林國峰 教授 Gwo-Fong Lin

Professor

學歷/ 美國匹茲堡大學博士

Ph.D., University of Pittsburgh

專長/ 序率水文學、序率水力學、計算水力學

Stochastic Hydrology, Stochastic Hydraulics, Computational Hydraulics

期刊論文 (Journal Paper)

1. Wu MC, Lin GF*, Lin HY, 2014.01, Improving the forecasts of extreme streamflow by support vector regression with the data extracted by self-organizing map, *Hydrological Processes*, Vol. 28, Issue 2, pp. 386-397. (SCI) <https://doi.org/10.1002/hyp.9584>
2. Lin GF*, Chen CA, Lai JS, 2014.03, Monthly runoff forecasting—The Lao-Nong river in Taiwan, *Journal of Taiwan Water Conservancy*, Vol. 62, No. 1, pp. 30-43. (in Chinese) (EI)
3. Guo WD, Lai JS, Lin GF, Huang CC, Chen CC, 2014.06, An advection upwinding-splitting finite-volume scheme for 2D shallow water flow simulations, *Journal of Taiwan Water Conservancy*, Vol. 62, No. 2, pp. 35-49. (in Chinese) (EI)
4. Yang TH, Ho JY, Hwang GD, Lin GF, 2014.10, An indirect approach for discharge estimation: a combination among micro-genetic algorithm, hydraulic model, and in situ measurement, *Flow Measurement and Instrumentation*, Vol. 39, pp. 46-53. (SCI) <https://doi.org/10.1016/j.flowmeasinst.2014.07.003>
5. Yang TH, Yang SC, Ho JY, Lin GF*, Hwang GD, Lee CS, 2015.01, Flash flood warnings using the ensemble precipitation forecasting technique: A case study on forecasting floods in Taiwan caused by typhoons, *Journal of Hydrology*, Vol. 520, pp. 367–378. (SCI) <https://doi.org/10.1016/j.jhydrol.2014.11.028>
6. Wang CM, Lin GF*, 2015.01, A novel method for flood forecasting based on the nonlinear computational units cascaded model, *Paddy and Water Environment*. Vol. 13, Issue 1, pp. 115-123. (SCI) <https://doi.org/10.1007/s10333-013-0413-z>
7. Lin GF*, Jhong BC, 2015.02, A real-time forecasting model for the spatial distribution of typhoon rainfall, *Journal of Hydrology*, Vol. 521, pp. 302-313. (SCI) <https://doi.org/10.1016/j.jhydrol.2014.12.009>
8. Wu, MC, Ho, JY, Lee, KT, Lin, GF, Liu, WC, 2015.03, Development of Real-time Rainfall and Runoff Forecasting Techniques, *Journal of Taiwan Water Conservancy*, Vol. 63, No. 1, PP. 14-25. (in Chinese) (EI)
9. Chen CC, Lai JS, Lee FZ, Tsung SC, Huang CC, Lin GF, 2015.06, Study of refractive deviation by image analysis in dam break experiments, *Journal of Taiwan Water Conservancy*, Vol. 63, No. 2, pp. 79-90. (in Chinese) (EI)
10. Wu MC, Lin GF*, 2015.11, An hourly streamflow forecasting model coupled with an enforced learning strategy, *Water*, Vol. 7, Issue 11, pp. 5876-5895. (SCI) <https://doi.org/10.3390/w7115876>

11. Lin GF, Wang TC, Chen LH, 2016.01, A forecasting approach combining self-organizing map with support vector regression for reservoir inflow during typhoon periods, *Advances in Meteorology*, Volume 2016 (2016), Article ID 7575126. (SCI) <https://doi.org/10.1155/2016/7575126>
12. Huang YC, Lin GF*, Chang MJ, Ho JY, 2016.03, Rainfall induced-landslide susceptibility analysis using support vector machine, *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, Vol. 28, No. 1, pp. 57-66. (in Chinese) (EI)
13. Jhong BC, Wang JH, Lin GF*, 2016.09, Improving the long lead-time inundation forecasts using effective typhoon characteristics, *Water Resources Management*, Vol. 30, Issue 12, pp. 4247-4271. (SCI) <https://doi.org/10.1007/s11269-016-1418-3>
14. Wang JH, Jhong BC, Lin GF, 2016.12, Effective real-time forecasting of inundation maps during typhoons, *Journal of Taiwan Agricultural Engineering*, Vol. 62, No. 4, pp. 69-86. (in Chinese) (EI)
15. Wu MC, Lin GF, Hwang LR, Chen DYC, Chiang CC, Wang YC, 2016, Optimal integration of the ensemble forecasts from an ensemble quantitative precipitation forecast experiment, *Procedia Engineering*, Vol. 154, pp. 1291-1297. (EI) <https://doi.org/10.1016/j.proeng.2016.07.465>
16. Lin GF*, Chang MJ, Wu JT, 2017.01, A hybrid statistical downscaling method based on the classification of rainfall patterns, *Water Resources Management*, Vol. 31, Issue 1, pp. 377-401. (SCI) <https://doi.org/10.1007/s11269-016-1532-2>
17. Wu MC, Lin GF, 2017.03, The very short-term rainfall forecasting for a mountainous watershed by means of an ensemble numerical weather prediction system in Taiwan, *Journal of Hydrology*, Vol. 546, pp. 60-70. (SCI) <https://doi.org/10.1016/j.jhydrol.2017.01.012>
18. Jhong BC, Wang JH, Lin GF*, 2017.04, An integrated two-stage support vector machine approach to forecast inundation maps during typhoons, *Journal of Hydrology*, Vol. 547, pp. 236-252. (SCI) <https://doi.org/10.1016/j.jhydrol.2017.01.057>
19. Lin GF*, Chang MJ, Huang YC, Ho JY, 2017.06, Assessment of susceptibility to rainfall-induced landslides using improved self-organizing linear output map, support vector machine, and logistic regression, *Engineering Geology*. Vol. 224, 62–74. (SCI) <https://doi.org/10.1016/j.enggeo.2017.05.009>
20. Lin GF*, Chang MJ, Wang CF, 2017.09, A novel spatiotemporal statistical downscaling method for hourly rainfall, *Water Resources Management*. Vol. 31, Issue 11, pp. 3465-3489 (SCI) <https://doi.org/10.1007/s11269-017-1679-5>
21. Wang JH, Lin GF*, Jhong BC, 2018.01, Effective real-time forecasting of inundation maps for early warning systems during typhoons, *MATEC Web of Conferences*, Vol. 147, Article No. 03014. (EI) <https://doi.org/10.1051/matecconf/201814703014>
22. Lee KT, Ho JY, Kao HM, Lin GF*, Yang TH, 2018.05, Using ensemble precipitation forecasts and a rainfall-runoff model for hourly reservoir inflow forecasting during typhoon periods, *Journal of Hydro-environment Research*. (SCI) <https://doi.org/10.1016/j.jher.2018.05.002>
23. Lee FZ, Lai JS, Tang YC, Chang MJ, Chen PA, Lin GF, 2018.10, Plunging mechanism analysis of turbidity current and simulation system application, *Journal of Taiwan Water Conservancy*. (in Chinese) (Accepted) (EI)
24. Chang MJ, Chang HK, Chen YC, Lin GF*, Chen PA, Lai JS, Tan YC, 2018.11, A support vector machine forecasting model for typhoon flood inundation mapping and early flood warning systems, *Water*, 10(12), 1734. (SCI) <https://doi.org/10.3390/w10121734>

研討會論文（Conference Papers）

1. Wang JH, Lin GF, Jhong BC, 2014.04, Simulation of inundation caused by typhoon heavy rainfall using a physically based two-dimensional model, European Geosciences Union General Assembly 2014, Vienna, Austria.
2. Chang MJ, Lin GF, 2014.07, A modified statistical downscaling model of daily precipitation, The 11th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2014), Sapporo, Japan. (Best Student Poster Award)
3. Lin GF, Jhong BC, 2014.07, Hourly typhoon rainfall forecasting using meteorological data through the integration of multi-objective genetic algorithm and support vector machine, The 11th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2014), Sapporo, Japan.
4. Wang JH, Lin GF, Jhong BC, 2014.07, Inundation simulation on the application of a physically based two-dimensional model due to typhoon heavy rainfall, The 11th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2014), Sapporo, Japan.
5. Huang YC, Lin GF, Chang MJ, 2014.07, Uncertainty and Sensitivity Analysis for COMCOT Model, The 11th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2014), Sapporo, Japan.
6. Jhong BC, Lin GF, 2014.08, Integration of multi-objective genetic algorithm and support vector machine for hourly typhoon rainfall forecasting, Proceedings of the 11th International Conference on Hydroinformatics, Paper 198, New York City, USA.
7. Huang CC, Lai JS, Lee FZ, Kang SY, Shih SS, Hwang GW, Lin GF, 2014.08, Long-term effects of river bed variations downstream of the Shihmen reservoir due to climate change, Proceedings of the 11th International Conference on Hydroinformatics, Paper 364, New York City, USA.
8. Lin JT, Lin GF, Huang CC, Kang SY, Lee FZ, Lai JS, Chou JH, 2014.10, The influence of reservoir desiltation on the river bed downstream of the desilting tunnel, The 18th Cross-Straits Symposium on Hydraulic Technology Exchange, Xi'an, China. (in Chinese)
9. Ho, JY, Lee, KT, Chen, YC, Hwang, GD, Yang, TH, Lin, GF, 2015.04, Evaluating the long-term performance for rainfall-induced shallow landslides prediction using a physically-based model in Taiwan, European Geosciences Union General Assembly, Vienna, Austria.
10. Lin, GF, 2015.04.15, Real-time urban flood forecasting during typhoons, The 7th World Water Forum, Science and Technology Process Session 3.3: Flood Damage Reduction in Urban Area by Improvement of Flood Forecasting, Daegu, Korea. (Invited Lecture)
11. Chang MJ, Lin GF, Wu JT, 2015.05, Effects of climate change on daily rainfall in the Taiwan: a new statistical downscaling method, The 2015 International Workshop on Typhoon and Flood – APEC Experience Sharing on Hazardous Weather Events and Risk Management, Taipei, Taiwan. (Student Poster Competition: Third Place, Hydrological Science-PhD Students Division)
12. Huang YC, Lin GF, Chang MJ, 2015.05, Landslide susceptibility mapping methodologies for Kaoping river basin, Taiwan, The 2015 International Workshop on Typhoon and Flood – APEC Experience Sharing on Hazardous Weather Events and Risk Management, Taipei, Taiwan. (Student Poster Competition: Third Place, Hydrological Science-Master's Students Division)
13. Wang JH, Lin GF, Jhong BC, 2015.05, Effective real-time inundation depth forecasting during typhoon periods, The 2015 International Workshop on Typhoon and Flood – APEC Experience Sharing on Hazardous Weather Events and Risk Management, Taipei, Taiwan.

14. Huang CC, Lai JS, Lee FZ, Lin GF, Qiu MQ, Hsieh HM, Kang SY, 2015.08, Water quality management of solid suspension at the Yuanshan water intake affected by reservoir desiltation operation, The 12th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2015), Singapore.
15. Lai JS, Lin GF, Huang CC, Lai YG, Lee FZ, Lu PK, Yen CY, 2015.08, Simulation of turbidity current movement in reservoir desilting operation, The 12th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2015), Singapore.
16. Wang JH, Lin GF, Jhong BC, 2015, Effective forecasting for real-time inundation during typhoon periods, Proceedings of the 2015 Annual Conference of the Taiwan Agricultural Engineers Society, pp. 444-464. (in Chinese) (Student Paper Competition: Excellent Award)
17. Lin GF, 2015.10.24, The use of ensemble precipitation forecasts and a rainfall-runoff model for hourly reservoir inflow forecasting during typhoon periods, International Conference on Sustainable Utilization and Protection of Water Resources under Changing Environment, Guangzhou, China. (Keynote Lecture)
18. Lin GF, 2015.10.28, Development of a real-time typhoon flood forecasting model, 2015 CHES Annual Conference: International Session, Nanjing, China. (Keynote Lecture)
19. Lin JT, Lin GF, Lai JS, Huang CH, Lee FZ, Huang CC, Huang GW, 2015.10, The field measurement of 52-Jia Wetland during a tide cycle using ADCP, The 19th Cross-Strait Symposium on Hydraulic Technology Exchange, Shanghai, China. (in Chinese)
20. Lin GF, 2015.11.24, The short-term real-time typhoon flood forecasting, The 2015 APEC Typhoon Symposium, Manila, Philippines. (Keynote Lecture)
21. Lin GF, Wang JH, Chang MJ, 2015.12, Assessing the impact of climate change on rainfall in Taiwan, Proceedings of the 2015 Symposium of the Agricultural Environment Technology Projects, Council of Agriculture. (in Chinese)
22. Lin GF, 2016.01.27, Effective real-time forecasting of inundation maps during typhoons, The 2nd International Symposium of Graduate School of Water Resources: Science and Technology for Water Resources under Changing Environment, Sungkyunkwan University, Suwon, Korea. (Keynote Lecture)
23. Chen PA, Lin GF, Lai JS, Chang MJ, Lee FZ, Jhong BC, 2016.05, Suspended sediment load prediction using multi-objective genetic algorithm and the improved self-organizing linear output model, The 2016 International Workshop on Typhoon and Flood, Taipei, Taiwan. (Student Poster Competition: Second Place, Hydrological Science-Master's Students Division)
24. Wang CF, Ling GF, Chang MJ, 2016.05, A two-stage spatiotemporal statistical downscaling method for hourly rainfall, The 2016 International Workshop on Typhoon and Flood, Taipei, Taiwan. (Student Poster Competition: Excellent Work, Hydrological Science-Master's Students Division)
25. Wang JH, Lin GF, Jhong BC, 2016.05, Long lead-time forecasting of inundation maps during typhoons, The 2016 International Workshop on Typhoon and Flood, Taipei, Taiwan.
26. Wang JH, Jhong BC, Lin GF, 2016.08, A novel approach using ensemble forecasts for improving rainfall forecasting during typhoons, The 13th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2016), Beijing, China.
27. Chen CL, Wang JH, Jhong BC, Lin GF, 2016.08, Flood susceptibility assessment using a data-driven approach, The 13th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2016), Beijing, China.

- 28.Huang YC, Lin GF, Chang MJ, Ho JY, 2016.08, Rainfall induced-landslide susceptibility analysis using self-organizing linear output map, The 13th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2016), Beijing, China.
- 29.Jhong BC, Wang JH, Lin GF, 2016.12, Effective typhoon characteristics and their effects on hourly inundation forecasting during typhoons, The 4th International Symposium on Water Environment Systems with Perspective of Global Safety, Sendai, Japan.
- 30.Lin GF, Wang JH, Chang MJ, 2016, Assessing the impact of climate change on rainfall patterns in Taiwan, Proceedings of the 2016 Symposium of the Agricultural Technology Projects, Council of Agriculture. (in Chinese)
- 31.Chen CL, Lin GF, 2017.05, Spatial prediction of flood hazard risk using a novel machine learning approach. The 2017 APEC Typhoon Symposium, Taipei, Taiwan. (Student Poster Competition: First Place, Hydrological Science-Master's Students Division)
- 32.Kuo SA, Lin GF, Chen YT, Chang MJ, Wu MC, 2017.05, A novel spatio-temporal statistical downscaling method for hourly temperature. The 2017 APEC Typhoon Symposium, Taipei, Taiwan.
- 33.Chen CL, Lin GF, 2017.05, Flood hazard risk analysis using GIS and a novel machine learning algorithm. The 2017 Joint Assembly of Taichung Forum on Smart City & Risk Governance and the Annual Meeting of the Taiwan Chapter of Society for Risk Analysis, Taichung, Taiwan. (Excellent Student Poster Award)
- 34.Ho JY, Lee KT, Hwang XM, Lin YF, Lin GF, 2017.08, Simulation and disaster management for suburban landslide under extreme weather conditions. The 14th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2017), Singapore.
- 35.Chen PA, Lin GF, Lai JS, Chang MJ, Lee FJ, 2017.09, Turbidity-current arrival-time forecasting by integrating turbidity-current arrival-time model and machine learning, Proceedings of the 23rd Hydraulic Engineering Conference. (in Chinese) (Student Paper Competition: Second Place)
- 36.Wang JH, Lin GF, Jhong BC, 2017.09, Effective real-time forecasting of inundation maps for early warning systems during typhoons. The Third International Conference on Sustainable Infrastructure and Built Environment (SIBE-2017), Bandung, Indonesia.
- 37.Lin GF, 2017.09.27, The short-time inundation forecasting during typhoons, The 2017 ACTS Workshop on Extreme Weather Forecast and Water Resources Management, Hanoi, Vietnam. (Keynote Lecture)
- 38.Chang MJ, Lai JS, Lin GF, Jou BJD and Liang BC, 2017.10, A data assimilation method based on artificial neural network for hourly rainfall estimation. The Conference of International Conference on Mesoscale Convective Systems and High-Impact Weather in East Asia (ICMCS-XII), Taipei, Taiwan.
- 39.Lin GF, Wang JH, Chang MJ, 2017.11, Assessing the impact of climate change on rainfall in the Shihmen Reservoir watershed, Proceedings of the 2017 Symposium of the Agricultural Water Resources Management Projects, Council of Agriculture. (in Chinese)
- 40.Wang YC, Lin GF, Lai JS, Chang MJ, Lee FZ, 2018.05, Outflow sediment concentration forecasting using integrated machine learning approach and time series analysis. The 2018 APEC Typhoon Symposium, Taipei, Taiwan. (Student Poster Competition: First Place, Hydrological Science-Master's Students Division)
- 41.Wang JH, Lin GF, Chen CL, 2018.06, A novel machine learning approach for flood susceptibility assessment, The 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2018), Honolulu, Hawaii.

- 42.Chen YU, Lin GF, Wang JH, 2018.06, Deep learning techniques for hourly water level forecasting during typhoons, The 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2018), Honolulu, Hawaii.
- 43.Huang YR, Lin GF, Wang JH, Ho JY, 2018.06, Rainfall induced-landslide susceptibility analysis using GIS and machine learning, The 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2018), Honolulu, Hawaii.
- 44.Huang IH, Lin GF, Chang MJ, Wang JH, Wu MC, 2018.06, Hourly rainfall forecasting using ensemble precipitation forecasts through support vector machine and random forest, The 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2018), Honolulu, Hawaii.

技術報告及其他

- 1.林國峰, 2014.03, 石門水庫放淤對下游河道變遷影響分析, 經濟部水利署北區水資源局研究計畫報告, 國立台灣大學水工試驗所.
- 2.林國峰, 2014.12, 都會區防洪減災策略之研究一子計畫：都市化影響下降雨及逕流特性分析與模擬技術發展之研究(II), 國科會研究計畫報告, 國立台灣大學土木工程學系.
- 3.林國峰, 2014.12, 因應糧食安全之農業水資源經營策略—氣候變遷下高屏溪流域水源風險評估(2), 農委會研究計畫報告, 國立台灣大學土木工程學系.
- 4.林國峰, 2015.12, 都會區防洪減災策略之研究一子計畫:都市化影響下降雨及逕流特性分析與模擬技術發展之研究(III), 科技部研究計畫報告, 國立台灣大學土木工程學系.
- 5.林國峰, 2015.12, 因應糧食安全之農業水資源經營策略—氣候變遷對台灣地區降雨之衝擊評估, 農委會研究計畫報告, 國立台灣大學土木工程學系.
- 6.賴進松, 林國峰, 2016.01,石門水庫排洪減淤操作對下游河道泥砂濃度與底床沖淤影響及改善方案研究, 經濟部水利署北區水資源局研究計畫報告, 國立台灣大學水工試驗所.
- 7.林國峰, 2016.08, 聯合機率分析方法在流域洪災管理之研發與應用一子計畫:聯合機率分析方法應用於流域洪災致災因子之研究(I) , 科技部研究計畫報告, 國立台灣大學土木工程學系.
- 8.林國峰, 2016.12, 枯旱情境下農業用水管理調節機制—氣候變遷對台灣地區降雨之衝擊評估, 農委會研究計畫報告, 國立台灣大學土木工程學系.
- 9.林國峰, 2017.08, 聯合機率分析方法在流域洪災管理之研發與應用一子計畫:聯合機率分析方法應用於流域洪災致災因子之研究(1/2), 科技部研究計畫報告, 國立台灣大學土木工程學系.
- 10.林國峰, 2017.12, 水稻節水技術應用推廣及農業水資源管理之研究—氣候變遷對石門水庫集水區降雨之衝擊評估, 農委會研究計畫報告, 國立台灣大學土木工程學系.
- 11.林國峰, 2018.08, 聯合機率分析方法在流域洪災管理之研發與應用一子計畫:聯合機率分析方法應用於流域洪災致災因子之研究(2/2), 科技部研究計畫報告, 國立台灣大學土木工程學系.
- 12.林國峰, 2018.12, 農業水資源智慧調配及水稻節水與灌溉管理技術研究與推廣—氣候變遷對水庫集水區未來降雨之衝擊評估, 農委會研究計畫報告, 國立台灣大學土木工程學系.

李鴻源 教授 Hong-Yuan Lee

Professor

學歷/ 美國愛荷華大學博士

Ph.D., University of Iowa

專長/ 河川水力學、泥砂運動力學、流體力學

River Hydraulics, Mechanics of Sediment Transport, Fluid Mechanics

期刊論文

(A) 期刊論文

1. Y.C. Chen, K.T. Chang, H.Y. Lee, S.H. Chiang, (2015), "Average landslide erosion rate at the watershed scale in southern Taiwan estimated from magnitude and frequency of rainfall.", *Geomorphology*, Volume 228, Pages 756–764, 1 January 2015 (SCI)
2. Shih, S.S., Y.Q. Zeng, H.Y. Lee, M.L. Otte, W.T. Fang, (2017), "Tracer Experiments and Hydraulic Performance Improvements in a Treatment Pond", *Water* 9(2), 137. (SCI)
3. Y.J. Chiu, H.Y. Lee, T.L. Wang, J. Yu, Y.T. Lin*, Y. Yuan (2019) "Modeling Sediment Yields and Stream Stability Due to Sediment-Related Disaster in Shihmen Reservoir Watershed in Taiwan", *Water* 2019, 11(2), 332 (SCI)
4. C,Y, Liang, Gene J.Y. You, H.Y. Lee (2019) "Investigating the Effectiveness and Optimal Spatial Arrangement of Low-Impact Development Facilities", *Journal of hydrology* 577 (2019) 124008.

(B) Conference Paper

無

(C) Other Publication

1. 李鴻源、莊孟儒、周立生、鄭傳謙、劉時宏，2015，「多期測繪資料同化與加值服務應用之探討 -以荖濃溪流域為例」，行政院國家科學委員會。
2. 李鴻源、劉施敏、鄭傳謙、林子皓，2016、「探討低衝擊開發技術輔助排水系統之能力 - 以新北市中永和地區為例」，行政院國家科學委員會。
3. 李鴻源、邱昱嘉、馬國宸、林永峻、柯凱元、譚義績，2017、「氣候變遷下高精度山地水砂災害預測與應對之合作研究(兩岸合作研究)」，科技部。

4. 李鴻源、張倉榮、賴進松、譚義績、林志平，2017、「水庫庫容永續技術之研發應用-水庫庫容永續技術之研發應用(1/3)」，科技部。
5. 李鴻源、邱昱嘉、林永峻、柯凱元、譚義績，2018、「氣候變遷下高精度山地水砂災害預測與應對之合作研究(兩岸合作研究)(1/2)」，科技部。
6. 李鴻源、張倉榮、賴進松、譚義績、林志平，2018、「水庫庫容永續技術之研發應用-水庫庫容永續技術之研發應用(2/3)」，科技部。
7. 李鴻源、邱昱嘉、林永峻、柯凱元，2019、「氣候變遷下高精度山地水砂災害預測與應對之合作研究(第二、三年)(兩岸合作研究)(2/2)」，科技部。
8. 李鴻源、張倉榮、賴進松、譚義績、林志平，2019、「水庫庫容永續技術之研發應用-水庫庫容永續技術之研發應用(3/3)」，科技部。

(D) 專書

1. 李鴻源，2014，「台灣如何成為一流國家」，時報出版，280 頁，台灣。(ISBN：9789571361529)
2. 李鴻源，2015，「記那些波光與映像：李鴻源人生隨筆」，時報出版，256 頁，台灣。(ISBN：9789571362786)
3. 李鴻源，2019，「台灣必須面對的真相」，時報出版，224 頁，台灣。(ISBN：9789571379388)

黃良雄 教授 Liang-Hsiung Huang

Professor

學歷/ 美國愛荷華大學博士

Ph.D., University of Iowa

專長/ 多孔介質流、流體力學、流體波動學

Porous Media Flow, Fluid Mechanics, Waves In Fluid

期刊論文 (Journal Paper)

1. Lin, M.Y., Huang, H.M. and Huang, L.H., 2014, Tilting while lifting a large object from a rigid porous seabed, *Journal of Engineering Mechanics, ASCE*, 140, 04014004-1 – - 04014004- 12. (SCI, EI) [NSC97-2221-E002-248-MY2]
2. Chang, K.H., Lin, M.Y. and Huang, L. H., 2015, Modified Lagrangian Vortex Method with Improved Boundary Conditions for Water Waves past a Thin Bottom-standing Barrier, *International Journal for Numerical Methods in Fluids*, 77, 183-205. (SCI, EI) [NSC100-2221-E002-019, and NSC100-2811-E002-047]
3. Chang, Yun, Huang, L.H. and Yang, F.P.Y., 2015, Two-dimensional lift-up problem for a rigid
4. Chuang, S.H., Yueh, C.Y. and Huang, L.H., 2015, Dual boundary element model coupled with
5. Chang, H.Y., Huang, L.H., Lin, M.Y. and Chng, K. H., 2017, Application of a pre-coated permeable layer to a pipeline partially buried in a porous seabed, *Journal of Engineering Mechanics @ ASCE*, ISSN 0733-9399,(SCI, EI) [NSC103-2221-E002-224]
6. Huang, Chwang-Wei, Yang, Fan-Po-Yuan, Huang, Liang-Hsiung, Chou, Jyh-Fang, Lien, Ho-Chen, and Chang, Cheng-Wei, 2018, Optimal design of interception for flood control: An integrated simulation approach, *Journal of Hydro-environmental Research*, 19, 103-116. (SCI) [MOEAWRA 1010087]
7. Yang, Fang-Po-Yuan, Huang, Liang-Hsiung, Chang, Cheng-Wei and Lin, Meng-Yu, 2018, Estimation of the specified time scale for mass transport in a tidal estuary, *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, Vol. 30, No.1, pp. 1-9. (EI) [NSC97-2221-E002-248-MY2] [NSC98 - 2625 - M002 - 004]

研討會論文 (Conference Papers)

1. Chang, H.Y., Huang, L.H., Lin, M.Y. and Chang, K.H., 2014, Flow behavior around a coated pipeline embedded partly in a permeable seabed, *Proceedings of the 11th International Conference on Hydrodynamics*, Singapore, Oct.19 – 24.
2. Wang, Y.H., Jan, J.F., Chang, C.W., Huang, L.H. and Young, C.C., 2015, A mountainous groundwater flow model, *Proceedings of the 5th International Conference on Engineering and Applied Science*, Sapporo, Japan, July 20 – 22.
3. Hsiao, Fu-Cheng and Huang, L.H., 2016, Analytical method of linear viscous water wave applied to flap type wave-maker, *Proceedings of the 38th Ocean Engineering Conference in Taiwan, ROC*, Taipei, Taiwan, Dec. 8-9 (in Chinese).

4. Lin, Y.H. and Huang, L.H., 2018, Exploring the adhesive approximate solution of lift-up problem with a rigid impermeable bed, proceedings of the 13th International Conference on Hydrodynamics, Incheon, Korea, Sep. 2 – 6.
5. Hsiao, F.C., Huang, L.H. and Lin, M.Y., 2018, Analytical method for linear viscous water wave applicable to a flat-type wave maker, proceedings of the 13th International Conference on Hydrodynamics, Incheon, Korea, Sep. 2 – 6.

技術報告

1. Lin, C.P., Huang, L.H. and Hsieh, D.Y., 2014, The implementation of observation and measurement system of sediment transport and the related applications in Nan-Hua Reservoir (1/2), Report of Taiwan Water Corporation (in Chinese).
2. Lin, C.P., Huang, L.H. and Hsieh, D.Y., 2014, The long term observation and measurement of sediment transport and the numerical simulation of the deposition prevention operation in Shihman Reservoir (2/2), Report of Water Resource Bureau, Ministry of Economic Affairs (in Chinese).
3. Huang, L.H., 2014, The study of sediment problem during typhoon flooding, Report of Ministry of Science and Technology, MOST100-2625-M-002-015-MY3 (in Chinese).
4. Huang, L.H., 2014, A review on hot spring development and utilization, Report of Water Resource Bureau, Ministry of Economic Affairs (in Chinese).
5. Huang, L.H. and Lin, M.Y., 2015, The study of a remedy for piping of underwater pipelines, Report of Ministry of Science and Technology, MOST103-2221-E-002-224 (in Chinese).
6. Lin, C.P., Huang, L.H. and Hsieh, D.Y., 2015, The implementation of observation and measurement system of sediment transport and the related applications in Nan-Hua Reservoir (2/2), Report of Taiwan Water Corporation (in Chinese).
7. Huang, L.H., 2016, The optimized arrangement of a remedy for piping of a underwater pipeline, Report of Ministry of Science and Technology, MOST104-2221-E002-144 (in Chinese).
8. Tsai, Tung-Lin, Huang, L.H. and Wu, Shiang-Jen, 2016, The construction and application of the numerical model of land subsidence due to loading or groundwater pumping, Report of Water Resource Bureau, Ministry of Economic Affairs MOEWRA1050211 (in Chinese).
9. Huang, L.H., 2017, The study of saltwater intrusion of groundwater(1), Report of Ministry of Science and Technology, MOST105-2221-E002-086 (in Chinese).
10. Huang, L.H., 2018, The study of saltwater intrusion of groundwater(2), Report of Ministry of Science and Technology, MOST106-2221-E002-103 (in Chinese).

專利

1. Huang, L.H., Lin, M.Y., Chang, Hsin-Yu and Lai, Bo-Yuan, 2016, Simulation method of piping prevention

指導獲獎論文

Supervised PhD Theses

1. Chang, Cheng-Wei (張正緯), 2018, The study of seawater intrusion of groundwater, PhD thesis, Department of Civil Engineering, National Taiwan University (in Chinese).

2. Yang, Fang-Po-Yuan (楊方泊源), 2018, The study on the method of optimal operation of self-purification for a tidal river in dry seasons, PhD thesis, Department of Civil Engineering, National Taiwan University (in Chinese).

Supervised MS Theses

- 1.Chang, Yun (張雲), 2014, Analytical solutions to the vertical lifting of a submerged rectangular block, MS thesis, Department of Civil Engineering, National Taiwan University.
- 2.Chen, Hsiao-Ching (陳曉慶), 2014, The study of the dividing wall for a merged flow of two open channels, Department of Civil Engineering, National Taiwan University (in Chinese).
- 3.Koh, Yen-Hui (高延輝), 2015, Development of BEEMD based smoothing algorithm for topography and a 2D cell based flood inundation model, Department of Civil Engineering, National Taiwan University.
- 4.Lai, Bo-Yuan (賴柏元), 2015, The optimized arrangement of prevention for piping of underwater pipelines, Department of Civil Engineering, National Taiwan University (in Chinese).
- 5.Hsiao, Fu-Cheng(蕭輔誠), 2016, Analytical method of linear viscous water wave applied to flap type wave-maker, Department of Civil Engineering, National Taiwan University (in Chinese).
- 6.Wei, I-Fan (衛亦凡), 2016, Groundwater floe analysis and computation for zones of large hydrodynamic conductivity difference, Department of Civil Engineering, National Taiwan University (in Chinese).
- 7.Lin, Yi-Ru (林怡汝), 2017, Analytical study on linear water waves with a submerged flat plate, Department of Civil Engineering, National Taiwan University (in Chinese).
- 8.Yu, Wei-Chieh (余偉傑), 2017, Analytical studies of some high Reynolds number flows in hydraulic engineering, Department of Civil Engineering, National Taiwan University (in Chinese).
- 9.Hsieh, Chuan-Yao (謝全曜), 2018, A study on Manning's n in wetland, Department of Civil Engineering, National Taiwan University (in Chinese).

Patent

1. Huang, L.H., Lin, M.Y., Chang, Hsin-Yu and Lai, Bo-Yuan, 2016, Simulation method of piping prevention.

Supervised Publications

1. Lin, Yu-His, 2017, Par1. Improvement of vortex experiment, Part 2. The flow behavior resulting from a plane revolving between two concentric cylinders, 3rd place, The 2017 Bachelor Degree Thesis Award of NTU.

劉格非 教授 Ko-Fei Liu

Professor

學歷/ 美國麻省理工學院博士

Ph.D., MIT

專長/ 土石流、環境流力、波浪力學

Debris Flow, Environmental Fluid Mechanics, Wave Dynamics

期刊論文 (Journal Paper)

1. Wu, Y.H., Liu, K.F. and Chen, Y.C. 2013 Comparison between FLO-2D and Debris-2D on the application of assessment of granular debris flow hazards with case study. *Journal of Mountain Science*, Vol. 10(2): 293-304 (SCI, IF=1.000) Ci=11
2. Liu, K.F., Wu, Y.H. and Chen, Y.C. 2013 Large scale simulation of watershed mass transport – A case study of TsengWen watershed. *Natural Hazards*, Vol. 67 (2): 855-867. (SCI, IF=1.529) Ci=21
3. Li, H.-C., Liu, K.-F. and Hsu, Y.-C., 2013 Loss Curve Analysis of A debris Flow : A Case Study on The Daniao Tribe”Applied Mechanics and Materials Vols. 284-287, pp 1499-1510
4. Liu, K.F., Wei, S.C., Li, P.C. 2013 “The influence of accumulated precipitation on debris flow hazard area.” *Journal of Chinese Soil and Water Conservation*, 44(3):225-233. (in Chinese)
5. Wu, Y.H. and Liu. K.F. 2014 “Formulation for Calibration of rheological parameters of Bingham fluid in Couette rheometer”, *Transactions of ASEM*. April, Vol. 137,
6. Wu, Y.H. and Liu, K.F. 2015“Start-up flow of a Bingham fluid between two coaxial cylinders under a constant wall shear stress” *J. Non-Newtonian Fluid Mech.* 223: 116-121, DOI: 10.1016/j.jnnfm.2015.06.002
7. Wu, Y.H. and Liu, K.F., 2015 Formulas for Calibration of Rheological Parameters of Bingham Fluid in Couette Rheometer. *J. Fluids Eng.* 137(4), 041202
8. Kuang, C., Wang, J., Liu, K.F., Hao, W., 2015, “Numerical study on debris flow under different rainfall intensities at Gangou in Hongse Village, Dujiangyan,” *J. Tongji University (Natural Science)*, Vol. 43(7), pp.1012-1018.
9. Wei, S. C., H. J. Shih, H. C. Li, and K. F. Liu. 2017. Potential Impact of Landslide and Debris Flow on Climate Extreme – A Case Study of Xindian Watershed in Taiwan, *Nat. Hazards Earth Syst. Sci. Discuss.*, <https://doi.org/10.5194/nhess-2017-262>, in review. (SCI, IF=2.51)
10. 魏士超、劉格非、黃亦敏、方耀民、尹孝元、黃效禹、林建良。2017。愛玉子溪土石

研討會論文 (Conference Paper)

1. Liu, K.F., Hsu, Y.C., 2013 "TRIGRS and DEBRIS-2D in Large Scale Sediment Disaster Assessment: Applied in Daniao Tribe Watershed in Taiwan", The 11th International Symposium on Mitigation of Geo-Disaster in Asia, 22-28 Oct. 2013, Kathmandu, Nepal. (Keynote)
2. Liu, K.F., Wu, Y.H. , 2013 "Calibration Formula of Rheological Parameters of Bingham Fluid in Couette Rheometer", The 11th International Symposium on Mitigation of Geo-Disaster in Asia, 22-28 Oct. 2013, Kathmandu, Nepal.
3. Liu, K.F., Wei, S.C., and Hsu, Y.C., 2013 "The influence of accumulated precipitation on debris flow hazard area", The 11th International Symposium on Mitigation of Geo-Disaster in Asia, 22-28 Oct. 2013, Pokhara, Nepal.
4. Liu, K.F., Wu, Y.H. , 2013 "The Influence of Countermeasures on Debris Flow Hazard Area with Numerical Simulation", The 11th International Symposium on Mitigation of Geo-Disaster in Asia, 22-28 Oct. 2013, Pokhara, Nepal.
5. Liu, K.F., Wei, S.C., and Wu, Y.H., 2014 "The influence of accumulated precipitation on debris flow hazard area", World Landslide Forum 3, 2-6 Jun. 2014, Beijing, China
6. Liu, K.F., Wu, Y.H., 2014 "The Influence of Countermeasures on Debris Flow Hazard Area with Numerical Simulation", World Landslide Forum 3, 2-6 Jun. 2014, Beijing, China
7. Liu, K.F. 2014, "Large scale sediment transport: Combine landslide area-volume relation, debris flow simulation and river sedimentation calculation to find large watershed sediment movement and storage change", Int. Symposium on Geo-disaster reduction, Cal. St. Univ., Fullerton, CA, USA Sep. 5-7 (Invited)
8. Liu, K. F., Chung, MC , Wang GS, Tan CH, Chi SY, Su TW, Chen MM, Fei LY, Shen CW, 2014 "Establishment of landslide bench mark monitoring sites in Taiwan", Proceedings of KSEG Fall Conference / November 27 - 28, 2014 (Invited)
9. K.F. Liu, S.C. Wei, and P.C. Lee 2015 "Combined Different Techniques for Measuring the Rheological Parameters of Bingham Fluid." The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
10. K.F. Liu, Jessie Chang, and S.C. Wei 2015 "The Influence of Rainfall Intensity of Rainfall-based Debris Flow Warning System." The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
11. Y.C. Hsu, K.F. Liu, M.P. Tsai, and S.C. Wei, 2015 "DEBRIS-2D Model Apply to Debris Flow Disaster Controlled - A Real Case at Songhe No.1 Creek in Central Taiwan" The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
12. K.F. Liu, and Jhan-Ming Jhou, 2015 "Mechanics analysis of tipping bucket rain gauge." The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
13. K.F. Liu, and Kai-Yin Cheng 2015 "Applied the Image Velocimetry in Debris-Flow Monitoring Film.2015 " The 13th International Symposium on Geo-disaster Reduction,

9-11 Aug. 2015, Prague, Czech Republic.

14. Chae, B.-G., Liu, K.-F., Choi, J., 2016, A study of landslide warning based on the RTI model in Korea, 2016 EGU General Assembly, Vienna, Austria, April 17-22, 2016
15. Liu, K.F., Wu, Y.H., 2016 “Large Scale Simulation of Watershed Mass Transport – a Case Study of Tsengwen Reservoir Watershed, Taiwan” The 7th International Conference on Water Resources and Environment Research (ICWRER2016), Kyoto TERRSA, Kyoto, Japan, June 5-9, 2016
16. Liu, K.F. Li, H.C. 2016, Social vulnerability index for natural disaster with case study for debris flows, Taiwan” The International Conference on Human Society and Culture (HSC2016), 8/19–21, Shenzhen, China (KeyNote)
17. Liu, K. F., and S. C. Wei. 2017. A Complete Watershed Monitoring System in Shenmu Village, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.
18. Wei, S. C., K. F. Liu, Y. M. Huang, and Y. M. Fang. 2017. Characteristics of Ground Vibration Signal Produced by Debris Flows at Ai-Yu-Zi Creek, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.

書 (Books)

1. Kuo, Liu, Ko-Fei, Chyan-Deng Jan, Ping Sien Lin and Hsin-Chi Li, 2012 “Progress of Geo-Disaster Mitigation Technology in Asia : Chap 4: Advances of Geo-Disaster Mitigation Technologies in Taiwan” F. Wang et al. (eds.), pp:77-103, Springer
2. Su-Chin Chen, Ko-Fei Liu, Lien-Kuang Chen, Chun-Hung Wu, Fawu Wang and Shih-Chao Wei, 2012 “Progress of Geo-Disaster Mitigation Technology in Asia : Chap 23: Catastrophic Deep-Seated Landslide at Xiaolin Village in Taiwan Induced by 2009.8.9 Typhoon Morakot” F. Wang et al. (eds.), pp:401-419, Springer
3. Ko-Fei Liu, Ying-Hsin Wu. 2013, “Introduction to Debris-2D – A Debris Flow Simulation Program : 3.886-1.1 ICL Landslide Teaching Tools” K. Sassa, B. He, M. McSaveney and O. Nagai (eds.). Apr, 2013: 238-246. (ISBN: 978-4-9903382-2-0)
4. Ko-Fei Liu, Hsin-Chi Li, Mei-Chun Kuo and Hui-Hsuan Yang, 2013, ‘Assessment Social Impact of debris flow disaster by Social Vulnerability Index : 5.886-1.2 ICL Landslide Teaching Tools” K. Sassa, B. He, M. McSaveney and O. Nagai (eds.) Apr, pp 410-412. (ISBN: 978-4-9903382-2-0).
5. Wu, Y.H., Liu, K.F., Chen, Y.C., Chiu, Y.J., Shih, S.S, 2016 “Simulation of mass movement in a large-scale watershed,” In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 143-158.
6. Liu, K.F., and Wu, Y.H., 2017 “Debris-2D Tutorial,” In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 108-117.
7. Abolmasov B., Fathani, T. F., Liu, K. F. and Sassa K., 2017 “Progress of the World Report on Landslides” in Advancing Culture of Living with Landslides , pp.219-226. DOI: 10.1201/b21520-73

專利 (Patents)

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利期間	國科會計畫編號
(A)	土石流變特性測量裝置	本國	199071	劉格非	劉格非	2004/3/1-2021/6/6	
(A)	地下水測量之方法與系統	本國	1225936	劉格非 黃名村	劉格非 黃名村	2004/6/6-2021/9/12	NSC90-2625-Z-002-021
(A)	測量河川水域平均流速之方法	本國	1230783	劉格非 張書豪 莊素敏	劉格非	2005/4/11-2021/5/22	
(A)	災害預警系統	中國	01124357.0	劉格非	劉格非	2001/7/27-2021/7/27	NSC91-2625-Z-002-020

卡艾瑋 教授 H. Capart

Professor

學歷/ 比利時國立魯汶大學博士

Universite catholique de Louvain

專長/ 實驗流體力學、輸砂力學、計算水力學

期刊論文 (Journal Paper)

1. Capart, H., Hung, C.-Y., and Stark, C.P. (2015) Depth-integrated equations for entraining granular flows in narrow channels. *Journal of Fluid Mechanics* **765**, R4 (Impact factor = 2.893)
2. Ni, W.-J., and Capart, H. (2015) Cross-sectional imaging of refractive-index-matched liquid-granular flows. *Experiments in Fluids* **56**, 163 (Impact factor = 2.195)
3. Ke, W.-T., and Capart, H. (2015) Theory for the curvature-dependence of delta front progradation. *Geophysical Research Letters* **42**, 10,680-10,688 (Impact factor = 4.339)
4. Hung, C.-Y., Stark, C. P., and Capart, H. (2016) Granular flow regimes in rotating drums from depth-integrated theory. *Physical Review E* **93**, 030902 (Impact factor = 2.284)
5. Ke, W.-T., Chen, Y.-W., Hsu, H.-C., Toigo, K., Weng, W.-C. and Capart, H. (2016) Influence of Sediment Consolidation on Hydrosuction Performance. *Journal of Hydraulic Engineering* **142**, 04016037 (Impact factor = 2.080).
6. Hung, C.-Y., Aussillous, P., and Capart, H. (2018) Granular surface avalanching induced by drainage from a narrow silo. *Journal of Fluid Mechanics* **856**, 444-469 (Impact factor = 2.893)
7. Ni, W.-J., and Capart, H. (2018) Stresses and Drag in Turbulent Bed Load From Refractive Index-Matched Experiments. *Geophysical Research Letters* **45**, 7000-7009 (Impact factor = 4.339)

Contributions to International Conferences

1. Vanden Berghe, J.F., J. Pyrah, S. Gooding, and H. Capart (2011) Development of a jet trenching model in sand. *Frontiers in Offshore Geotechnics II*, Taylor and Francis.
2. Ni, W.J., H. Capart and L.J. Leu (2011) Design to Build: Pilot Tests for a New Keystone Project Course at NTU-CE. *Proceedings of the First International Workshop on Design in Civil and Environmental Engineering*, April 2011, KAIST, Korea.
3. Wu, E. Y.-H., H. Capart, M.-L. Lin, (2011) Design With or Without Expert Guidance? Lessons from a New Capstone Course at NTU-CE. *Proceedings of the First International Workshop on Design in Civil and Environmental Engineering*, April 2011, KAIST, Korea.

4. Bellal, M., H. Capart, S. Soares-Frazao, Y. Zech (2009) Analytical, experimental, and numerical models of knickpoint migration. Proceedings River, Coastal and Estuarine Morphodynamics: RCEM 2009, Santa Fe, Vionnet et al. (eds), Taylor & Francis Group, London, ISBN 978-0-415-55426-8, pp 57-63
5. Vanden Berghe, J.F., H. Capart, and J.C.C. Su (2008) Jet-induced trenching operations: mechanisms involved. Proceedings of the 2008 Offshore Technology Conference, May 2008, Houston, Texas.
6. Su, J.C.C., A.T.H. Perng, and H. Capart (2007) Underwater trench incision and turbid overspill due to moving point jets. Proceedings of XXXII Congress IAHR, Venice, Italy, July 2007.
7. Lai, S.Y.J., and H. Capart (2007) Response of hyperpycnal deltas to a steady rise in base level. Proceedings, RCEM2007, Twente, The Netherlands, September 2007.
8. Yang, R.Y., H.H. Hwung, S.J Jan, C.L. Teng, H. Capart, and L.A. Kuo (2007) Experimental study on the interaction between flow current and cage structure. Proceedings of the 17th Intl Offshore and Polar Eng Conference, Lisbon, Portugal, July 2007.
9. Huang, Y.F., H. Capart, R.H. Chen, and Y.L. Huang (2007) Experimental analysis of the seepage failure of a sand slope. Proceedings of the Fourth Int. Conf. on Debris Flow Haz Mitig., Chengdu, China, September 2007.
10. Huang, Y.L., H. Capart, R.H. Chen, and Y.F. Huang (2007) Laser scanning technique for the in-situ characterization of debris flow material. Proceedings of the Fourth Int. Conf. on Debris Flow Haz Mitig., Chengdu, China, September 2007.

蔡宛珊 教授 Christina Wan Shan Tsai

Professor

學歷/ 美國伊利諾大學香檳校區土木與環境工程學博士

Ph.D., Univ. of Illinois at Urbana-Champaign, USA

專長/ 泥沙輸移、不確定性分析、風險可靠性分析、環境水力學

Sediment Transport, Uncertainty Analysis, Risk and Reliability Analysis, Environmental Hydraulics

Refereed Journal Publications (underlined authors indicating Ph.D. students supervised)

1. Tsai, C.W.* and Lai, K.C. (2014). "A Three-state continuous-time Markov chain model for mixed size sediment particle transport" ASCE Journal of Hydraulic Engineering, 140(9), 04014047 (10pp), doi: 10.1061/(ASCE)HY.1943-7900.0000897
2. Tsai, C.W.* and Li, M. (2014). "Uncertainty analysis and risk assessment of DO concentrations in the Buffalo River Using the Perturbation Moments Method" ASCE Journal of Hydrologic Engineering, 19(12), 04014032 (12pp), [http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000985](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000985)
3. Tsai, C.W.*, Man, C. and Oh, J.S. (2014). "A stochastic particle based model for suspended sediment in surface flows." International Journal of Sediment Research 29 (2014), 195-207.
4. Tsai, C.W.*, Hsu, Y.W., and Lai, K.C., Wu, N.K. (2014). "Application of Gambler's ruin model to sediment transport problems" Journal of Hydrology. 510: 197-207. <http://dx.doi.org/10.1016/j.jhydrol.2013.11.038>
5. Tsai, C.W.* and Yang, F.-N. (2013). "Modeling bedload transport using a three-state continuous-time Markov chain model." ASCE Journal of Hydraulic Engineering, 139(12), 1265-1276.
6. Franceschini, S., Tsai, C.W., and Marani, M. (2012). "Point Estimate Methods based on Taylor series expansion – the Perturbation Moments Method – a more coherent derivation of the second order statistical moment." Applied Mathematical Modelling, 36(11), 5445-5454.
7. Franceschini, S., Marani, M., Tsai, C.W., and Zambon, F. (2012). "A perturbation moment point estimate method for uncertainty analysis of the hydrologic response." Advances in Water Resources, 40, 46-53, DOI: 10.1016/j.advwatres.2012.02.007
8. Kuai, K. Z. and Tsai, C.* (2012). "Identification of varying time scales in sediment transport using the Hilbert–Huang Transform method. J. Hydrology, Vol. 401-402, 245-254, doi:10.1016/j.jhydrol.2011.12.007
9. Oh, J.S., Tsai, C. W.* (2011). A stochastic jump diffusion particle-tracking model (SJD-PTM) for sediment transport in open channel flows (vol 47, W03902, 2011). Water Resources Research, 47.
10. Oh, J. S., and Tsai, C.* (2010). "A stochastic jump diffusion particle-tracking model (SJD-PTM) for sediment transport in open channel flows." Water Resources Research, VOL. 46, W10508, 20pp, doi:10.1029/2009WR008443.
11. Franceschini, S. and Tsai, C.* (2010). "Assessing uncertainty sources in water quality

- modeling in the Niagara River.” *Advances in Water Resources*, 33(4), 493–503
12. Franceschini, S and Tsai, C.* (2010). “Application of Hilbert Huang Transform method for analyzing toxic concentrations in the Niagara River.” *ASCE Journal of Hydrologic Engineering* 15(2), 90-96.
 13. Oh. J. S., Tsai, C. W.* and Choi, S-U “Quantifying the uncertainty of sediment concentration estimation in open channel flows using the stochastic particle tracking method ” *ASCE Journal of Hydraulic Engineering* (under review).
 14. Oh. J. S., Choi, S-U, and Tsai, C. W. “Investigation of the Characteristics of Momentum Transfer in the Open-Channel Flow based on the Lateral Distribution Method” *Environmental Fluid Mechanics* (under review).
 15. Kuai, K. Z., and Tsai, C.W.* “A discrete-time Markov chain model for transport of mixed size sediment particles under unsteady flow conditions.” *ASCE Journal of Hydrologic Engineering* (under review).
 16. Tsai, C.W.* and Treadwell, H. “Analysis of trends and variability of toxic concentrations in the Niagara River “ *Environmental Modeling and Software* (under review).

Refereed Conference Proceeding Publications (underlined authors indicating graduate students supervised)

1. Tsai, C* and Lin, E. Y. (2015). “ Evaluation of potential climate change effects on particle movement in surface water” Proc, World Water and Environmental Resources Congress 2015, Austin, TX.
2. Tsai, C* and Wu, N.K. (2015). “Application of a Gambler’s ruin model to uncertainty assessment of reservoir sedimentation problems ” Proc, World Water and Environmental Resources Congress 2015, Austin, TX.
3. Tsai, C*, Lai, K.C. and Wu, N.K. (2013). “Application of Gambler’s ruin model to sediment transport modeling” 17th Cross strait hydro-tech Conference, Myao-Li, Taiwan.
4. Tsai, C.* and Li, M. (2013). “Uncertainty analysis of water quality using the Perturbation Moments Method“ Proc. IAHR 2013, 10pp. Wu-Han, China.
5. Kuai, K. and Tsai, C. (2012). “Stochastic modeling of nonuniform sediment transport under unsteady flow conditions” Proc, World Water and Environmental Resources Congress 2012, Albuquerque, NM.
6. Oh, J.S. and Tsai, C. (2011). “Stochastic Multivariate modeling for sediment transport” Proc, World Water and Environmental Resources Congress 2011, EWRI, 10pp. Palm Springs, CA.
7. Yang, Fu-Ning. and Tsai, C. (2011). “Modeling movement of sediment particles by a three-state continuous-time Markov chain model”, Proc, World Water and Environmental Resources Congress 2011, EWRI, 10pp. Palm Springs, CA.
8. Oh, J.S. and Tsai, C. (2010). “Estimation of particle concentrations using stochastic particle tracking method in open channel flows” Proc, World Water and Environmental Resources Congress 2010, EWRI, 10pp. Providence, RI.
9. Kuai, K. Z. and Tsai, C. (2010). “Application of Hilbert-Huang Transform method to the analysis of varying timescales in sediment transport”, Proc, World Water and Environmental Resources Congress 2010, EWRI, 10pp. Providence, RI.
10. Tsai, C and Oh, J.S. (2009). “A stochastic diffusion jump model of suspended sediment transport in case of hydrologic extreme events” Proc, IAHR, 10pp. Vancouver, Canada.
11. Oh, J.S. and Tsai, C. (2009). “A stochastic diffusion jump model of suspended sediment transport in case hydrologic extreme events” Proc, World Water and Environmental Resources Congress 2009, EWRI, 10pp. Kansas City, MO.
12. Kuai, K. Z. and Tsai, C. (2009). “A stochastic non-equilibrium bedload transport model” Proc, World Water and Environmental Resources Congress 2009, EWRI, 10pp. Kansas City, MO.

李天浩 副教授 Tim Hau Lee

Associate Professor

學歷/ 美國愛荷華大學博士

Ph.D., University of Iowa

專長/ 水文統計、氣象水文、地下水

Stochastic Hydrology, Hydrology Meteorology, Groundwater Hydrology

期刊論文 (Journal Paper)

1. 李天浩、林忠義，「評估四種聯合克利金法整合雷達和雨量站觀測估計降雨空間分佈的誤差特性」，2010 年，中國土木水利工程學刊，第二十二卷第一期，23-41。
2. T.-L. Chung, W.-Y. Chang, W.-F. Tsai, F.-P. Lin, E. Strandell, L.-C. Ku, J.-G. Lee, J.-Y. Chang, T.-H. Lee, J.-H. Wu, S.-C. Lin, M. Chen, Y.-H. Lee, K.-C. Chang, and Y.-F. Wang, Cyber-infrastructure for flood mitigation in Taiwan, 2010, Proceedings of the ICE (Institution of Civil Engineers) - Water Management, vol.163(1) p3-11. (SCI, 2008 I.F.=0.333)

研討會論文 (Conference Papers)

1. 李天浩、溫欣儀、陳雲蘭、陳孟詩，2014，「通用克利金法的統計結構模型選擇和參數檢定方法」，交通部中央氣象 103 年天氣分析與預報研討會論文集。
2. 洪國展、李天浩、馮智勇、黃椿喜、丘君翹、林彥廷，2014，「以改良式 ABLER 法應用於台灣地區降雨系統移速場外延估計」，交通部中央氣象 103 年天氣分析與預報研討會論文集。
3. 鄭安孺、顧欣怡、陳怡彣、李天浩，2014，「即時焚風資料篩檢機制」，交通部中央氣象 103 年天氣分析與預報研討會論文集。
4. Lee, Tim Hau, Treng-Shi Huang, Feng-Yin Chang, Hung-Yu Shueh, Chen-Hsin Liu, "The Advection Based Lagrangian Eulerian Regression (ABLER) Scheme for Storm Tracking", 2013 APEC Typhoon Symposium, Oct. 21-22, 2013, Taipei, Taiwan.
5. 李天浩、陳翠玲、陳品妤、陳孟詩、李明營、陳雲蘭，「颱風地形降雨趨勢分析及其對山區雨量估計影響之探討」，102 年天氣分析與預報研討會，桃園龍潭，102 年 5 月 13-15 日。
6. 李天浩、張鳳吟、丘君翹、蔡雅婷、黃椿喜、劉承昕，「應用 QPESUMS 資料迴歸估計台灣地區降雨系統移速場」，102 年天氣分析與預報研討會，桃園龍潭，102 年 5 月 13-15 日。
7. 鄭安孺、李天浩、顧欣怡、陳怡彣、林忠義，「應用雷達定量降雨估計改進雨量檢覈技術」，102 年天氣分析與預報研討會，桃園龍潭，102 年 5 月 13-16 日，研討會論文集，A2-87-91。

8. 鄭安儒、李天浩、顧欣怡、陳怡彣，「即時溫度品質檢覈」，101 年天氣分析與預報研討會，交通部中央氣象局，台北市，101 年 9 月 17-20 日，研討會論文集，165-170。
9. Lee, Tim Hau, "An Efficient Geomorphologic Soil Moisture Accounting Model for Baseflow and A Block Kinematic Wave Model for Direct Runoff Simulation", 2012 APEC Typhoon Symposium, June 4-6, 2012, Taipei, Taiwan.
10. Lin, Chung-Yi and Tim Hau Lee, "Co-Kriging, Ordinary Kriging, Universal Kriging, Rainrate Estimate, Radar Observation, Gauge Observation, Spatial Interpolation, Observing System Experiment", International Symposium on Weather Radar and Hydrology, April 18-21 2011, Exeter United Kingdom.
11. 馮智勇、李天浩、陳雲蘭、高慧萱，「發展鄉鎮逐時預報計畫之高解析度統計預報技術研究(3)－BCDG 空間內插方法分析與應用」，建國百年天氣分析預報與地震測報研討會，交通部中央氣象局，台北市，100 年 9 月 20-22 日。
12. 鄭安儒、李天浩、顧欣怡、高慧萱、陳怡彣，「即時雨量資料品質檢覈」，建國百年天氣分析預報與地震測報研討會，交通部中央氣象局，台北市，100 年 9 月 20-22 日，交通部中央氣象建國百年天氣分析預報與地震測報研討會論文集，253-258。
13. Lee, Tim Hau and Shiou-Hua Hu, "Block Kinematic Wave for Direct Runoff Modeling", Asia Oceania and Geosciences Society, August 8-12, 2011, Taipei Taiwan.
14. Lee, Tim Hau and Wan-Ling Hsiao, "Data Assimilation for Flood Forecasting under Lateral Inflow and Riverbed Uncertainties", Asia Oceania and Geosciences Society, August 8-12, 2011, Taipei Taiwan.
15. Lee, Tim Hau, "Block Kinematic Wave for Direct Runoff Modeling", International Workshop on Typhoon and Flood, Taipei, June 23-24, 2011.
16. Yen, Chin-Lien and Tim Hau Lee, "On Typhoon Flood Research in Taiwan", International Workshop on Typhoon and Flood, Taipei, June 23-24, 2011.
17. 周乃昉、李天浩、何建旺、李文生、鄭安儒、古必維，「莫拉克風災期間曾文水庫洩洪對下游淹水衝擊之探討」，99 年農業工程研討會，臺南市，摘 pp.94-95，全 pp.131-140。

專書、技術報告與其他：

1. 李天浩、丘君翹、林彥廷，強化災害性即時天氣預報-建置降雨特徵移速預報辨識研究(3/3)，中央氣象局，2014 年 12 月。
2. 李天浩、丘君翹、薛宏宇，強化災害性即時天氣預報-建置降雨特徵移速預報辨識研究(2/3)，中央氣象局，2013 年 12 月。
3. 李天浩，黃奕璋，颱洪災防數位境況決策支援系統之建立與測試應用--子計畫：都會區域暴雨迅洪災害模擬(III)，國科會報告，2013 年 10 月
4. 李天浩、張鳳吟、丘君翹、蔡雅婷，強化災害性即時天氣預報-建置降雨特徵移速預報辨識研究(1/3)，中央氣象局，2012 年 12 月。
5. 李天浩、李文生，七河局轄內洪水預報系統建置(東港溪、四重溪)，經濟部水利署第七河川局，101 年 12 月。
6. 李天浩、饒逢書，颱洪災防數位境況決策支援系統之建立與測試應用--子計畫：都會區域暴雨迅洪災害模擬(II)，國科會報告，2012 年 10 月
7. 李天浩、李政賢，建立高精度與高效能之洪氾預警整合系統--子計畫：考慮不確定土石

量影響河道斷面的洪水演算模式(I)，國科會報告，2012 年 10 月。

8. 李天浩、鄭安孺，「機率式洪水預報系統之研發(2/2)」，經濟部利署，100 年 12 月。
9. 李天浩、李文生，100 年度高屏溪洪水預報系統維護及更新，經濟部水利署第七河川局，100 年 12 月。
10. 李天浩、蕭婉玲，颱洪災防數位境況決策支援系統之建立與測試應用--子計畫：都會區域暴雨迅洪災害模擬(I)，國科會報告，2011 年 10 月。
11. 陳正平、許晃雄、李天浩，「災害性天氣監測與預報作業建置計畫」，交通部中央氣象局，100 年 12 月。
12. 李天浩、鄭安孺，「機率式洪水預報系統之研發(1/2)」，經濟部利署，99 年 12 月。
13. 陳正平、黃鍔、李天浩、曾于恒、林博雄，「災害性天氣監測與預報作業建置計畫」，交通部中央氣象局，99 年 12 月。
14. 李天浩，「發展鄉鎮逐時天氣預報統計降尺度建置案-網格完全推測和傳統點完全推測統計迴歸方法比較驗證」，交通部中央氣象局，99 年 12 月。
15. 李天浩，都市積淹水即時預報系統研發總計畫暨子計畫:渠道管網演算與資料同化模式研發(III)，國科會報告，2010 年 10 月。

專利

名稱：「自動化虛擬實境地形影像產生方法、展示編輯系統，及系統儲存裝置」

發明人：賴進松、何興亞、郭振泰、李天浩、譚義績、李豐佐、李碧雲、彭韶雯、黃鈺喻

專利權人：賴進松

專利證號：發明第 I 282944 號

專利權期間：2007 年 6 月 21 號至 2025 年 5 月 11 日

游景雲 副教授 Jiing-Yun You

Associate Professor

學歷/ 美國伊利諾大學香檳校區土木與環境工程博士

Ph.D., Univ.of Illinois at Urbana-Champaign,USA

專長/ 水資源經濟與政策分析、決策分析、作業研究方法

Water resources economics and policy, Decision making process, Operational research approachy

REFEREED JOURNAL PUBLICATIONS

- (1) Wang, Y. H., Chu, C. C., **You, G. J. Y.***, Gupta, H.Y & Chiu, P. H. (2019). Evaluating Uncertainty in Fluvial Geomorphic Response to Dam Removal. *Journal of Hydrologic Engineering*. Accepted.
- (2) Liang, C. Y., **You, G. J. Y.***, & Lee, H. Y. (2019). Investigating the effectiveness and optimal spatial arrangement of low-impact development facilities. *Journal of Hydrology*, 577, 124008.
- (3) Wang, Y. H., Hsu, Y. C., **You, G. J. Y.***, Yen, C. L., & Wang, C. M. (2018). Flood Inundation Assessment Considering Hydrologic Conditions and Functionalities of Hydraulic Facilities. *Water*, 10(12), 1879.
- (4) Chen, P. C., Wang, Y. H., **You, G. J. Y***., & Wei, C. C. (2017). Comparison of methods for non-stationary hydrologic frequency analysis: Case study using annual maximum daily precipitation in Taiwan. *Journal of Hydrology*, 545, 197-211.
- (5) Wei, C. C.*., **You, G. J. Y.**, Chen, L., Chou, C. C., & Roan, J. (2015). Diagnosing Rain Occurrences Using Passive Microwave Imagery: A Comparative Study on Probabilistic Graphical Models and “Black Box” Models. *Journal of Atmospheric and Oceanic Technology*, 32(10), 1729-1744.
- (6) Lian, Y*., **You, G. J. Y**, Lin, K., Jiang, Z., Zhang, C., & Qin, X. (2015). Characteristics of climate change in southwest China karst region and their potential environmental impacts. *Environmental Earth Sciences*, 74(2), 937-944.
- (7) Su, H. T., & **You, G. J. Y***. (2014). Developing an entropy-based model of spatial information estimation and its application in the design of precipitation gauge networks. *Journal of Hydrology*, 519, 3316-3327.

CONFERENCES PUBLICATIONS

無

TECHNICAL REPORT

無

施上粟 副教授 Shang-Shu Shih

Associate Professor

學歷/ 國立臺灣大學博士

Ph.D., NTU

專長/ 生態水文學、河川水力學、水利生態模式開發與應用、濕地及河川環境復育工程

Water resources economics and policy, Decision making process, Operational research approach

期刊論文 *Corresponding author

1. Shih, S.S. *, P.H. Kuo, J.S. Lai (2019, Dec). A nonstructural flood prevention measure for mitigating urban inundation impacts along with river flooding. *Journal of Environmental Management*, 251: 1-11. (SCI, 37/251, Environmental Science). MOST 106-2621-M-002-004-MY3. 本人為第一作者、通訊作者.
2. Yu, H.L., S.S. Shih* (2018, Oct). Using fish as an ecological indicator to assess the advantage and disadvantage of constructed groynes. *Journal of Wetlands*, 7 (1): 42-51. 本人為通訊作者.
3. Ouyang, H.T., S.S. Shih, C.S. Wu (2017, Jul). Optimal Combinations of Non-Sequential Regressors for ARX-Based Typhoon Inundation Forecast Models Considering Multiple Objectives. *Water*, 9(7), 519. (SCI, 29/91, Water Resources).
4. Shih, S.S., Y.Q. Zeng, H.Y. Lee, M.L. Otte, W.T. Fang (2017, Feb). Tracer Experiments and Hydraulic Performance Improvements in a Treatment Pond. *Water*, 9(2), 137. (SCI, 29/91, Water Resources). NSC 102-2218-E-002-008. 本人為第一作者.
5. Chang, T.J., Y.S. Chang, W.T. Lee, S.S. Shih* (2016, Jul). Flow uniformity and hydraulic efficiency improvement of deep-water constructed wetlands. *Ecological Engineering*, 92: 28-36. (SCI, 43/165, Ecology). NSC 102-2218-E-002-008. 本人為通訊作者.
6. Shih, S.S., S.S. Hong, T.J. Chang (2016, Jun). Flume Experiments for Optimizing the Hydraulic Performance of a Deep-Water Wetland Utilizing Emergent Vegetation and Obstructions. *Water*, 8(6), 265. (SCI, 29/91, Water Resources). NSC 102-2218-E-002-008. 本人為第一作者.
7. Fang, W.T., B.Y. Cheng, S.S. Shih, J.Y. Chou, M.L. Otte (2016, Jan). Modeling driving forces of avian diversity in a spatial configuration surrounded by farm ponds. *Paddy and water environment*, 14(1): 185-197. (SCI, AGRICULTURAL ENGINEERING 5/12).
8. Shih, S.S. *, G.W. Hwang, H.L. Hsieh, C.P. Chen, Y.Ch. Chen (2015, Sep). Geomorphologic dynamics and maintenance following mudflat, creek and pond formation in an estuarine mangrove wetland. *Ecological Engineering*, 82: 590-595. (SCI, 43/165, Ecology). 本人為第一作者、通訊作者.
9. Hsieh, H.L., H.J. Lin, S.S. Shih, C.P. Chen (2015, Jun). Ecosystem functions connecting contributions from ecosystem services to human wellbeing in a mangrove system, northern Taiwan. *International Journal of Environmental Research and Public Health*, 12(6):

- 6542-6560. (SCI, 112/251, Environmental Sciences). NSC 101-2621-M-001-003.
10. Fang, W.T., C.W. Huang, J.Y. Chou, B.Y. Cheng, S.S. Shih (2015, Mar). Low Carbon Footprint Routes for Bird Watching. *Sustainability*, 7(3), 3290-3310. (SCI, 105/251, Environmental Sciences).
 11. Shih, S.S. Shih, H.L. Hsieh, P.H. Chen, C.P. Chen, H.J. Lin (2015, Mar). Tradeoffs between reducing flood risks and storing carbon stocks in mangroves. *Ocean & Coastal Management*, 105:116-126. (SCI, 25/91, Water Resources). MOST 103-2621-M-002-020. 本人為第一作者.
 12. Lee, F.Z., G.W. Hwang, J.S. Lai, S.S. Shih, S.Y. Yang, C.J. Huang (2019 年 12 月)。Application of composite investigation technique on flow measurement and topography analysis of tidal effect wetland。Journal of the Chinese Institute of Civil and Hydraulic Engineering , 31(6): 545-552。 (EI) 。
 13. Hwang, G.W., F.J. Li, W.S. Yu, J.W. Chen, H.M. Yen, S.S. Shih, W.D. Lin, J.W. Lin (2017 年 08 月)。Proposal and action plan for the management and maintenance of the public sewerage。Journal of Taiwan Agricultural Engineering , 63(2): 12-21。 (EI) 。
 14. Hu, T.J., J.S. Lai, S.S. Shih, J.Y. Han (2017 年 06 月)。Check dam implementation and Fishways Installation in the Shi-Wen River。Journal of Taiwan Agricultural Engineering , 63(2): 78-93。 (EI) 。
 15. Shih, S.S., G.W. Hwang, J.W. Huang, C.H. Hong, Rita S.W. Yam(2016 年 06 月)。Index of wetland condition development and application for evaluating ecological functions of detention ponds。Journal of Taiwan Agricultural Engineering , 62(3): 1-12。 (EI) 。本人為第一作者。
 16. Shih, S.S., P.H. Chen, M.Y. Lee, H.T. Ouyang (2016 年 02 月)。Evaluating the competition and cooperation between waterbirds habitat conservation of Hsinpei wetland and flood control demand。Journal of Taiwan Agricultural Engineering , 62(1): 1-11。 (EI) 。本人為第一作者。
 17. Shih, S.S., G.W. Hwang, W.S. Yu, Y.C. Chen, W.T. Fang (2015 年 03 月)。On evaluating the selection of habitat restoration projects for the wintering common teals in the Huajiang wetland。Journal of Taiwan Agricultural Engineering , 61(1): 65-80。 (EI) 。本人為第一作者。

研討會論文 *Corresponding author

1. Shih, S.S. * (2019, Aug). On developing an evolution model for simulating geomorphic dynamics of tidal waterways and mudflats. Joint Meeting for SWS Asia Chapter & Korean Wetlands Society, Korea. MOST 106-2621-M-002-004-MY3. 本人為第一作者、通訊作者.
2. Cheng, T.Y. S.S. Shih* (2019, Jul). A model for geomorphological changes of tidal creeks and mudflat. AOGS2019, Singapore. MOST 106-2621-M-002-004-MY3. 本人為通訊作者.
3. Hsu, W.B., S.S. Shih* (2019, Jul). Investigations on the diffusion characteristics of Kandelia mangrove seedling in northern Taiwan. AOGS2019, Singapore. MOST 106-2621-M-002-004-MY3. 本人為通訊作者.
4. Hsu, Y.W., S.S. Shih* (2019, Jul). Hydrological investigation and water budget model development of a mountain wetland in northern Taiwan. AOGS2019, Singapore. 本人為通訊作者.

5. Liu, C.H., S.S. Shih (2019, Jul). Flow Regime Analysis Using Wavelet Methods Considering Weir Effects. AOGS2019, Singapore. MOST 106-2625-M-002-011. 本人為通訊作者.
6. Wang, H.C., S.S. Shih* (2019, Jul). Identification of dead zone in constructed wetlands for evaluating the related hydraulic performance. AOGS2019, Singapore. 本人為通訊作者.
7. Shih, S.S., C.P Chen, S.C. Huang, G.W. Hwang, H.L. Hsieh (2018, Aug). Habitat uses of macrobenthos and aves revealing landscape-based management in a mangrove ecosystem in northern Taiwan. SWS2018 (China and Asia Chapters), Changchun, China. 本人為第一作者.
8. Shih, S.S. * (2018, Jun). Water Budget Investigation of a Mountain Lake for Preserving the Endemic Plant in Taiwan. AOGS 2018, Hawaii, USA. 本人為第一作者、通訊作者.
9. Chen, C.P., H.L. Hsieh, S.S. Shih, H.J. Lin (2017, Jun). Building climate resilience through wise use of island wetlands: A case study of Taiwan. The Society of Wetland Scientists' 2017 Annual Meeting, San Juan, Puerto Rico. MOST 104-2621-M-002-022-MY2.
10. Shih, S.S.* (2017, Jun). Habitat model development and application related to rising sea level effects of mangroves. The Society of Wetland Scientists' 2017 Annual Meeting, San Juan, Puerto Rico. MOST 104-2621-M-002-022-MY2. 本人為第一作者、通訊作者.
11. Hsieh, H.L., H.J. Lin, S.S. Shih, C.P. Chen (2016, Sep). Ecosystem functions connecting contributions from ecosystem services to human wellbeing in a mangrove system, northern Taiwan. 10th Intecol International Wetlands Conference, Changshu, China. MOST 104-2621-M-002-022-MY2.
12. Shih, S.S. *, C.P. Chen, H.L. Hsieh, H.J. Lin (2016, Sep). Driving forces for the landscape evolution of riverine mangroves. 10th Intecol International Wetlands Conference, Changshu, China. MOST 104-2621-M-002-022-MY2. 本人為第一作者、通訊作者.
13. Yang, S.C., S.S. Shih, G.W. Hwang, H.M. Hsu , T.F. Huang (2015, Apr). Restore the riverbed with reservoir sedimentation: A case study for the Dahan Creek in Taiwan. EGU General Assembly 2015, Vienna, Austria.
14. 施上粟*（2019年05月）。水科學與生命科學跨領域研究淺論。第十屆臺灣濕地生態系研討會，國立中山大學，高雄市。本人為第一作者、通訊作者。
15. 施上粟*、郭品含、吳諤育（2019年05月）。裂隙岩層地下水對夢幻湖濕地水文系統之影響。第十屆臺灣濕地生態系研討會，國立中山大學，高雄市。本人為第一作者、通訊作者。
16. 楊勝崎、吳明璋、施上粟（2018年05月）。從資料探勘到知識發掘：以大漢溪河床變遷為例。第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。
17. 王泓智、施上粟*（2018年05月）。人工濕地低流速區對水力表現影響研究。第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。本人為通訊作者。
18. 許耀文、郭品含、施上粟*（2018年05月）。從濕地水收支平衡模式看濕地水環境管理之機會與挑戰：以夢幻湖濕地及無尾港濕地為例。第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。本人為通訊作者。
19. 郭品含、施上粟*（2018年05月）。水庫排洪對潮間帶濕地水質影響機制及程度探討。

- 第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。本人為通訊作者。
20. 郭品含、施上粟*（2018年05月）。水庫排砂操作對紅樹林地形地貌及生育地之影響。
第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。本人為通訊作者。
21. 鄭庭宇、許耀文、施上粟*（2018年05月）。紅樹林對於溼地水動力及剪應力反應。
第九屆臺灣濕地生態系研討會，國立台灣大學，台北市。本人為通訊作者。
22. 徐舒貞、施上粟*（2017年05月）。挖子尾紅樹林濕地周邊工程引致地景變遷探討。
第八屆台灣濕地生態系研討會暨第二屆國家公園濕地研究成果發表會，蕙蓀農場，南投市。科技部：104-2621-M-002-022-MY2。本人為通訊作者。
23. 施上粟*、許主恩、鄭庭宇（2017年05月）。紅樹林於河口及海岸帶防護效益模擬評估。
第八屆台灣濕地生態系研討會暨第二屆國家公園濕地研究成果發表會，蕙蓀農場，南投市。科技部：104-2621-M-002-022-MY2。本人為第一作者、通訊作者。
24. 施上粟*、許主恩、郭家暢、鄭庭宇（2017年05月）。陽明山國家公園夢幻湖水文調查及水收支模式建立。
第八屆台灣濕地生態系研討會暨第二屆國家公園濕地研究成果發表會，蕙蓀農場，南投市。本人為第一作者、通訊作者。

專書及專書論文

1. Wu Y.H., Liu K.F., Chen Y.C., Chiu Y.J., Shih S.S. TXT-tool 3.886-1.2: Simulation for the Debris Flow and Sediment Transport in a Large-Scale Watershed. *Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools.* Springer. Mar, 2018.

詹益齊 助理教授 I-Chi Chan

Assistant Professor

學歷/美國康乃爾大學博士

Ph.D., Cornell University

專長/水波力學、海岸工程、海洋災害

Water wave mechanics、Coastal engineering、Coastal hazards

期刊論文 (Journal Paper)

1. Li, Y., Mei, C.C. & Chan, I. Asymptotic analysis of dispersive tsunami from a slender fault. Journal of Hydrodynamics, 31, 1073-1084 (2019).

研討會論文 (Conference Papers)

1. Chan, I-C. (2018, Jul.). A revisit on the leading waveform due to a transient disturbance. ICCE 2018, Baltimore, 30 Jul. – 3 Aug., 2018.

張學孔 教授 Shyue-Koong Chang

Professor

學歷/ 美國馬里蘭大學博士

Ph.D., University of Maryland

專長/ 大眾運輸規劃、運輸經濟、智慧型運輸系統

Public Transportation Planning, Transportation Economics, Intelligent Transportation Systems

期刊論文

1. 涂仁維、張學孔、陳雅雯（2020 年 01 月）。公共自行車系統站點區位優化之研究 (Improvement Strategies for Rental Stations of Public Bike System)。運輸學刊。(已接受)。(TSSCI)。
2. S.K. Jason Chang, Hou-Yu Chen, Hung-Chang Chen (2019, Dec). Mobility as a service policy planning, deployments and trials in Taiwan. *IATSS Research*, 43, 210-218.
3. 張學孔、張朝能、陳雅雯、洪鈞澤、史習平、洪勝宇（2019 年 09 月）。無障礙小客車多元運輸服務系統平台之建立(Development of Accessible Mobility Smart Service Platform)。*運輸計劃季刊*，48(3), 179-217。（TSSCI）
4. Hwa-chyi Wang, S. K. Jason Chang, Hans De Backer, Dirk Lauwers, Philippe De Maeyer (2019, Jul). Integrating Spatial and Temporal Approaches for Explaining Bicycle Crashes in High-Risk Areas in Antwerp (Belgium). *Sustainability*, 11(13): 3746, pp 1-28. (SCI).
5. Hwa-Chyi Wang, Hans De Backer, Dirk Lauwers, S. K. Jason Chang (2019, Feb). A Spatio-Temporal Mapping to Assess Bicycle Collision Risks on High-Risk Areas (Bridges)- A Case Study from Taipei (Taiwan) . *Journal of Transport Geography*, 75, pp 94-109. (SCI).
6. S.K. Jason Chang, Da-Wei Shen, Chia-Chu Kung,Yi-Hsuan Hung (2019 年 04 月)。國產自駕巴士實測經驗與展望。*土木水利*，46(2), 25-31。
7. 張學孔、陳雅雯、周寬也、于立安（2019 年 04 月）。發展自動駕駛運具之衝擊影響評估。*土木水利*，46(2), 66-72。
8. 陳恒宇、張學孔、陳雅雯（2018 年 12 月）。公共運輸多元整合行動服務(MaaS)願付價格之研究(Willingness to Pay for Mobility as a Service)。運輸學刊, 30(4), 311-344。(TSSCI)
9. 張學孔、陳雅雯（2016 年 09 月）。從國際經驗看臺灣自行車友善環境之發展。*能源報導月刊*，2016 年 9 月號 ，23-27。
10. 張學孔、陳雅雯（2016 年 06 月）。應用智慧城市與智慧交通技術推動永續發展。高雄市城市發展半年刊，第 20 期，57-67。

專書

1. 鄒倫、張學孔、陳雅雯、左峻德、李育明、解鴻年、侯勝宗、周寬也、于立安、陳潔儀、郭佳韋（2018 年 12 月）。臺灣發展自駕車之挑戰與影響-經濟社會之影響（ISBN：978-986-97218-3-7）。中技社。
2. 張學孔、張馨文、陳雅雯（2015 年 02 月）。綠色交通-慢活、友善、永續(增訂版)。新自然主義。

研討會論文

1. S.K. Jason Chang (2019, Nov), Development of Driverless Bus: Challenges and Opportunities, Invited Speech in the Austria Autonomous Driving Workshop, Taipei.
2. S.K. Jason Chang (2019, Sept), Public Transport and Active Mobility Policy in Taipei. Invited Speech in SLSTL and EASTS Joint Special Session: Best Practices in Transport Policy Formulation_Global Perspectives, 13th International Conference of the Eastern Asia Society for Transportation Studies (EASTS).
3. S.K. Jason Chang (2019, Aug), Mobility as a Service for Smart City, Invited Speech in Touch Taiwan Display International Conference, Taipei, Taiwan.
4. S.K. Jason Chang (2019, Aug), Smart Mobility for Livable Cities, Invited Speech in the 12th ATRANS Annual Conference, Bangkok, Thailand.
5. 張學孔（2019, June），電動載具發展與永續行動力，電動車產業論壇主題演講，台中。
6. S. K. Jason Chang, Ya-Wen Chen, Jacky Fu, Zhao-Neng Zhang, Hsi-Ping Shih (2018, Nov). Using Big Data to Analyze the Productivity of Accessible Transport Services. The 15th International Conference on Mobility and Transport for Elderly and Disabled Persons (TRANSED 2018), Taiwan.
7. De-Jun Wang, Ya-Wen Chen, Ying- Lin Wu and S. K. Jason Chang (2018, May). Smart Bus Terminal Development for Multimodality. the 16th ITS Asia-Pacific Forum, Fukuoka, Japan.
8. S. K. Jason Chang, Chia-Hung Chueh, Ta-Wei Shen, Ya-Wen Chen, Chao-Neng Chang, Chih-Yueh Chen, Shin-Yun Tsai (2018, May). Use of Innovative Cellular-based Probes to Explore Travel Behavior and Identify Potential Terminal Locations for Freeway Bus System on Taipei and Yilan Corridor. the 16th ITS Asia-Pacific Forum, Fukuoka, Japan.,
9. S.K. Jason Chang, Li-An Yu, Ya-Wen Chen (2018, May). Development of Shared Electric Vehicles and Electric Buses in Taiwan. the 16th ITS Asia-Pacific Forum, Fukuoka, Japan.
10. Heng-Yu Chen, S. K. Jason Chang, Ya-Wen Chen and Li-An Yu (2017, Sep). Willingness to Pay for Mobility as a Service (MaaS). 8th International Symposium on Travel Demand Management (TDM 2017), Taiwan.
11. S.K. Jason Chang (2017, Apr). Integration of Bike, Bus, Metro and Walk. Invited Speech in EASTS-Japan Seminar.

12. S.K. Jason Chang (2017, Jan). Smart Mobility for Livable City. Keynote speech in Special Session on Smart and Livable City, Gujarat Summit, India.
13. S.K. Jason Chang (2016, Dec). ICT for Taiwan High Speed Rail. International Symposium on High Speed Rail, organized by Hong Kong City University.
14. S.K. Jason Chang (2016, Nov). Integration of Active Mobility and Public Transport. Invited speech in Scientists for Cycling Colloquium, Aveiro, Portugal.
15. S.K. Jason Chang (2016, Nov). “Smart Travel and Sustainability”. Invited Speech in Taiwan Europe Environment and Technology Summit.
16. S.K. Jason Chang (2016, Oct). Challenges for Modeling of Behaviors in Future Mobility. Invited speech in New Mobility Modelling Special Session. 23rd ITS World Congress Melbourne, Australia.
17. Yi Yiu Jen and S.K. Jason Chang (2016, Aug). Information and communication technologies for enhanced Emergency Management in Taiwan High Speed Rail. 2016 IEEE International Conference on Intelligent Rail Transportation (ICIRT).
18. S.K. Jason Chang, Ching Yi Chen, Ya Wen Chen (2016, Jul). Motorcycle Management Policy in Taiwan: From Dilemma to Reality. World Conference on Transport Research (WCTR 2016), Shanghai. (Best WCTR Paper Award on Transport in Developing Countries)
19. S. K. Jason Chang, Ya-Wen Chen, Te-Shao Chen, and Cheng-Kun Yang (2015, Sep). The Two-Stage Evaluation Model of Demand Response Transit Services. 11st International Conference of Eastern Asia Society for Transportation Studies (EASTS' 11), Cebu, Philippines..
20. K. D. Huang, Chao-Neng Chang, Tzu-Jan Huang, S. K. Jason Chang, Ta-Wei Shen, Ya-Wen Chen and Chih-Ying Chiang (2015, Apr). Performance Evaluation of Electric Bus Trials in Taiwan. 14th ITS Asia Pacific Forum, Nanjing, China.
21. S. K. Jason Chang, Ya-Wen Chen, Te-Shao Chen, Wan-Hsing Hsieh (2015, Apr). Transforming Conventional Bus Routes into Demand Responsive Transit Systems. 14th ITS Asia Pacific Forum, Nanjing.
22. 張學孔, 張朝能, 周文生, 洪鈞澤, 史習平, 沈大維 (2017年12月)。預約式無障礙小客車運輸服務之整合規劃。中華民國運輸學會106年學術論文研討會, 臺北。
23. 張家欣、張學孔、陳雅雯(2017年12月)。公共自行車站點服務範圍最大化決策模式。中華民國運輸學會106年學術論文研討會，臺北。
24. 陳恒宇、張學孔、陳雅雯(2017年12月)。多元整合出行服務(MaaS)願付價格之研究。中華民國運輸學會106年學術論文研討會，臺北。
25. 張學孔、李芊、陳科宏、陳雅雯(2016年12月)。需求反應式運輸接駁服務乘客使用意願之研究。中華民國運輸學會104年年會暨學術論文國際研討會。
26. 邱琮驛、張學孔 (2016年12月)。國道五號及門旅行時間對運具選擇行為影響之研究。中華民國運輸學會105年學術論文研討會，台灣。
27. 張學孔、李芊、陳科宏、陳雅雯(2015年12月)。需求反應式運輸接駁服務乘客使用意願之研究。中華民國運輸學會104年年會暨學術論文國際研討會。

28. 張學孔、賴勁丞、邱奕珩（2015 年 12 月）。基於站點相依性之公共自行車調度策略。
中華民國運輸學會 104 年年會暨學術論文國際研討會。

周家蓓 教授 Chia-Pei Chou

Professor

學歷/ 美國德州大學奧斯汀校區博士

Ph.D., University of Texas, Austin

專長/ 土木工程、鋪面設計與管理系統、機場設計與管理、重型車輛載重法規

期刊論文 (Journal Paper)

1. Chou, Chia-Pei, Wan-Ju Lee, Ai-Chin Chen, Ren-Zuo Wang, I-Chun Tseng; Cheng-Chun Lee, Simulation of Bicycle Riding Smoothness by Bicycle Motion Analysis Model, ASCE's Journal of Transportation Engineering. Vol. 141, Issue 12, December 2015. (SCI, IF:0.801(2015))
2. 周家蓓、謝長潤、陳艾勳，「國道三號大溪龍潭段剛柔性鋪面之生命週期成本分析比較」，鋪面工程，第 14 卷 3 期，2016 年 9 月。[獲中華鋪面工程學會年度最佳論文獎]
3. 呂昀軒、周琦芮、江東旭、周家蓓、陳艾勳，「道路標線回歸反射輝度係數影響因數之初步探討」，鋪面工程，第 15 卷 3 期，2017 年 9 月，第 9-18 頁。
4. Chou, Chia-Pei, Yi-Chun Lin, Ai-Chin Chen, Temperature Adjustment for Light Weight Deflectometer Application of Evaluating Asphalt Pavement Structural Bearing Capacity, Transportation Research Record: Journal of the Transportation Research Board, No. 2641, Transportation Research Board of the National Academies, Washington, D.C., 2017, pp. 75-82. (SCI, IF:0.522(2015))
5. Chou, Chia-Pei, Cheng-Chun Lee, Ai-Chin Chen, and Cherng-Yann Wu. Using a Constructive Pavement Texture Index for Skid Resistance Screening, International Journal of Pavement Research and Technology, Volume 10, Issue 4, July 2017, pp. 360-368. (EI)
6. 周家蓓、蕭冠箴、陳艾勳，「精進車輛反應加速度平坦度指標之演算法」，鋪面工程，第 16 卷第 2 期，2018 年 6 月，第 21-28 頁。
7. 周家蓓、李陽、陳艾勳，「以手機為量測工具之路面平整度大數據蒐集先期研究--手機擺放角度影響之探討」，鋪面工程，第 16 卷第 4 期，2018 年 12 月，第 35-41 頁。
8. Chou, Chia-Pei, Hao-Jui Chu, and Ai-Chin Chen. Advanced runway groove identification. Measurement 152, 2020. <https://doi.org/10.1016/j.measurement.2019.107272>
9. Chou, Chia-Pei, Guan-Jhen Siao, Ai-Chin Chen, Cheng-Chun Lee, Algorithm for Estimating International Roughness Index by Response-Based Measuring Device, ASCE's Journal of Transportation Engineering, , Part B: Pavements. (已接受刊登)

研討會論文 (Conference Papers)

1. Chou, Chia-Pei , Wan-Ju Lee, Ai-Chin Chen, Ren-Zuo Wang, I-Chun Tseng, Cheng-Chun Lee, Assessing Bicycle Route Riding Quality by Bicycle Motion Analysis Model, Transportation Research Board 94th Annual Meeting, Washington, D. C., January 11- 15, 2015.
2. Chia-Pei Chou, Runway Skid Resistance Inspection, Analysis, and Grooving Measurement, Transportation Research Board 94th Annual Meeting, Washington, D. C., January 11- 15, 2015.
3. Chou, Chia-Pei , Cheng-Chun Lee, Ai-Chin Chen, Cherng-Yann Wu. Evaluation of Skid Resistance Using a Constructive Pavement Texture Index, Transportation Research Board 94th Annual Meeting, Washington, D. C., January, 2016.
4. Chou, Chia-Pei , Po Kai Ku, Ai-Chin Chen, Evaluating Pavement Roughness Based on Smartphone Built-in Sensors and Accelerometer, 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), July 2016, Singapore.
5. Chou, Chia-Pei, Yi-Chun Lin, Ai-Chin Chen, The Inspection Method of Pavement Structure Capacity for Utility Cuts, 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), July 2016, Singapore.
6. Chou, Chia-Pei, Chang-Jun Hsieh, Ai-Chin Chen, A Case Study of Life Cycle Cost Analysis of Concrete and Asphalt Pavement in Taiwan Freeway Network, 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), July 2016, Singapore.
7. 江東旭、陳艾勳、周家蓓、吳元維、呂昀軒，熱處理聚酯標線不同摻料抗滑能力之初探，第 12 屆鋪面工程材料再生及再利用學術研討會暨 2016 世界華人鋪面專家聯合學術研討會，2016 年 10 月 20-21 日，宜蘭縣。[獲大會優秀論文獎]
8. 呂昀軒、白佳樺、施欣慧、周家蓓，以手機 APP 量測自行車道鋪面舒適度之研究，第 12 屆鋪面工程材料再生及再利用學術研討會暨 2016 世界華人鋪面專家聯合學術研討會，2016 年 10 月 20-21 日，宜蘭縣。
9. 呂昀軒、江東旭、朱皓睿、賴彥彤、李宜臻、余香儒、周家蓓，以加速度規量測自行車道鋪面舒適度，第 12 屆鋪面工程材料再生及再利用學術研討會暨 2016 世界華人鋪面專家聯合學術研討會，2016 年 10 月 20-21 日，宜蘭縣。
10. Chou, Chia-Pei, Po Kai Ku, Ai-Chin Chen, Systematic Assessment of Factors Affecting the Acceleration-Based Method of Pavement Roughness Evaluation, Transportation Research Board 95th Annual Meeting, Washington, D. C., January, 2017.
11. Chen, Chih-Sheng, Chia-Pei Chou, Ai-Chin Chen, Viscoelastic Model for Estimating the International Roughness Index by Smartphone Sensors, Transportation Research Board 95th Annual Meeting, Washington, D. C., January, 2017.
12. Chou, Chia-Pei, Yi-Chun Lin, Ai-Chin Chen, Temperature Adjustment for Light Weight Deflectometer Application of Evaluating Asphalt Pavement Structural Bearing Capacity, Transportation Research Board 95th Annual Meeting, Washington, D. C., January, 2017.

13. 周家蓓、李陽、陳艾勳，以手機為量測工具之路面平整度大數據蒐集先期研究，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。
14. 周家蓓、陳艾勳、朱皓睿，數位影像分析儀與傳統檢測儀在標線用玻璃珠物性分析比較，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。[獲大會優秀論文獎]
15. 江東旭、周家蓓、陳艾勳，熱處理聚酯標線不同添加料抗滑性能之研究，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。
16. 周家蓓、蕭冠箴、陳艾勳，狹窄道路平坦度檢測之研究，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。
17. 周家蓓、蕭冠箴、陳艾勳，車輛反映垂直加速度量測道路平坦度之演算法，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。
18. 周家蓓、Hernan Romero、陳艾勳，Wheelchair Pathway Roughness Index in Taiwan，第十九屆鋪面工程學術研討會暨 2017 世界華人鋪面專家學術研討會，2017 年 10 月 26-27 日，高雄市。
19. Chou, Chia-Pei, Guan-Jhen Siao, Ai-Chin Chen, and Cheng-Chun Lee, Algorithm for Estimating International Roughness Index by Response-Based Measuring Device, Transportation Research Board 96th Annual Meeting, Washington, D. C., January, 2018.
20. 蕭冠箴、朱皓睿、周家蓓、陳艾勳，車輛反應式平坦儀之平坦度指標影響因素探討，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。
21. 蕭冠箴、周家蓓、陳艾勳，車輛反應式平坦儀應用於鋪面糙度績效分析，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。
22. 周家蓓，Hernan Romero, 陳艾勳，探討以輪椅使用者觀點評估人行道平整度之方法，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。
23. 李陽、周家蓓、陳艾勳，智慧型手機為鋪面平整度量測工具之探討，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。
24. 周家蓓、陳艾勳、林沛達、吳東縉、黃柏勛，道面積水與運具行駛安全性之文獻探討，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。[獲大會優秀論文獎]
25. 朱皓睿、周家蓓、陳艾勳、蕭冠箴，機場鋪面鋸槽自動化檢測分析精進算法，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。

26. 梁健偉、周家蓓、陳艾勳，利用數位影像建立道路標線可見度及距離檢測，第十三屆鋪面材料再生及再利用研討會暨 2018 世界華人鋪面專家學術研討會，2018 年 11 月 1-2 日，桃園市。
27. Chou, Chia-Pei, Hao-Jui Chu, and Ai-Chin Chen, Advanced Runway Groove Identification and Quality Assessments, Transportation Research Board 97th Annual Meeting, Washington, D. C., January, 2019.
28. Chou, Chia-Pei, Hernan Remero, and Ai-Chin Chen, Algorithms Comparison of Wheelchair Pathway Serviceability Evaluation, Transportation Research Board 97th Annual Meeting, Washington, D. C., January 2019.
29. Chia-Pei Chou, Yang Li, and Ai-Chin Chen, Smartphone Application on Roadway Roughness Evaluation, First iSMARTi International Symposium on Pavement Service Functional Design and Management (PFDM), Oct. 24-26, 2019, Xi-an, China.
30. Rabi KC and Chia-Pei Chou, Analysis of Pavement Roughness by using Response-Based Measuring Device in different Roads of Nepal, The 1st International Conference of Sustainable and Innovative Infrastructure (1st ICSII), Nov. 7-8, 2019, Tai-Chung.
31. 周家蓓、黃柏勛、陳艾勳，透過現地實驗提升道路標線夜間與潮溼狀態下之反光與抗滑性能，中華民國第二十屆鋪面工程學術研討會暨第一屆永續與創新基礎建設國際研討會，2019 年 11 月 7-8 日，台中市。
32. 周家蓓、吳東縉、陳艾勳，道路平整度與乘車舒適度評估指標主觀評分與客觀指標之探討，中華民國第二十屆鋪面工程學術研討會暨第一屆永續與創新基礎建設國際研討會，2019 年 11 月 7-8 日，台中市。
33. 林沛達、周家蓓，使用雷射儀器量測道面積水深度並建立預測公式之研究，中華民國第二十屆鋪面工程學術研討會暨第一屆永續與創新基礎建設國際研討會，2019 年 11 月 7-8 日，台中市。
34. 陳艾勳、周家蓓、張家瑞、楊士賢、蘇育民、朱皓睿、梁健偉、蕭冠箴、吳東縉，簡易型平整儀應用於大規模路網檢測之研究，中華民國第二十屆鋪面工程學術研討會暨第一屆永續與創新基礎建設國際研討會，2019 年 11 月 7-8 日，台中市。

技術報告

- 周家蓓主持，陳艾勳協同主持，「市區道路鋪面養護管理績效檢測與道路考評作業整合測試」，內政部營建署委託研究，104 年 12 月。
- 周家蓓主持，陳艾勳協同主持，「熱處理聚酯標線於不同使用環境下抗滑能力與反光強度標準之研究」，公路總局材料試驗所委託研究，106 年 11 月。
- 周家蓓主持，陳艾勳協同主持，「市區道路鋪面平整度管理精進作為之研究」，內政部營建署委託研究，107 年 2 月。
- 周家蓓主持，「柔性鋪面整修策略對溫室氣體減量潛力之研究」，科技部研究計畫。(計畫編號：MOST 105-2221-E-002-233)，107 年 2 月。
- 周家蓓主持，陳艾勳協同主持，「國內外市區道路管理制度之探討」，內政部營建署委託研究，107 年 9 月。

6. 周家蓓主持，陳艾勳協同主持，「『機場空側道面檢查評估、道面維護管理規範彙編及教育訓練』委託專業服務案」-12 機場道面檢測評估、道面維護技術規範、維護管理機制與維修策略、與航空站教育訓練部分工作項目」，儀衡工程科技顧問公司委託研究，108 年 11 月。
7. 周家蓓主持，「提升道路標線夜間與潮溼狀態下之反光性能與發展 VR 於檢測管理應用」，科技部研究計畫，107 年 8 月~110 年 7 月。(執行中)
8. 周家蓓主持，陳艾勳協同主持，「路面平整度績效檢測增能計畫」，內政部營建署委託研究，109 年 2 月。

賴勇成 教授 Yung-Cheng Lai

Professor

學歷/ 美國伊利諾大學香檳分校土木與環境工程博士

Ph.D., University of Illinois at Urbana-Champaign (UIUC)

專長/鐵道運輸系統、鐵道營運與管理、鐵道號誌與控制、鐵道容量分析與規劃、鐵道安全

期刊論文 (Journal Paper)

1. Lu, C.L., and Lai, Y.C. (2019) Optimal Rail System Design with Multiple Layers of Fault and Event Trees, *Journal of Transportation Safety & Security*, Accepted. (SCI)
2. Lin, T.Y., Lin, Y.C., and Lai, Y.C. (2019) Estimation of Base Train Equivalents for Multiple Train Types based on Delay-Based Capacity Analysis, *ASCE Journal of Transportation Engineering, Part A: Systems*, Accepted. (SCI)
3. Lai, Y.C., Huang, C.W., and Hsu, Y.T. (2018) Estimation of Rail Passenger Flow and System Utilization with Ticket Transaction and Gate Data. *Transportation Planning and Technology*, Vol. 41(7), 752-778. (SCI)
4. Lai, Y.C., Chen, K.T., Yan, T.H., and Li, M.H. (2018) Simulation-Based Method of Capacity Utilization Evaluation to Account for Uncertainty in Recovery Time, *Transportation Research Record - Journal of the Transportation Research Board*, Vol. 2672(10), 202–214. (SCI)
5. Chang, S., Jong, J.C., and Lai, Y.C. (2018) Integrated Optimization Model for the Train Scheduling and Utilization Planning Problems in Mass Rapid Transit Systems. *Journal of the Chinese Institute of Transportation (運輸學刊)*, Vol. 29(4), 365-387. (TSSCI)
6. Hsu, Y.T., Lin, W.R., Lai, Y.C., and Kao, T.C. (2018) An Aggregate Approach for High-Speed Rail Ridership Forecasting Model Development Based On Case Revisit of Taiwan High-Speed Rail. *Journal of the Chinese Institute of Transportation (運輸學刊)*, Vol. 29(4), 337-364. (TSSCI)
7. Lai, Y.C., and Ip, C.S., (2017) An Integrated Framework for Assessing Service Efficiency and Stability of Rail Transit Systems, *Transportation Research Part C: Emerging Technologies*, Vol. 79, 18-41. (SCI)
8. Lai, Y.C., Wang, S.W., and Huang, K.L., (2017) Optimized Train-Set Rostering Plan for Taiwan High Speed Rail, *IEEE Transactions on Automation Science and Engineering*, Vol. 14 (1), 286-298. (SCI)
9. Lai, Y.C., Lu, C.T., and Lu, C.L. (2017) A Comprehensive Approach to Allocate Reliability and Cost in Passenger Rail System Design. *Transportation Research Record - Journal of the Transportation Research Board*, Vol. 2608(1), 86-95. (SCI)
10. Lai, Y.C., and Chen, K.T. (2017) Evaluating Service Risk in Railway Capacity Utilization using Expected Recovery Time, *ASCE Journal of Transportation Engineering*, Vol. 143 (6), 04017016. (SCI)

11. Lai, Y.C., Shih, M.C., and Chen, G.H. (2017) Development of Efficient Stop Planning Optimization Process for High Speed Rail Systems, *Journal of Advanced Transportation*, Vol. 50, 1802-1819. (SCI)
12. Lai, Y.C., and Lin, Y.R. (2016) Using Profit-Maximizing Capacity Framework and Models for Railway Capacity Management, *ASCE Journal of Transportation Engineering*, Vol. 142 (10), 04016045. (SCI)
13. Sogin, S, Lai, Y.C., Dick, C.T., and Barkan C.P.L. (2016) Analyzing the Transition from Single to Double Track Railway Lines with Non-linear Regression Analysis, *Journal of Rail and Rapid Transit*, Vol. 230 (8), 1877-1889. (SCI)
14. Lai, Y.C., Hsu, C.E., and Wu, M.H. (2016) Routing Trains with consideration of Congestion-Induced Link and Node Delay, *ASCE Journal of Transportation Engineering*, Vol. 142 (3), 04015047. (SCI)
15. Lai, Y.C., Liu, Y.H., and Lin, Y.J. (2015) Standardization of Capacity Unit for Headway-based Rail Capacity Analysis, *Transportation Research Part C: Emerging Technologies*, Vol. 57, 68-84. (SCI).
16. Lai, Y.C., Lu, C.T., and Hsu, Y.W. (2015) Optimal Allocation of Life Cycle Cost, System Reliability, and Service Reliability in Passenger Rail System Design, *Transportation Research Record - Journal of the Transportation Research Board*, Vol. 2475, 46-53. (SCI).
17. Lai, Y.C., Fan, D.C., and Huang, K.L. (2015) Optimizing Rolling Stock Assignment and Maintenance Plan for Passenger Railway Operations, *Computers and Industrial Engineering*, Vol. 85, 284–295. (SCI)

會議論文 (Conference Paper)

1. Lin, T.Y., Lin, Y.C., and Lai, Y.C., Computing Base Train Equivalents for Delay-Based Capacity Analysis with Multiple Types of Trains, *Proceedings of the 8th International Conference on Railway Operations Modelling and Analysis*, Norrkoping, Sweden, 2019.
2. Wu, M.R., and Lai, Y.C., Train-set Assignment Optimization with Predictive Maintenance, *Proceedings of the 8th International Conference on Railway Operations Modelling and Analysis*, Norrkoping, Sweden, 2019.
3. Chen, J.H., and Lai, Y.C., How Light Rail System Capacity is Affected by Station, Intersection, and Mixed Traffic? *Proceeding of the 25th Joint Railway Technology Symposium (J-Rail 2018)*, Tokyo, 2018.
4. Lin, T.Y., Chen, Y.C., and Lai, Y.C., Computation of Base Train Equivalents for Delay-based Capacity Analysis with Multiple Train Types, *Proceeding of the 25th Joint Railway Technology Symposium (J-Rail 2018)*, Tokyo, 2018.
5. Wu, M.J., and Lai, Y.C., Application of Predictive Maintenance Strategy for Rolling Stock Assignment Problem. *Proceeding of the 25th Joint Railway Technology Symposium (J-Rail 2018)*, Tokyo, 2018.
6. Lai, Y.C., Chen, K.T., Yan, T.H., and Li, M.H., Simulation-Based Method of Capacity Utilization Evaluation to Account for Uncertainty in Recovery Time, *Proceedings of 97th Transportation Research Board*, Washington, DC, 2018.
7. Lai, Y.C., Xu, R.H., and Yan, T.H., A Rolling-Horizon Optimization Approach for Catenary Maintenance Identification and Assignment, *Proceedings of 97th Transportation Research Board*, Washington, DC, 2018.
8. Li, M.H, and Lai. Y.C., Development of Light Rail Transit Capacity Model with Balanced Transit Signal Priority Plan. *Proceeding of the 24th Joint Railway Technology Symposium (J-Rail 2017)*, Niigata, 2017.

9. Yan, T.H., Lai, Y.C., and Omoleye, T.J., Optimization of Track Utilization and Maintenance Scheduling. Proceeding of the 24th Joint Railway Technology Symposium (J-Rail 2017), Niigata, 2017.
10. Xu, R.H., Lai, Y.C., and Huang, K.L., Optimal Maintenance Task Identification and Assignment for Catenary System. Proceeding of the 24th Joint Railway Technology Symposium (J-Rail 2017), Niigata, 2017.
11. Lai, Y.C., and Yan, T.H., Optimization of Railway Upgrading Strategy, Proceedings of the 12th Eastern Asia Society for Transportation Studies, Ho Chi Minh City, Vietnam, 2017.
12. Lai, Y.C., Chien, S.C., and Xu, R.H., Optimization of Track Maintenance Task Generation and Assignment, Proceedings of the 12th Eastern Asia Society for Transportation Studies, Ho Chi Minh City, Vietnam, 2017.
13. Lai, Y.C., and Lu, C.L., Optimization of Passenger Railway System Design, Proceedings of the 7th International Conference on Railway Operations Modelling and Analysis, Lille, France, 2017
14. Lai, Y.C., Chien, S.C., and Lu, C.L., Optimal Maintenance Task Generation and Assignment for Rail Infrastructure, Proceedings of 96th Transportation Research Board, Washington, DC, 2017.
15. Lai, Y.C., Lu, C.T., and Lu, C.L., A Comprehensive Approach to Allocate Reliability and Cost in Passenger Rail System Design. Proceedings of 96th Transportation Research Board, Washington, DC, 2017.
16. Lai, Y.C., Lu, C.T., and Lu, C.L., Development of an Integrated Optimization Approach to Allocate Reliability and Cost in Passenger Rail System Design Proceeding of the 23th Joint Railway Technology Symposium (J-Rail 2016), Tokyo, 2016.
17. Lai, Y.C., and Chien, S.C., Improving Railway Services by Using Service Sensitivity Meter, Proceeding of the 23th Joint Railway Technology Symposium (J-Rail 2016), Tokyo, 2016.
18. Lai, Y.C., Wu, M.H., and Chen, G.H., Rail Line Service Improvement by Infrastructure and Rolling Stock Upgrade, Proceedings of 2016 IEEJ Industry Applications Society Conference (JIASC), Gunma, 2016.
19. Lai, Y.C., and Lin, Y.J., Converting Multiple Types of Trains into a Standard Unit using Base Train Equivalents Model, Proceedings of 11th World Congress on Railway Research, Milan, 2016.
20. Lai, Y.C., and Huang, C.W., Mapping Passenger Flow with Ticket Transaction and Gate Data, Proceedings of 11th World Congress on Railway Research, Milan, 2016.
21. Lai, Y.C., Lin, Y.J., and Han, N.T., Evaluating Rail Network Assets and Capacity Allocation Using a Profit-Maximizing Capacity Framework, Proceedings of 95th Transportation Research Board, Washington, DC, 2016.
22. Lai, Y.C., Shih, M.C., and Chen, G.H., Efficient Stop Planning Model for High-Speed Rail Systems, Proceedings of 95th Transportation Research Board, Washington, DC, 2016.
23. Lai, Y.C., Huang, C.W., and Huang, K.L., Evaluation of Rail Passenger Flow and System Utilization with Ticket Data, Proceeding of the 22nd Joint Railway Technology Symposium (J-Rail 2015), Tokyo, 2015.
24. Lai, Y.C., and Ip, C.S., Operational Stability and Efficiency Assessment for Metro Systems, Proceedings of 2015 IEEJ Industry Applications Society Conference (JIASC), Oita, 2015.
25. Lai, Y.C., Wu, M.H., and Chen, G.H., Optimizing Rail Route through Infrastructure and Rolling Stock Improvements, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015

26. Lai, Y.C., and Lu, C.T., Optimization of Life-Cycle Cost and Reliability Allocation for Rail Systems, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
27. Lai, Y.C., Ip, C.S., and Huang, S.Y., Development of the Operational Stability and Efficiency Evaluation Model for Metro Systems, Proceedings of 6th International Seminar on Railway Operations Modelling and Analysis, Tokyo, 2015
28. Jong, J.C., Lai, Y.C., Huang, S.H., and Hsu, Y.W., Evaluation of Rail Transit Capacity by Analytical Models, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
29. Lai, Y.C., Chu, H.Y., and Hsiao, W.P., Development and Application of Arrival and Departure Headway Equations for Multiple Track Sections, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
30. Lai, Y.C., and Huang, C.W., Mapping Passenger Flow with Ticket Transaction and Gate Data, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
31. Chang, S., Jong, J.C., and Lai, Y.C., Integrated Optimization Model for the Train Scheduling and Utilization Planning Problems in Mass Rapid Transit Systems, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
32. Shih, M.C., Dick, T. C., and Lai, Y.C., Optimization of Siding Location for Single-track Lines with Non-Uniform Track Speed, Proceedings of 6th International Conference on Railway Operations Modelling and Analysis, Tokyo, 2015
33. Hsu, Y.T., Lin, W.R., Lai, Y.C., and Kao, T.C., Forecasting High Speed Rail Ridership Using Aggregate Data: A Case Revisit of High Speed Rail in Taiwan, Proceedings of 94th Transportation Research Board, Washington, DC, 2015.
34. Lai, Y.C., Lu, C.T., and Hsu, Y.W., Optimal Allocation of Life Cycle Cost, System Reliability, and Service Reliability in Passenger Rail System Design, Proceedings of 94th Transportation Research Board, Washington, DC, 2015.

許添本 教授 Tien-Pen Hsu

Professor

學歷/ Ph.D., Universitat(TH) Karlsruhe

專長/ 土木工程（交通）

期刊論文 (Journal Paper)

1. Hsu, Tien-Pen Tsai, Chia-Chia Lin, Yu-Jui, Comparative Analysis of Household Car and Motorcycle Ownership Characteristics, Journal of the Eastern Asia Society for Transportation Studies, Vol.6, 2007
2. Tien-Pen Hsu, Chih-li Chen, Jiang-Ren Chang, New Computation Methods for Solving Problems of the Astronomical Vessel Position, Journal of Marine Science and Technology, May 2005 . (SCI)
3. Hsu, Tien-Pen; Wen-Shen Jung, The More Reliable Path for Post Great Earthquake Traffic Management, Proceeding of 2004 IEEE International Conference on Networking, Sensing, and Control, March 2004, Taipei (EI), PP.13
4. Chih-Li Chen, Tien-Pen Hsu; Jiang-Ren Chang, A Novel Approach to Determine the Astronomical Vessel Position, Journal of Marine Science and Technology, vol. 11. No.4, pp.221-235, 2003. (SCI)
5. 許添本, 林育瑞, 南陽街機車路邊收費事前事後評估研究, 都市交通季刊, 專題論著, 2005, 8 月.
6. 許添本, 林胤宏, 輕軌運輸系統交通控制策略之模擬分析, 都市交通期刊, 專題論著, 2003 年 12 月 , pp. 65-85
7. Chih-Li Chen, Tien-Pen Hsu; Jiang-Ren Chang, A Direct Computation Method to Great Circle Sailing, Maritime Research Journal, Vol. 15, pp 61-76 2003. (EI)
8. Hsu, Tien-Pen; Ahmad Farhan Mohd Sadullah, Nguyen Xuan Dao, 2003, Oct. A Comparative Study on Motorcycle Traffic Development of Taiwan, Malaysia and Vietnam, Journal of the Eastern Asia Society for Transportation Studies, Vol.5, No.2, P.381-p.395.
9. 許添本, 盧嘉棟, 吳育婷, 鄭雄飛, 民國 92 年 12 月公車優先號誌一般化微觀模擬系統 (MISSBUS) 之建立與應用, 運輸計畫季刊, 第 32 卷第四期。(TSSCI)
10. 許添本、李明聰, 民國 92 年 6 月巷道人行交通安全評估分級之建立, 運輸計畫季刊, 第 32 卷第二期 , P271~296 。(TSSCI)
11. Hsu, Tien-Pen; Lu, Chia-Tung, 1999, Sept. Bus Lane Capacity – A Revised Approach, Journal of the Eastern Asia Society for Transportation Studies, Vol.3, No.2, P.381-p.395.
12. 許添本, 呂慧, 2002 年 6 月地震救災最小風險路徑選擇模式之建立與應用, 台大工程, 第八十五期 , p33-48 。(NSC89-2218-E-002-101)
13. 許添本、李明聰, 民國 91 年 6 月地區性道路人車衝突交通安全風險評估模式之建立, 運輸計畫季刊, 第 31 卷第二期 , P245~266 。(TSSCI)

研討會論文 (Conference Papers)

1. HSU, Tien-Pen LI, Pei-Jung CHAOS ANALYSIS OF MIXED TRAFFIC FLOW WITH MOTORCYCLE, Proceedings of the Eastern Asia Society for Transportation Studies, Vol.6, 2007
2. Hsu, Tien-Pen, Lin, Yu-Jui, MULTINOMIAL LOGIT MODEL OF MOTORCYCLE OWNERSHIP AND CAR OWNERSHIP IN TAIWAN, Proceedings of the Eastern Asia Society for Transportation Studies, Vol.6, 2007
3. Leong L.V., Sadullah A.F., Hsu T.P., MOTORCYCLES TRAFFIC MANAGEMENT IN MALAYSIA AND TAIWAN World Engineering Congress 2007, Penang, Malaysia, 5 – 9 August 2007
4. Hsu, Tien-Pen, etc. 2006, August Dynamic Warning Threshold for Collision voidance System in Taiwan, 13th ITS world congress, London
5. Hsu, Tien-Pen, 2006, Nov. SEGREGATED MOTORCYCLE TRAFFIC FLOW COUNTERMEASURES AT INTERSECTIONS, REAAA Conference, Manila
6. Hsu, Tien-Pen, 2006 July ITS Application for Mixed Traffic Operation and Safety, ITS Forum Asia-Pacific, Hong Kong.
7. 許添本，孫將瓴,市區道路小汽車變換車道防撞警示系統之研究，中華民國運輸學會第 21 屆論文研討會中華民國 95 年 12 月
8. 許添本，王信傑，輕軌路口設置型式準則之研究， 中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
9. 許添本，吳佩蓉利用戶口普查資料進行就學、就業旅次分佈之研究，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
10. 許添本，林俊良我國引入輕軌電車的交通工程衝擊與改善措施之研究，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
11. 許添本，李佳訓輕軌列車長度選擇之研究中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
12. 許添本，林俊源，輕軌噪音預測模式建立與防制對策之研究，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
13. 許添本，林育瑞，台灣、馬來西亞與越南之機車持有與使用特性比較分析與台灣汽機車個體選擇模式之研究中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
14. 許添本，黃麗燕道路施工交通維持計畫提送門檻之研究,中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
15. 許添本，鄭棋樺，新型綠色運具—電動滑板車之選擇效用分析，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
16. 許添本，蔡銘聰，輕軌運輸系統安全服務水準檢核模式之建立，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
17. 許添本，林俊良，我國引入輕軌電車的交通工程衝擊與改善措施之研究，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
18. 許添本，施宗泓，運用公私合作模式於推動觀光政策之研究-以觀光客倍增計畫之台灣觀光巴士系統為例，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月
19. 許添本，邱榮梧輕軌電車之號誌化交叉口容量之研究，中華民國運輸學會第 21 屆論文研討會，中華民國 95 年 12 月

20. Hsu, Tien-Pen, 2005, June, Design Guideline and Performance Analysis of Motorcycle Exclusive Lane in Urban Area, 15th International Road Federation World Meeting, Bangkok, Thailand.
21. Hsu,Tien-Pen, 2005, October Comparative study on motorcycle ownership forecasting model – Taiwan, Malaysia, and Vietnam, 7th EASTS Conference, Eastern Asia Transportation Research Society.
22. Hsu, Tien-Pen, 2005, August Development of Conceptual Framework of Advanced Motorcycle Traffic Safety Control System (AMOTSACS), 7th Asia-Pacific ITS forum, New Delhi, 2005, 10. Aug. India.
23. Hsu, Tien-Pen, ; Kuo, Pei-Fen , 2005, August. Priority evaluation of traffic safety subsystems of ITS in Taiwan, 7th Asia-Pacific ITS forum, New Delhi, 2005, 10. Aug. India.
24. Hsu, Tien-Pen, Yu-Jui Lin and Jen-Fu Deng, 2005, August. Study of Dynamic Warning Threshold for Collision Avoidance System , 7th Asia-Pacific ITS forum, New Delhi, 2005, 10. Aug. India.
25. Hsu, Tien-Pen, Li, Ming-Tsung; 2004 May, Development and Application of Level of Safety for Pedestrian on Local Street, Urban Transport 2004 conference, May, 2004, Germany. In Book : Urban Transport, Editor: Wessex Institute, England.
26. HSU TIEN-PEN, 2004, Feb. Motorcycle Traffic Safety Management in Taiwan: A Segregated Flow Concept, International Conference on Transportation Systems Planning and Operation, Chennai, India. In Book: Transportation system planning, Editor: Prof. V. Thamizh Arasan
27. HSU TIEN-PEN, 2004, March, The More Reliable Path for Post Great Earthquake Traffic Management, IEEE 2004, Taipei.
28. HSU TIEN-PEN, 2003, Oct. Motorcycle Issue and Traffic Development in Taiwan, EASTS Conference, Fukuoka, Japan, Special Session.
29. HSU TIEN-PEN, 2003, Sept. The level of sustainability (LOS) for urban transport, Conference of Sustainable Planning and Development 2003, Skiathos, Greece. In Book: Sustainable Planning & Development, Editor: E. Beriatos, C.A. Brebbia, H. Coccossis & A. Kungolos.

朱致遠 教授 Chih-Yuan Chu

Professor

學歷/美國西北大學博士

Ph.D., Northwestern University, Evanston, IL, USA

專長/大眾運輸規劃與營運、行人模擬、物流管理、都市運輸規劃、運輸設施生命週期管理

A. 期刊論文

a. SCI/SSCI 期刊論文

1. **Chu, J. C.**, Korsestakarn, K., Hsu, Y.-T.*, Wu, H.-Y. (2019, Nov). Models and a solution algorithm for planning transfer synchronization of bus timetables. *Transportation Research Part E*, 131, 247-266. (SCI). MOST 105-2628-E-002-004-MY3. 本人為第一作者.
2. Yan, S., **Chu, J. C.***, Hung, W.-C. (2019). A customer selection and vehicle scheduling model for moving companies. *Transportation Letters*. (SCI). 本人為通訊作者.
3. **Chu, J. C.*** and Huang, K.-H. (2018, Mar). Mathematical programming framework for modeling and comparing network-level pavement maintenance strategies. *Transportation Research Part B*, 109, 1-25. (SSCI, 2016: 1/33, Transportation). MOST 105-2628-E-002-004-MY3. 本人為第一作者、通訊作者.
4. **Chu, J. C.*** (2018, Feb). Mixed-integer programming model and branch-and-price-and-cut algorithm for urban bus network design and timetabling. *Transportation Research Part B*, 108, 188–216. (SSCI, 2016: 1/33, Transportation). MOST 105-2628-E-002-004-MY3. 本人為第一作者、通訊作者.
5. **Chu, J. C.**, Chen, A. Y.*, and Lin, Y.-F. (2017, Dec). Variable Guidance for Pedestrian Evacuation Considering Congestion, Hazard, and Compliance Behavior. *Transportation Research Part C*, 85, 664–683. (SCI, 2016: 5/34, Transportation Science & Technology). MOST 105-2628-E-002-004-MY3. 本人為第一作者.
6. Yan, S., **Chu, J. C.***, and Wang, S.-S. (2017, Nov). An experimental approach for examining solution errors of engineering problems with

- uncertain parameters. Computer & Industrial Engineering, 119, 1-9. (SCI, 2016: 9/44, Engineering, Industrial). 本人為通訊作者.
7. **Chu, J. C.**, Yan, S.*, and Huang, H.-J. (2017, Mar). A multi-trip split-delivery vehicle routing problem with time windows for inventory replenishment under stochastic travel times. Networks and Spatial Economics, 17(1), 41-68. (SCI, 2016: 15/83, Operations Research & Management Science). 本人為第一作者.
 8. Chen, A. Y. and **Chu, J. C.*** (2016, Sep). A TDVRP and BIM Integrated Approach for in-Building Emergency Rescue Routing. ASCE Journal of Computing in Civil Engineering, 30(5). (SCI, 2016: 24/125, ENGINEERING, CIVIL). 本人為通訊作者.
 9. **Chu, J. C.*** and Chen, S.-C. (2016, Mar). Optimization of Transportation Infrastructure System Protection Considering Weighted Connectivity Reliability. ASCE Journal of Infrastructure Systems, 22(1). (SCI, 2016: 55/125, ENGINEERING, CIVIL). MOST 102-2221-E-002-244-MY3. 本人為第一作者、通訊作者.
 10. Yan, S., **Chu, J. C.***, Hsiao, F.-Y., Huang, H.-J. (2015, Sep). A planning model and solution algorithm for multi-trip split-delivery vehicle routing and scheduling problems with time windows. Computer & Industrial Engineering, 87, 383-393. (SCI, 2016: 9/44, ENGINEERING, INDUSTRIAL). 本人為通訊作者.

b.非屬 SCI/SSCI 之 EI 或 TSSCI 期刊論文

1. 陳韻如、朱致遠*、Kanticha Korsethakarn (2019). Discrete-event System Simulation of Battery Swapping Behaviors for Electric Scooter Drivers. 運輸計劃季刊, 48(1), 63-86. (TSSCI). 本人為通訊作者.

c.其他期刊論文

B. 會議論文

a.國外會議論文

1. **Chu, J. C.**, Location Optimization of Battery Swapping Stations for Electric Scooters, 3rd International Symposium on Infrastructure Asset Management (SIAM3), Abu Dhabi, United Arab Emirates, Mar. 31-Apr. 1, 2019
2. Yang, S.-K., **Chu, J. C.**, Chou, Y.-H., Wang, M.-H., Liu, C.-P. and Xiao, Y.-A., Comparison of solution methods of dial-a-ride problems for rural areas, The

- Thirty-Second KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, Oct. 24-26, 2019.
3. Yeh, J.-C., **Chu, J. C.**, Chou, Y.-H., Huang, H.-P., and Chang, Y.-J., Scheduling and Charging Optimization of Electric Buses, The Thirty-Second KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, Oct. 24-26, 2019.
 4. Wei, Y.-T., **Chu, J. C.**, and Shih, A.-L., A mesoscopic model for large-scale pedestrian simulation, The Thirty-Second KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, Oct. 24-26, 2019.
 5. Liao, F.-Y., **Chu, J. C.**, and Yu, Y.-H., Optimization of Deployment and Repositioning in Dock-less Electric Scooter Sharing Systems, The Thirty-Second KKHTCNN Symposium on Civil Engineering, Daejeon, Korea, Oct. 24-26, 2019.
 6. Lin, Y.-F., Lin, Y.-Y., Korsesthakarn, K., Chen, Y.-J., Kang, C.-Y., and **Chu, J. C.**, Design of Variable Guidance for Pedestrian Evacuation, International Symposium of Transport Simulation & International Workshop on Traffic Data Collection and its Standardization 2018 (ISTS & IWTDCS 2018), Matsuyama, Japan Aug. 4-6, 2018.
 7. Wu, H.-Y., Korsesthakarn, K., Chen, Y.-J., Kang, C.-Y., Lin, Y.-Y., and **Chu, J. C.**, Optimization of Transit Timetables Considering Transit Assignment, International Symposium of Transport Simulation & International Workshop on Traffic Data Collection and its Standardization 2018 (ISTS & IWTDCS 2018), Matsuyama, Japan Aug. 4-6, 2018.
 8. Chen, Y.-J., Kang, C.-Y., Lin, Y.-Y., Korsesthakarn, K., and **Chu, J. C.**, Optimization of urban transit network design and timetabling for round-trip routes, International Symposium of Transport Simulation & International Workshop on Traffic Data Collection and its Standardization 2018 (ISTS & IWTDCS 2018), Matsuyama, Japan Aug. 4-6, 2018.
 9. Shih, H.-H., Kang, C.-Y., Lin, Y.-Y., Korsesthakarn, K., Chen, Y.-J., and **Chu, J. C.**, Integration of Bus Network Design and Dial-a-ride Scheduling, International Symposium of Transport Simulation & International Workshop on Traffic Data Collection and its Standardization 2018 (ISTS & IWTDCS 2018), Matsuyama, Japan Aug. 4-6, 2018.
 10. Chen, Y.-J., Yang, S.-K., and **Chu, J. C.**, Location Optimization of Battery Swapping Stations for Electric Scooters, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, Nov. 22-24, 2018.
 11. Huang, K.-H., Yeh, J.-C., and **Chu, J. C.**, Mathematical Modeling and Comparison for network-level pavement maintenance strategies, The

Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, Nov. 22-24, 2018.

12. Liao, F.-Y. and **Chu, J. C.**, Mathematical programming model for deployment and balancing in dock-less electric scooter sharing systems, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, Nov. 22-24, 2018.
13. Chao, H.-Y. and **Chu, J. C.**, Mixed-integer programming model and branch-and-price-and-cut algorithm for urban bus network design and timetabling, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, Nov. 22-24, 2018.
14. Kang, C.-Y., Wei, Y.-T., and **Chu, J. C.**, Large-Scale Pedestrian Simulation - An Extension to Floor Field Cellular Automata, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, Nov. 22-24, 2018.
15. **Chu, J. C.**, Urban Transit Network Design and Timetabling Problem for Multi-Depot Round-Trip Routes, INFORMS Transportation and Logistics Society Conference, Chicago, IL, USA, Jul. 26-29, 2017.
16. Huang, K.-H. and **Chu, J. C.**, Model formulation and comparison for network-level pavement maintenance strategies, 2nd International Symposium on Infrastructure Asset Management, Zurich, Switzerland, Jun. 29-30, 2017.
17. **Chu, J. C.**, Li, C.-W., and Wu, H.-Y., A transit planning model considering route directness and transfer coordination, 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016), Osaka, Japan, July 6 - 8, 2016.
18. **Chu, J. C.**, Lin, Y.-F., and Shih, H.-H., Dynamic Evacuation Guidance Considering Hazards and Congestion, 6th International Conference on Computing in Civil and Building Engineering (ICCCBE2016), Osaka, Japan, July 6 - 8, 2016.
19. **Chu, J. C.**, Huang, K.-H., and Lou, S.-Y., Evacuation of Threshold Maintenance Strategies in Transportation Asset Management, 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016), Osaka, Japan, July 6 - 8, 2016.
20. **Chu, J. C.** and Chen, S.-C., Transportation Network Protection Based on Path Directness and Travel Demand Weighted Connectivity, 16th International Symposium on Transportation Network Reliability (INSTRE 2015), Nara, Japan, August 2-3, 2015.

b. 國內會議論文

1. Yang, S.-K., **Chu, J. C.**, Chou, Y.-H., Wang, M.-H., Liu, C.-P. and Xiao, Y.-A., Comparison and improvement of solution methods of dial-a-ride problems for rural areas, 2019 International Conference and Annual Meeting of Chinese Institute of Transportation, Hsinchu City, Taiwan, Dec. 5-6, 2019 (in Chinese).
2. Yeh, J.-C., **Chu, J. C.**, Chou, Y.-H., Huang, H.-P., and Chang, Y.-J., Optimization of Scheduling and Charging of Electric Buses using Discrete-event Simulation, 2019 International Conference and Annual Meeting of Chinese Institute of Transportation, Hsinchu City, Taiwan, Dec. 5-6, 2019 (in Chinese).
3. Wei, Y.-T., **Chu, J. C.**, and Shih, A.-L., A mesoscopic pedestrian model for large-scale evacuation simulation, 2019 International Conference and Annual Meeting of Chinese Institute of Transportation, Hsinchu City, Taiwan, Dec. 5-6, 2019 (in Chinese).
4. Chen, Y.-J., **Chu, J. C.**, and Liao, F.-Y., Discrete-event System Simulation of Battery Swapping Behaviors for Electric Scooter Users, 2018 International Conference and Annual Meeting of Chinese Institute of Transportation, Taichung City, Taiwan, Dec. 6-7, 2018.
5. Wu, H.-Y., Korsesthakarn, K., and **Chu, J. C.**, Transit timetable optimization with dynamic assignment using mixed integer programming model, The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan, Nov. 2-4, 2017.
6. Shih, H.-H., Kang, C.-Y. and **Chu, J. C.**, Integration of Dial-a-ride Scheduling and Bus Network Design by A Stochastic Programming Model, The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan, Nov. 2-4, 2017.
7. Huang, K.-H., Chen, Y.-J., and **Chu, J. C.**, Mathematical programming framework for modeling and comparing network-level pavement maintenance strategies, The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan, Nov. 2-4, 2017.
8. **Chu, J. C.**, Chen A. Y., Lin, Y.-F., and Lin, Y.-Y., Variable Guidance for Pedestrian Evacuation Considering Congestion, Hazard, and Compliance Behavior, The 30th KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan, Nov. 2-4, 2017.

9. Shih, H.-H, **Chu, J. C.**, and Kang, C.-Y., A Stochastic Programming Model for Integration of Bus Network Design and Dial-a-ride Scheduling, 8th International Symposium on Travel Demand Management (TDM), Taipei, Taiwan, Sep. 26-29, 2017.
10. **Chu, J. C.**, Transit network design and scheduling problem for multi-depot round-trip fixed-interval routes, 9th International Conference on Applied Operational Research (ICAOR), Taoyuan, Taiwan, Dec. 18-20 2017
11. Wu, H.-Y., Korsestakarn, K., and **Chu, J. C.**, A Mixed Integer Programming Model for Transit Timetable Optimization Considering Transit Assignment, 2017 International Conference and Annual Meeting of Chinese Institute of Transportation, Taipei, Taiwan, Dec. 7-8, 2017.
12. Lin, Y.-F., **Chu, J. C.**, Shih, H.-H., Wu, H.-Y., and Lou, S.-Y., Dynamic Evacuation Guidance Considering Hazards and Congestion, 2016 International Conference and Annual Meeting of Chinese Institute of Transportation, Hualien County, Taiwan, Dec. 8-9, 2016 (in Chinese).
13. **Chu, J. C.** and Chen, S.-C., Highway Network Protection Strategy Considering Connectivity Reliability, 3rd International Conference on Evacuation Modeling and Management (ICEM), Tainan City, Taiwan, June 1-3, 2015.

C. 專書及專書論文

D. 技術報告及其他

陳柏華 副教授 Chen, Albert Y.

Associate Professor

學歷/美國伊利諾大學香檳分校博士

Ph.D., University of Illinois at Urbana-Champaign, IL, USA

專長/組合最佳化與演算法、災難運輸規劃、影像處理與電腦視覺之應用

期刊論文：

- * denotes corresponding author, and # indicates student under my supervision.
1. Lee#, C.-D., Lee, Y.-C., and Chen^{*}, A. Y. (2019) "In-Building Automated External Defibrillator Location Planning and Assessment through Building Information Models," *Automation in Construction*, Accepted (SCI, IF: 4.313, 5-IF: 5.276, Rank: 7/132, Engineering, Civil).
 2. Yen#, Y., Angah#, O., Huang, Y.N., and Chen^{*}, A.Y. (2018) "Potential Applications of State of the Art Artificial Intelligence in Civil Infrastructure Engineering." *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, Vol. 45, Issue 5. pp. 51-58.
 3. Chiang^{*}, W.-C., Hsieh, M.-J., Chu, H.-L., Chen, A. Y., Wen, S.-Y., Yang, W.-S., Chien, Y.-C., Wang, Y.-C., Lee, B.-C., Wang, H.-C., Huang, E.-P., Yang, C.-W., Sun, J.-T., Chong, K.-M., Lin, H.-Y., Hsu, S.-H., Chen, S.-Y., and Ma M. H. (2017) "The Effect of Successful Endotracheal Intubation on Patient Outcomes following Out-of-hospital Cardiac Arrest in Taipei." *Annals of Emergency Medicine*, 71(3), pp. 387-39, (SCI, IF: 5.209, 5-IF: 5.661, Rank: 1/29, Emergency Medicine)
 4. Chu, J. C., Chen^{*}, A. Y., and Lin, Y.-F. (2017) "Variable Guidance for Pedestrian Evacuation Considering Congestion, Hazard, and Compliance Behavior." *Transportation Research Part C: Emerging Technologies* Vol. 85, pp. 664-683. (SCI, IF: 5.775, 5-IF: 6.067, Rank: 3/37, Transportation Science and Technology)
 5. Chen^{*}, A. Y. and Yu#, T.-Y. (2016) "Network Based Temporary Facility Location for the Emergency Medical Services Considering the Disaster Induced Demand and the Transportation Infrastructure in Disaster Response." *Transportation Research Part B: Methodological*. Vol. 91, pp. 408-423, DOI:10.1016/j.trb.2016.06.004. (SCI, IF: 4.574, 5-IF: 5.257, Rank: 4/132, Engineering, Civil)
 6. Chen^{*}, A. Y., Lu#, T.-Y., Ma, H.-M. M., and Sun, W.-Z. (2016) "Demand Forecast using Data Analytics for the Pre-allocation of Ambulances." *IEEE, Journal of Biomedical and Health Informatics (J-BHI)*, Vol. 20, No. 4, pp. 1178-1187 DOI:10.1109/JBHI.2015.2443799. (SCI, IF: 4.217, 5-IF: 4.390, Rank: 19/155, Computer Science, Information Systems) (Cover Article)
 7. Chen, A. Y. and Chu^{*}, J. C. (2016) "TDVRP and BIM Integrated Approach for in-Building Emergency Rescue Routing." *ASCE, Journal of Computing in Civil Engineering*, Vol. 30, Issue 5, C4015003, DOI:10.1061/(ASCE)CP.1943-5487.0000522. (SCI, IF: 2.554, 5-IF: 2.743, Rank: 40/132, Engineering, Civil)

8. Chang, T.-H., Chen*, A. Y., Hsu, Y.-T., Yang, C.-L. (2016) "Freeway travel time prediction based on seamless spatio-temporal data fusion: case study of the freeway in Taiwan." *Transportation Research Procedia*, Vol. 17, pp. 452-459.
9. Chen*, A. Y. and Huang#, T. (2015) "Toward a BIM Enabled Decision Making for in-Building Response Missions." *IEEE, Transactions on Intelligent Transportation Systems*, Vol. 16, No. 5, pp. 2765-2773, DOI:10.1109/TITS.2015.2422138. (**SCI, IF: 5.744, 5-IF: 6.064, Rank: 2/132, Engineering, Civil**)
10. Liu#, H.-H., Chen*, A. Y., Dai, C.-Y., and Sun, W.-Z. (2015) "Physical Infrastructure Assessment for Emergency Medical Response." *ASCE, Journal of Computing in Civil Engineering*, Vol. 29, Issue 3, 04014044, DOI:10.1061/(ASCE)CP.1943-5487.0000395. (**SCI, IF: 2.554, 5-IF: 2.743, Rank: 40/132, Engineering, Civil**)
11. Chen*, A. Y., Yu#, T.-Y, Lu#, T.-Y, Chung, W.-L., Lai, J.-S., Yeh, C.-H., Oyang, Y.-J., Ma, M. H.-M., and Sun, W.-Z. (2015) "Ambulance Service Area Considering Disaster-induced Disturbance on the Transportation Infrastructure." *ASTM, Journal of Testing and Evaluation*, Vol. 43, Issue 2. DOI:10.1520/JTE20140084. (**SCI, IF: 0.711, 5-IF: 0.734, Rank: 25/33, Material Science, Characterization and Testing**)
12. Yan, S.Y., Chen*, A.Y., and Lin, S.M. (2015) "Application of Unmanned Aerial Vehicle on Seismic Risk Assessment and Emergency Response." *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, Vol. 27, Issue 2. pp. 163-171.
13. Shen, Y.J., Huang*, Y.N., and Chen, A.Y. (2015) "Optimal Fair-Load Scheduling-A Case Study of a Molding Factory." *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, Vol. 27, Issue 3. pp. 247-254.

研討會論文：

1. Lin, Y.C., Wang, C.R., and Chen A.Y. (2020) "Optimizing Routing of Mobile Retroreflectivity Units for Pavement Marking Performance Assessment," Proceedings of 99th Transportation Research Board, Washington, DC.
2. Lin, Y.C., Liao, S.T., Wang, C.R., and Chen A.Y. (2019) "VRP-based Model for Lane Marking Assessment with MRU Vehicle," The Thirty-Second KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, KAIST Mun-Ji Campus, Daejeon, Korea
3. Qiu W.-X., and Chen A.Y. (2019) "Computer Vision-based In-building Human Demand Estimation for Installation of Automated External Defibrillators," International Conference on Civil and Building Engineering Informatics (ICCBEI), nd Building Engineering Informatics November 7-8, 2019, Sendai, Japan.
4. Lin, Y.C., Liao, S.T., Wang, C.R., and Chen A.Y. (2019) "TSP-based Model for Lane Marking Assessment with MRU Vehicle," International Conference on Civil and Building Engineering Informatics (ICCBEI), nd Building Engineering Informatics November 7-8, 2019, Sendai, Japan.
5. Yen, Y., Wen, S.-Y., Y.-H., Huang, Y.-N., and Chen, A. (2018) "Human Tracking for Facility Surveillance," Computer Vision Conference (CVC), Las Vegas 2019.
6. Wang, J.-C. and Chen, A. Y. (2018) "Image-based Traffic Characteristics Extraction through Deep Learning," The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24
7. Ou, C.-Y. and Chen, A. Y. (2018) "The Analysis of Audio Content in Emergency Medical Service Dispatch Communication," The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24

8. Qiu, W.-X. and Chen, A. Y. (2018) "Multi-Camera Human Tracking for Decision Making for Facilities Location in Public Places," The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24
9. Wei, S.-R. and Chen, A. Y. (2018) "Projection transformation for traffic surveillance cameras through deep learning," The 31st KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24
10. Hsieh, T.-C. and Chen, A. Y. (2018) "Emotion Effect on the Interaction between Caller and Dispatcher in Emergency Medical Service Dispatch Communication" The 17th International Conference on Computing in Civil and Building Engineering (ICCCBE), Tampere, Finland, June 5-7. (Best Student Paper Award)
11. Lin, B.-W., and Chen, A. Y. (2018) "Improvement of the Efficiency of Object Detection," The 17th International Conference on Computing in Civil and Building Engineering (ICCCBE), Tampere, Finland, June 5-7.
12. Wen, S.-Y., and Chen, A. Y. (2018) "Using Context Encoders in AEC/FM," The 17th International Conference on Computing in Civil and Building Engineering (ICCCBE), Tampere, Finland, June 5-7.
13. Kuo, T.-J. Chan, Y.-C., and Chen, A. Y. (2017) "Development of an Occupant-Centered Integrated Lighting and Shading Control for Energy Saving and Individual Preferences," International Workshop on Computing in Civil Engineering (IWCCE 2017), Seattle, WA, USA, June 25-27.
14. Chen, C.-H. and Chen, A. Y. (2017) "Applied BIM: MAT and MTSP Integrated Approach for the Interior Patrol Routing Problem," International Workshop on Computing in Civil Engineering (IWCCE 2017), Seattle, WA, USA, June 25-27.
15. Chen, C.-C., and Chen, A. Y. (2017) "Video-Based Indoor Human Detection for Decision-Making of the Installation Locations for Automated External Defibrillators," International Workshop on Computing in Civil Engineering (IWCCE 2017), Seattle, WA, USA, June 25-27.
16. Chou, C.-C. and Chen, A. Y. (2017) "EMS Response Actions in Mass Casualty Incidents," International Workshop on Computing in Civil Engineering (IWCCE 2017), Seattle, WA, USA, June 25-27.
17. Chen, C.-H. and Chen, A. Y. (2017) "BIM and MTSP Integrated Approach for the Interior Patrol Routing Problem," International Conference on Civil and Building Engineering Informatics (ICCBEI 2017), Taipei, Taiwan, April 19-21.
18. Chou, C.-C. and Chen, A. Y. (2017) "Victims Assignment In Mass Casualty Incidents," International Conference on Civil and Building Engineering Informatics (ICCBEI 2017), Taipei, Taiwan, April 19-21.
19. Chen, C.-C. and Chen, A. Y. (2017) "Computer Vision-Based Indoor Human Detection for the Data Collection for Installation of Automated External Defibrillators," International Conference on Civil and Building Engineering Informatics (ICCBEI 2017), Taipei, Taiwan, April 19-21.
20. Chen, Y.-S., Chen, A. Y., and Lee, Y.-C. (2016) "Can Data Facilitate Ambulance Deployment for Pre-hospital EMS?" The 16th International Conference on Computing in Civil and Building Engineering (ICCCBE), Osaka, Japan, July 6-8.
21. Chiu, Y.-L., Chen, A. Y., and Hsieh, M.-H. (2016) "Vision Based Traffic Conflict Analytics of Mixed Traffic Flow," The 16th International Conference on Computing in Civil and Building Engineering (ICCCBE), Osaka, Japan, July 6-8.

22. Chung, M.-H. and Chen, A. Y. (2016) "Emergency humanitarian and resource allocation under disaster convergence," The 16th International Conference on Computing in Civil and Building Engineering (ICCCBE), Osaka, Japan, July 6-8.
23. Lee, C.-D., Chen, A. Y., and Chang, C.-Y. (2016) "In-building Coverage of AED Considering Pedestrian Flow," The 16th International Conference on Computing in Civil and Building Engineering (ICCCBE), Osaka, Japan, July 6-8.
24. Lin, C.-H. and Chen, A. Y. (2015) "Trip Characteristics Study through Social Media Data," International Workshop on Computing in Civil Engineering (IWCCE 2015), Austin, Texas, USA, June 22-25.
25. Chen, A. Y. and Yu, T.-Y. (2015) "Network Based Clustering in Disasters for the Emergency Medical Service," International Conference on Evacuation Modeling (ICEM 2015), Tainan, Taiwan, June 1-3.
26. Chen, A. Y. and Chang, C.-Y. (2015) "Using Hog For Video-Based Human Detection for In-Building Emergency Response," International Conference on Civil and Building Engineering Informatics (ICCBEI 2015), Tokyo, Japan, April 22-25.
27. Chen, A. Y. and Hsieh, M.-H. (2015) "Vision Based Safety Space Identification for Motorcycles," International Conference on Civil and Building Engineering Informatics (ICCBEI 2015), Tokyo, Japan, April 22-25.
28. Chen, A. Y. and Su, C.-H. (2015) "Supply Shortage Forecast using Spatial Data Mining for EMS," International Conference on Civil and Building Engineering Informatics (ICCBEI 2015), Tokyo, Japan, April 22-25.
29. Chen, A. Y. and Yu, T.-Y. (2015) "Clustering Analysis Considering the Utility Cost of the Transportation Infrastructure in Disaster Response for the Emergency Medical Service," International Conference on Civil and Building Engineering Informatics (ICCBEI 2015), Tokyo, Japan, April 22-25. (Best Paper Honorable Mention)

許聿廷 助理教授 Yu-Ting Hsu

Assistant Professor

學歷/美國普渡大學博士

Ph. D., Purdue Univ., U.S.A.

專長/運輸規劃、運輸系統分析、旅行者行為、交通路網分析

Transportation planning、Transportation system analysis、Evacuation planning and operation、Traveler behavior and traveler information system、Traffic and spatial network analysis

(A) 期刊論文 (*: 通訊作者)

a. SCI/SSCI 期刊論文

- (1) Chu, J.C., Korsesthakarn, K., **Hsu, Y.T.***, Wu, H.Y. (2019). "Models and a solution algorithm for planning transfer synchronization of bus timetables." *Transportation Research Part E: Logistics and Transportation Review*, 131, pp.247–266.
- (2) Lai, Y.C.*., Huang, C.W., **Hsu, Y.T.** (2018) "Estimation of rail passenger flow and system utilization with ticket transaction and gate data." *Transportation Planning and Technology*, 41(7), pp. 752–778.
- (3) Chang, T. H.*., Tseng, J. S., Hsieh, T. H., **Hsu, Y.T.**, Lu, Y. C. (2018) "Green transportation implementation through distance-based road pricing." *Transportation Research Part A: Policy and Practice*, 111, pp. 53–64.
- (4) Miralinaghi, M.*., Lou, Y., **Hsu, Y.T.**, Shabanpour, R., Shafahi, Y. (2016) "Multiclass fuzzy user equilibrium with endogenous membership functions and risk-taking behaviors." *Journal of Advanced Transportation*, 50(8), pp. 1716–1734.
- (5) **Hsu, Y.T.***, Kang, L., Wu, Y.H. (2016) "User behavior of bikesharing systems under demand-supply imbalance." *Transportation Research Record*, 2587, pp. 117–124.
- (6) **Hsu, Y.T.***, Peeta, S. (2016) "Online calibration of an integrated framework for information-based evacuation operations." *Journal of Advanced Transportation*, 50(7), pp. 1531–1553.
- (7) **Hsu, Y.T.**, Peeta, S.* (2015) "Clearance time estimation for incorporating evacuation risk in routing strategies for evacuation operations." *Networks and Spatial Economics* 15(3), pp. 743–764.
- (8) **Hsu, Y.T.**, Peeta, S.* (2014) "Behavior-consistent information-based network traffic control for evacuation operations." *Transportation Research Part C*, 48, pp. 339–359.
- (9) **Hsu, Y.T.**, Peeta, S.* (2014) "Risk-based spatial zone determination problem for stage-based evacuation operations." *Transportation Research Part C*, 41, pp. 73–89.

b. 非屬 SCI/SSCI 之 EI 或 TSSCI 期刊論文

- (1) **Hsu, Y.T.***, Lin, W.R., Lai, Y.C., Kao, T.C. (2017) "An aggregate approach for high-speed rail ridership forecasting: model development based on case revisit of

Taiwan High-Speed Rail.” *Journal of the Chinese Institute of Transportation*, 29(4), pp. 337–364.

c. 其他期刊論文

- (1) Wu, Y.H., Kang, L., **Hsu, Y.T.***, Wang, P.C. (2019) “Exploring trip characteristics of bike-sharing system uses: effects of land-use patterns and pricing scheme change.” *International Journal of Transportation Science and Technology*, 8(3), pp. 318–331.
- (2) Chien, S.T., **Hsu, Y.T.*** (2017) “Research on interactions between high-speed rail facilities and regional development.” *Journal of the Eastern Asia Society for Transportation Studies*, 12, pp. 784–803.
- (3) Chang, T.H., Chen, A.Y., **Hsu, Y.T.***, Yang, C.L. (2016) “Freeway travel time prediction based on seamless spatio-temporal data fusion: case study of the freeway in Taiwan.” *Transportation Research Procedia* 17, pp.452–459.

(B) 研討會論文 (*: 通訊作者)

a. 國外會議論文

- (1) Lee, W.Y., **Hsu, Y.T.***, Suen, C.S., Wu, M.H., Ni, Y.C. “Exploring intercity trip patterns of railway systems on national holidays using deep auto-encoder.” 99th Transportation Research Board (Washington, DC, Jan. 2020).
- (2) Miralinaghi, M.*., Tabesh, M.T., Seilabi, S.E., **Hsu, Y.T.**, Labi, S., Fricker, J.D. “Bi-Level Multi-Objective Optimization of Urban Road Project Scheduling Considering Contract Bundling.” 98th Transportation Research Board (Washington, DC, Jan. 2019).
- (3) Lee, K.C., **Hsu, Y.T.***, Yeh, N.T. “Exploring smart card data of an urban railway system: investigation of spatiotemporal patterns of trip distribution and demand-side characteristics.” 12th World Congress on Railway Research (Tokyo, Japan, Oct. 2019).
- (4) Lee, K.C., **Hsu, Y.T.*** “Exploring urban trip-activity patterns based on smart card data and land-use characterization.” 32nd KKHTCNN Symposium on Civil Engineering (Daejeon, Korea, Oct. 2019).
- (5) Chang, C., **Hsu, Y.T.***, Lai, J.S., Ke, K.Y. “Dynamic traffic assignment upon short-duration intense rainfall events.” 32nd KKHTCNN Symposium on Civil Engineering (Daejeon, Korea, Oct. 2019).
- (6) Li, H.Y., **Hsu, Y.T.*** “Stochastic dynamic dispatch model for freeway incident response.” 32nd KKHTCNN Symposium on Civil Engineering (Daejeon, Korea, Oct. 2019).
- (7) Cheng, S.H.*., Wang, J.Y., **Hsu, Y.T.**, Chen, C.H., Chen, C.Y. “Development of a vehicle monitoring system for low emission zone application based on OBD technology.” 3rd International Conference on Smart Vehicular Technology, Transportation, Communication and Application (Arad, Romania, Oct. 2019).

- (8) Lou, S.Y., Hsu, W.Y., **Hsu, Y.T.*** "Exploring holiday trip patterns on freeways based on electronic toll collection data." 13th International Conference of the Eastern Asia Society for Transportation Studies (Colombo, Sri Lanka, Sep. 2019).
- (9) Tseng, M.Y., **Hsu, Y.T.***, Chang, P.C. "Exploring cyclist flow patterns at signalized crossing: perspective of cyclist-pedestrian conflict analysis." 13th International Conference of the Eastern Asia Society for Transportation Studies (Colombo, Sri Lanka, Sep. 2019).
- (10) Chen, P.A., Wu, H.T., **Hsu, Y.T.*** "Widening narrow alleys to enhance response efficiency for fire emergency from the perspective of urban roadway network analysis." 13th International Conference of the Eastern Asia Society for Transportation Studies (Colombo, Sri Lanka, Sep. 2019).
- (11) Patel, H., **Hsu, Y.T.***, Chang, S.K. "Analysis of the demand-side characteristics of Mumbai Dabbawala service." 13th International Conference of the Eastern Asia Society for Transportation Studies (Colombo, Sri Lanka, Sep. 2019).
- (12) Hsu, C.W., **Hsu, Y.T.*** "Exploring the propagation pattern of traffic congestion through analyzing and visualizing vehicle detector data." 15th World Conference on Transport Research (Mumbai, India, May 2019).
- (13) Ni, Y.C., Lo, H.H., **Hsu, Y.T.***, Huang, H.J., Chang, T.H. "Design of passive transit signal priority control for bus rapid transit based on a simulation-based optimization model." 15th World Conference on Transport Research (Mumbai, India, May 2019).
- (14) Chen, Y.J., **Hsu, Y.T.***, Miralinaghi, M. "Optimizing resilience of retorting disrupted interdependent infrastructure systems." 98th Transportation Research Board (Washington, DC, Jan. 2019).
- (15) Tai, C.Y., Chen, W.H., **Hsu, Y.T.*** "Using dynamic vehicle routing model to dispatch emergency response teams for freeway incidents." 98th Transportation Research Board (Washington, DC, Jan. 2019).
- (16) Miralinaghi, M.*., Seilabi, S.E., Chen, S., **Hsu, Y.T.**, Labi, S. "Optimizing the selection and scheduling of multi-class projects." 98th Transportation Research Board (Washington, DC, Jan. 2019).
- (17) Xu, Z.X., **Hsu, Y.T.***, Chen, A.Y. "Signal control strategies to coordinate surface-street and freeway traffic: a neural network approach." 31st KKHTCNN Symposium on Civil Engineering (Kyoto, Japan, Nov. 2018).
- (18) Ni, Y.C., **Hsu, Y.T.***, Huang, H.H. "Design of passive signal priority strategies for transit systems with type B right-of-way on an urban arterial." 31st KKHTCNN Symposium on Civil Engineering (Kyoto, Japan, Nov. 2018).
- (19) Chen, Y.J., **Hsu, Y.T.*** "Scheduling restoration of disrupted interdependent infrastructure systems: the perspective of resilience optimization." 31st KKHTCNN Symposium on Civil Engineering (Kyoto, Japan, Nov. 2018).
- (20) Tseng, M.Y., **Hsu, Y.T.** "Exploring cyclist behavior at signalized crossing: perspective of cyclist-pedestrian conflict analysis." 31th International Co-operation on Theories and Concepts in Traffic Safety Conference (Porto, Portugal, Oct. 2018).

- (21) Wang, P.C., **Hsu, Y.T.** “Analysis of waiting time perception of bus passengers provided with mobile service.” 97th Transportation Research Board (Washington, DC, Jan. 2018).
- (22) Hsu, C.W., **Hsu, Y.T.*** “Exploring the cascading pattern of traffic congestion through visualizing vehicle detector data.” 30th KKHTCNN Symposium on Civil Engineering (Taipei, Taiwan, Nov. 2017).
- (23) Chien, S.T., **Hsu, Y.T.*** “Research on interactions between high-speed rail facilities and regional development.” 12th International Conference of Eastern Asia Society for Transportation Studies (Ho Chi Minh City and Binh Duong City, Vietnam, Sep. 2017).
- (24) Chen, H.Y., **Hsu, Y.T.***, “Formulating the Minimum Network Clearance Time for Evacuation Problems.” 2017 International Workshop on Computing in Civil Engineering (Seattle, U.S.A., Jun. 2017).
- (25) Dai, Z.Y., Kang, Z.F., Li, N., Yang, L.K., **Hsu, Y.T.***, “Partition problem for optimizing the deployment of incident response.” 2017 International Workshop on Computing in Civil Engineering (Seattle, U.S.A., Jun. 2017).
- (26) Wu, Y.H., Kang, L., Wang, P.C., **Hsu, Y.T.*** “Exploratory multivariate analysis of bikesharing system use: trip characteristics and effect of pricing scheme change.” 96th Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2017).
- (27) Huang, H.H., **Hsu, Y.T.***, Miralinaghi, M. “A location problem of two-level disaster relief facilities for vulnerable networks.” 96th Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2017).
- (28) Miralinaghi, M.*., Lou, Y., Keskin, B.B., **Hsu, Y.T.**, Shabanpour, R. “Refueling station location problem with traffic deviation considering route choice and demand uncertainty.” 96th Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2017).
- (29) Chen, J.S., **Hsu, Y.T.*** “Dynamic bike redistribution strategies considering on-site demand patterns for bike sharing systems.” 14th World Congress on Transport Research (Shanghai, China, Jul. 2016).
- (30) Huang, H.H., **Hsu, Y.T.*** “Locations of two-level disaster relief facilities for vulnerable networks: case study of Nantou, Taiwan.” 14th World Congress on Transport Research (Shanghai, China, Jul. 2016).
- (31) Liu, M.H., **Hsu, Y.T.*** “Airport capacity analysis based on integrated assignments considering both gate and runway usage.” 20th Air Transport Research Society World Conference (Rhodes, Greece, Jun. 2016).
- (32) Chien, S.T., **Hsu, Y.T.*** “Forecasting ridership of railway systems by factoring interactions between railway facilities and land-use patterns.” 11th World Congress on Railway Research (Milan, Italy, May 2016).
- (33) **Hsu, Y.T.***, Kang, L., Wu, Y.H. “User behavior of bike sharing systems under demand-supply imbalance.” 95th Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2016). Accepted to be published in Transportation Research Record No. 2587.
- (34) Song, D.Y., Peeta, S.*., **Hsu, Y.T.** “Psychological effects of real-time travel information on route choice decision-making processes in multi-tasking travel

environments.” 14th International Conference on Travel Behaviour Research (Winsor, UK, Jul. 2015).

- (35) **Hsu, Y.T.***, Lin, W.R., Lai, Y.C. R., Kao, T.C. “Forecasting high speed rail ridership using aggregate data: A case revisit of high speed rail in Taiwan.” 94th Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2015).
- (36) Chang, T.H., Chen, A.Y., **Hsu, Y.T.***, Yang, C.L. “Freeway travel time prediction based on seamless spatio-temporal data fusion: case study of the freeway in Taiwan.” 11th Conference on Transportation Planning and Implementation Methodologies for Developing Countries (Mumbai, India, Dec. 2014).
- (37) **Hsu, Y.T.***, Peeta, S. “Clearance time estimation for assessing evacuation risk in real-time evacuation operations.” 93rd Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2014).
- (38) **Hsu, Y.T.***, Peeta, S. “Using behavior-consistent information-based control for traffic routing in real-time evacuation operations.” 93rd Annual Meeting of the Transportation Research Board (Washington D.C., U.S.A., Jan. 2014).

b. 國內會議論文

- (1) 陳璽煌*、洪詮盛、王晉元、**許聿廷**、陳其華、陳志岳「運用 OBD-II 實作車輛駕駛工作時間和出勤紀錄系統之研究」第 25 臺灣網際網路研討會（高雄，臺灣，2019 年 9 月）。
- (2) 陳璽煌*、洪詮盛、王晉元、**許聿廷**、陳其華、陳志岳「使用 OBD 車上診斷系統與 TensorFlow DNN 分類器於油電混合車之動力電池故障預警系統實作」第九屆網路智能與應用研討會（雲林，臺灣，2019 年 10 月）。[大會佳作論文獎]
- (3) 許添本*、**許聿廷**、蕭唯倫、何婉菁、李芊 「自行車肇事特性分析與車聯網防撞策略之研究」第 32 屆中華運輸學會年會暨國際論文研討會（臺北，臺灣，2017 年 12 月）。

(C) 專書及專書論文

(D) 技術報告

- (1) 許聿廷、李文字 (2019) 軌道運輸系統運量預測方法：考量運輸系統與土地利用狀態之互動關係，科技部/107-2119-M-002-044-。
- (2) 許聿廷、陳薇亘、楊璵凱、李弘亦 (2019) 107-108 年精進國道事件處理效率委外研究，國道高速公路局北區養護分局/107B04P006。
- (3) 譚義績、許聿廷、柯凱元、陳柏華、林永樂、賴洺嘉、溫欣儀、陳譽仁 (2018) 核能電廠緊急應變計畫區民眾疏散方案規劃與模擬分析，臺灣電力公司。
- (4) 許聿廷、陳譽仁 (2018) 大規模路網疏散時間估算與疏散路線規劃之研究，科技部/107-NU-E-002-002-NU。

- (5) 許聿廷、曾慶華、張秉鈞 (2017) 大型活動輻射事件下物資佈署與群眾安置、疏散之規劃問題，科技部/106-NU-E-002-004-NU。
- (6) 許聿廷、朱致遠、游景雲、陳柏華、卡艾瑋、陳譽仁、康家瑜 (2017) 潟壩分析暨下游緊急應變計畫：區域疏散、群眾安置與關鍵設施強化之整合，科技部/106-2119-M-002-018-。
- (7) 許聿廷、戴至佑、楊礪凱、陳薇亘 (2017) 精進國道事件處理效率委外研究，國道高速公路局北區養護分局/105B03P022。
- (8) 許聿廷、陳靖昇、吳宜萱 (2016) 考量使用者行為基礎之公共自行車系統動態調度作業，科技部/104-2119-M-002-033。
- (9) 許聿廷、黃懷萱 (2014) 脆弱路網結構下災難防救與自我維持救援站之選址問題，宗倬章先生教育基金/103-S-AO。
- (10) 許聿廷 (2014) 因應大規模疏散作業之整合式供需管理架構暨風險基礎之路徑分派策略，科技部/102-2218-E-002-020。
- (11) 許聿廷、陳靖昇 (2014) 學生宿舍增建方案之交通衝擊評估計畫，台灣大學總務處。

曾惠斌 教授 Hui-Ping Tserng

Professor

學歷/ 美國威斯康辛大學麥迪遜分校博士

專長/ 工程績效管理、估價與排程、專家系統

期刊論文(Refereed Papers)

A. SCI 之期刊論文

1. Chen*, A. Y., Yu, T.-Y, Lu, T.-Y, Chung, W.-L., Lai, J.-S., Yeh, C.-H., Oyang, Y.-J., Ma, H.-M., and Sun W. Z. (2014) "Ambulance Service Area Considering Disaster-induced Disturbance on the Transportation Infrastructure." Journal of Testing and Evaluation, ASTM International, Vol 43, Issue 2. DOI:10.1520/JTE20140084
2. Liu, H.-H., Chen*, A. Y., Dai, C.-Y., and Sun, W.-Z. (2014) "Physical Infrastructure Assessment for Emergency Medical Response." (Accepted) ASCE, Journal of Computing in Civil Engineering, Reston, VA.
3. Liu, P., Chen, A. Y., Huang, Y.-N., Han J.-Y., Lai, J.-S., Kang*, S.-K., Wu, T.-H., Wen, M.-C., and Tsai, M.-H. (2014) "A Review of Rotorcraft Unmanned Aerial Vehicle (UAV) Developments and Applications in Civil Engineering." Smart Structures and Systems, Vol. 13, No. 6, pp. 1065-1094.
4. Chang T.-H., Chen*, A. Y., Chang, C.-W., and Chueh, C.-H. (2014) "Traffic Speed Estimation via Data Fusion from Heterogeneous Sources for First Response Deployment." ASCE, Journal of Computing in Civil Engineering, Vol. 28, Issue 6, 04014018, Reston, VA.
5. Chen*, A. Y., Peña-Mora, F., Plans, A., Mehta, S., and Aziz, Z. (2012) "Supporting Urban Search and Rescue with Digital Assessments of Structures and Requests of Response Resources." Advanced Engineering Informatics, Elsevier, Vol. 26, Issue 4, pp. 833-845
6. Chen*, A. Y. and Peña-Mora, F. (2011) "A Decentralized Approach Considering Spatial Attributes for Equipment Utilization in Civil Engineering Disaster Response." ASCE, Journal of Computing in Civil Engineering, Vol. 25, Issue 6, pp. 457-470, Reston, VA.
7. Chen*, A. Y., Peña-Mora, F., and Ouyang, Y. (2011). "A collaborative GIS Framework to Support Equipment Distribution for Civil Engineering Disaster Response Operations." Automation in Construction, Elsevier, Vol. 20, Issue 5, August, pp. 637-648.
8. Chen*, A. Y., Han S. W., Lee, S. H., and Peña-Mora, F. (2011) "A Public Web Service to Guide Converging Construction Equipment in Urban Search and Rescue." Journal of Construction Engineering and Project Management (JCEPM), Vol. 1, Issue 3, pp. 45-51.
9. Chen*, A.Y., Peña-Mora, F., Mehta, S. J., Plans, A. P., Brauer, B. R., Foltz, S., and Nacheman, S. (2011), "Equipment Distribution for Structural Stabilization and Civilian Rescue.", International Journal of Information Systems for Crisis Response and Management (IJISCRAM), Vol. 3, Issue 1, pp. 19-31.

10. Peña-Mora, F., Chen*, A. Y., Aziz, Z., Soibelman, L., Liu, L. Y., El-Rayes, K., Arboleda, C. A., Lantz, T. S., Plans, A. P., Lakhera, S., and Mathur, S. (2010) "A Mobile Ad-Hoc Network Enabled Collaborative Framework Supporting Civil Engineering Emergency Response Operations," ASCE, Journal of Computing in Civil Engineering, Vol. 24, Issue 3, pp. 302-312

B.非 SCI 但為 EI 之期刊論文

1. Tserng, H.P. and Chung, C-L, (2007). "Health Assessment and Maintenance Strategy for Bridge Management Systems: a Lesson Learned in Taiwan," ASCE Journal of Infrastructure Systems, Vol.13, No.3, Sept. 1, pp235-246. (EI)

C.其他期刊論文

1. 曾惠斌、荷世平、宋秋緯、蔡榮根、楊宜軒 (2009年9月),「企業評價模型運用於營建業之研究與實證」,中國土木水利工程學刊 (EI) 21卷第三期, P.275-284, <獲99年度中國土木水利工程學會論文獎>。
2. 蔡榮根、林樹枝、蔡志揚、宋秋緯、曾惠斌 (2009年9月),「中國大陸之建築結構審查與施工勘驗制度」,結構工程,第二十四卷 第三期,第 41-60頁。
3. 曾惠斌、蔡榮根、王炤烈 (2009年夏季號),「混凝土結構體中之鋼筋腐蝕性檢測方法探討」,營建管理季刊,第79期第76-83頁。
4. 林文雄, 曾惠斌, 黃智弘, "FIDIC一般條款與我國施工綱要規範00700之初步比較", 營建管理季刊, 第78期, Page 81-97, 2009。
5. 曾惠斌, 蔡榮根, 王炤烈, "鋼結構工程施工品質之管理制度研究", 營建管理季刊, 第78期, Page 57-65, 2009。
6. 曾惠斌, 蔡志揚, 宋秋緯, 蔡榮根, "建築結構安全與國家責任-「行政與技術分立原則」", 結構工程, 第24卷, 第一期, pp3-20, 2009。
7. 蔡榮根, 王華弘, 曾惠斌, "美國結構技師養成及證照制度的探討", 結構工程, 第24卷, 第四期, pp3-9, 2008。
8. 曾惠斌, 劉湘羚, "工程顧問公司知識管理系統中使用參與程度評量指標之研究", 營建管理季刊, 第76期, Page 1-14, 2008。
9. 蔡榮根, 王華弘, 曾惠斌, "美國結構技師養成及證照制度的探討", 結構工程, 第24卷, 第四期, pp3-9, 2008。
10. 曾惠斌, 劉湘羚, "工程顧問公司知識管理系統中使用參與程度評量指標之研究", 營建管理季刊, 第76期, Page 1-14, 2008。

學術會議論文(Conference full papers)

1. H. P. Tserng, K. C. Chang, Miroslaw Skibniewski, C. C. Chen, Y. F. Liu, "Development of an Innovative Bridge Monitoring System for Multi Disasters ,," International Symposium on Automation and Robotics in Construction(ISARC), 2011 June 29th-July 2nd , Seoul, Korea.
2. Ji-De Huang, Wen-Jong Wu, Jen-Yu Han, Hui-Ping Tserng, Nan-Jie Wang, Chih-Ting Lin, "High Efficient Synchronization-On-Demand Protocol of IEEE802.15.4 Wireless Sesnor

- Network for Construction Monitoring," International Symposium on Automation and Robotics in Construction(ISARC), 2011 June 29th-July 2nd , Seoul, Korea.
3. K. C. Chang , H. P. Tserng, K.W. Weng, Y. W. Chen, H. T. Tseng, "Developing Bridge Monitor Platform Using GPS and Communication Technology," International Symposium on Automation and Robotics in Construction(ISARC), 2011 June 29th-July 2nd, Seoul, Korea.
 4. H. P. Tserng, S. H. Ju, K. C. Chang, C. W. Feng, C. T. Lin, J. Y. Han, K.W. Weng, N. H. Peng, H. C. Chung, P. S. Chang, "Development and Testing of Integrated Bridge Disaster Prevention and Management Platform," International Symposium on Automation and Robotics in Construction(ISARC), 2011 June 29th-July 2nd, Seoul, Korea.
 5. H. Ping Tserng, Hsien-Hsing Liao, L. Ken Tsai, Po-Cheng Chen, Wen-Pei Wang, "Comparison of Option-Based and Accounting-Based Models on the Prediction of Construction Contractor Default," Proceedings of the 2nd International Symposium on Life-Cycle Civil Engineering, Taipei, Taiwan, October 27-31, 2010, p.393-397.
 6. L. Ken Tsai, H. Ping Tserng, Hsien-Hsing Liao, Po-Cheng Chen, Man-Cheng Lei, "The Performance of Barrier Option-Based Model in Predicting Construction Contractor Default," Proceedings of the 2nd International Symposium on Life-Cycle Civil Engineering, Taipei, Taiwan, October 27-31, 2010, p.865-869.
 7. Thanh Long Ngo, H. Ping Tserng, Samuel Y. L. Yin, "A Lean Procurement Model (LPM) for the Construction Contractor," Proceedings of the 2nd International Symposium on Life-Cycle Civil Engineering, Taipei, Taiwan, October 27-31, 2010.
 8. H. Ping Tserng, Samuel Y.L. Yin, and Wu-Chueh Hung, "Prefabrication Algorithm for Efficient MEP Construction", The 5th Civil Engineering Conference in the Asian Region (5CECAR), 2010 Aug 08-12, Sydney, Australia
 9. L. Ken Tsai, H. Ping Tserng, Wen-Pei Wang, Po-Cheng Chen, 2010, "Predicting Construction Contractor Financial Distress in Taiwan-Integration of Accounting-Based & Market-Based Models," The 14th Symposium on Construction Engineering and Management, 2010 Jul, Taipei, Taiwan.
 10. H. Ping Tserng, Wu-Chueh Hung, and Hsiu-Hui Tsai, "The Comparative Study of the Pre-Fabrication Operation and Traditional Operationfor Pipeline Setting-A case study of the Fire-pump Room", The 14th Symposium on Construction Engineering and Management, 2010 Jul, Taipei, Taiwan.
 11. 蔡榮根、曾惠斌、陳柏誠、李敏晶，2010，「運用市場基礎模型於營造業之財務危機預測-Merton模型與Barrier模型之比較」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
 12. 曾惠斌、李卓翰、徐景文，2010，「技術服務廠商履約績效評鑑指標之研究」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
 13. 林文雄、陳議標、杜振成、曾惠斌，2010，「預鑄節塊應用於預力橋墩之效益分析」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
 14. 曾惠斌、范素玲、許雅茹，2010，「關鍵鏈管理方法應用於建築工程排程管控之研究」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
 15. 林傑、徐景文、曾惠斌，2010，「運用新制度經濟學分析中央促參單位於推動促參業務所扮演之角色」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
 16. 曾惠斌、余昇鴻、洪五爵、林文雄、徐景文，2010，「公共工程常見爭議項目原因分析及處理對策之研究」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。

17. 黃金田、張文城、林文雄、曾惠斌，2010，「高敏感區位卵礫石潛盾隧道之施工安全風險管理」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
18. 蔡琇惠、曾惠斌、洪五爵，2010，「管線預組與傳統工法之比較研究-以消防泵浦機房為例」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
19. 高聰宗、曾惠斌、陳立翰，2010，「時間-歷程關係圖在大型工程專案排程之研究-以台灣高鐵工程為例」。(第14屆) 營建工程與管理學術研討會，國立臺灣大學。
20. L. Ken Tsai, Hao-Wei Chin, Hsien-Hsing Liao, H. Ping Tserng, " Developing an Option Framework for Predicting Default Probability of Construction Firms," The 14th Annual Meeting of CRIOCM & 2009 International Symposiumon Advancement of Construction Management and Real Estate, Southeast University (SEU), Nanjing, P.R.China.
21. Lung-Ken Tsai, H. Ping Tserng, Shih-Hsiung Chiang, "The Updates on Seismic Resisting Design of Building Provisions after the 921 Chi-Chi Earthquakes," The 5th APRU 2009 Research Symposium , Multi-Hazards Around the Pacific Rim, National Taiwan University.
22. L. Ken Tsai; Hao-Wei Chin; Hsien-Hsing Liao, H. Ping Tserng (2009), "A Barrier Option Framework for Predicting Insolvency of Construction Firms," (第13屆) 營建工程與管理學術研討會，屏東科技大學。
23. H. Ping Tserng, Samuel Y.L. Yin, and Wu-Chueh Hung, "The Prefabrication of Electrical and Mechanical System of a Construction Project", Eleventh East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-11), 2008 Nov 11-19, Taipei, Taiwan.

荷世平 教授 Shih-Ping Ho

Professor

學歷/ 美國伊利諾大學博士

Ph.D., University of Illinois at Urbana-Champaign.

專長/ 營建財務工程、BOT 專案融資與政策、資訊與科技管理

Construction Management, Construction Economics, Financial Management

期刊論文 (Journal Paper)

1. S. Ping Ho* and Y. Hsu (2013). "Bid Compensation Theory and Strategies for Projects with Heterogeneous Bidders: A Game Theoretic Analysis." *Journal of Management in Engineering, ASCE*. Final proof, in print. DOI:10.1061/(ASCE)ME.1943-5479.0000212. (SCI). NSC101-2221-E-002-186.
2. Y. Lin and S. Ping Ho (2013). "Impacts of Governance Structure Strategies on Performance of Construction Joint Ventures." *Journal of Construction Engineering and Management, ASCE*, 139(3), 304-311. (SCI). NSC100-2628-E-002-013.
3. S. Ping Ho, H. Tserng, and S. Jan (2013). "Enhancing Knowledge Sharing Management Using BIM Technology in Construction." *The Scientific World Journal*, DOI:10.1155/2013/170498. Published online. (SCI).
4. R. Levitt, C. Wang, S. Ping Ho*, and A. Javernick-Will (2013). "Encouraging Knowledge Sharing in Engineering Firms-Part II: Game Theory Analysis and Firm Strategies." *Engineering Project Organization Journal*, 3(1), 22-31. (2011 new journal by Taylor and Francis).
5. H. Tserng, S. Ping Ho, J. Chou, and C. Lin (2013). "Proactive Measures of Governmental Debt Guarantees to Facilitate PPP Project." *Journal of Civil Engineering and Management*. Final proof, in print. (SCI).
6. H. Tserng, S. Ping Ho, and S. Jan (2013). "Developing BIM-Assisted As-Built Schedule Management System for General Contractors." *Journal of Civil Engineering and Management*, DOI:10.3846/13923730.2013.851112. Final proof, in print. (SCI).
7. R. Levitt, C. Wang, S. Ping Ho*, and A. Javernick-Will (2012). "Encouraging Knowledge Sharing in Engineering Firms-Part I: Incentives, Disincentives, and the Impacts of Firm." *Engineering Project Organization Journal*, 2(4), 231-239. (2011 new journal by Taylor and Francis).
8. M. Lin, H. Tserng, S. Ping Ho, and D. Young (2012). "A Novel Dynamic Progress Forecasting Approach for Construction Projects." *Expert Systems with Applications*, 39(3), 2247-2255. (SCI).
9. Y. Lin, S. Ping Ho, and H. Wu (2012). "The Antecedents and Performance Consequence of Governance Structures in R&D Alliances." *Journal of Southeast University*, 28(3), 360-366. (EI).

10. S. Ping Ho*, Y. Hsu, and E. Lin (2011). "Model for Knowledge Sharing Strategies: A Game Theory Analysis." *Engineering Project Organization Journal*, 1(1), 53-65. (2011 new journal by Taylor and Francis). NSC97-2221-E-002-204. This paper currently is ranked Top One MOST READ paper of the journal, with 788 downloads as of 2/7/2014.
11. M. Lin, H. Tserng, S. Ping Ho, and D. Young (2011). "Developing a Construction-Duration Model Based on a Historical Dataset for Building Project." *Journal of Civil Engineering and Management*, 17(4), 529-539. (SCI).
12. L. Tsai, H. Tserng, S. Ping Ho, C. Sung, and Y. Chou (2010). "Developing an Analytical Model for the Optimal Capital Structure of the Building Company." *Journal of Marine Science and Technology*, 18(3), 385-394. (SCI).
13. S. Ping Ho*, Y. Lin, W. Chu, and H. Wu (2009). "Model for Organizational Governance Structure Choices in Construction Joint Ventures." *Journal of Construction Engineering and Management*, ASCE, 135(6), 518-530. NSC96-2221-E-002-219 & NSC95-2221-E-002-321. (SCI)
14. S. Ping Ho*, Y. Lin, W. Chu, and H. Wu (2009) "Empirical Test of a Model for Organizational Governance Structure Choices in Construction Joint Ventures." *Construction Management and Economics*, 27(3), 315-324. NSC96-2221-E-002-219. (EI)
15. H. Tserng, S. Ping Ho, C. Sung, L. Tsai, and D. Yang (2009) "An Empirical Research of Valuation Models for the Construction Industry." *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, 21(3), 275-284. (EI)
16. Y. Hsu, J. Chien, and S. Ping Ho (2008) "Macroeconomic Risk, Long-Run Risk and Asset Pricing Puzzles." *Journal of Financial Review*, 8, 1-20.
17. J. Chien, Y. Hsu, and S. Ping Ho (2007). "Can Housing Prices Predict Stock Prices?" *Academia Economic Papers*, Institute of Economics, Academia Sinica, 36(1), 89-139. (TSSCI).
18. S. Ping Ho*, C. Tsui, and B. Hsiung (2007). "A Study of Time Limit to Claim for Extension of Time for Construction Completion- and Review on the Taiwan High Court Judgment C.S.T. No. 170 (1998)." *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, 19(1), 117-124. (EI)

研討會論文 (Conference Papers)

1. S. Ping Ho*, C. Lin, H. Yin (2013). "The Entry Mode Choice of Construction Firms into China Market - From an Institution-Based Point of View" *Proceedings of the 26th KKHTCNN Symposium on Civil Engineering*, Singapore.
2. S. Ping Ho*, Y. Hsu, Y. Wang, and Y. Pen (2012). "Bid Compensation Strategies for PPP Projects with Heterogeneous Bidders: A Game Theory Analysis." *Proceedings of Engineering Project Organization Conference 2012*, Netherlands.
3. S. Ping Ho*, Y. Hsu, and C. Wang (2011). "How knowledge is shared in organizations: model and empirical evidence." *Proceedings of EASEC 11*, Taipei, TAIWAN.
4. Yi-Hsin Lin, S. Ping Ho*, and Hsueh-Liang Wu (2011). "An Empirical Analysis of the Organizational Governance Structure Choices in International Construction Joint Ventures." *Proceedings of EASEC 11*, Taipei.
5. P. Lin and S. Ping Ho (2011). "Eclectic Paradigm and the MNE's Entry Model" *Proceedings of the 24th KKCNN Symposium on Civil Engineering*, Japan.
6. S. Ping Ho* and E. Lin (2010). "Motivating Knowledge Sharing in Communities of Practice." *Proceedings of Engineering Project Organization Conference*, South Lake Tahoe, CA.

7. S. Ping Ho* and E. Lin (2010). "Model for the Internationalization Process of Construction Firms: A Dynamic OLI View." Proceedings of Engineering Project Organization Conference, South Lake Tahoe, CA.
8. S. Ping Ho* and C. Tsui (2010). "When PPP Governance Should not be used: Case Studies of Chunnel and Taiwan High Speed Rail Projects." Proceedings of 2nd Stanford CRGP & Aalto University Joint Seminar on Global Projects, Business Networks and Project Business, Stanford, CA.
9. S. Ping Ho* and C. Tsui (2010). "Model for Legal Principles of Compensation for Errors in Bills of Quantities: A Law and Economic Analysis." Proceedings of Construction Research Congress 2010, ASCE, Banff, Canada.
10. S. Ping Ho* and C. Tsui (2010). "When are Public-Private Partnerships not an Appropriate Governance Structure? Case Study Evidence." Proceedings of . Construction Research Congress 2010, ASCE, Banff, Canada.
11. S. Ping Ho*, C. Pan, C. Yeh, and Y. Hsu (2010). "Characteristics of and Relations Between Housing Cycles and Economic Fluctuations: A Time-Frequency Analysis." Proceedings of the 2nd ReCapNet Conference, Mannheim, Germany. [Only 21 papers were accepted and invited, each with a thirty-minute-long session of presentation and discussion.]
12. Y. Lin and S. Ping Ho, (2010). "Impact of Governance Structure Fit on Performance in Construction Joint Ventures." The 8th International Conference on Construction and Real Estate Management, Brisbane, Australia, 230-235.
13. S. Ping Ho* and C. Tsui (2009). "The Transaction Costs of Public-Private Partnerships: Implications on PPP Governance Design." Proceedings of Lead 2009 Specialty Conference: Global Governance in Project Organizations, South Lake Tahoe, CA.
14. S. Ping Ho, Y. Hsu, and E. Lin (2009). "A Sharing-Focused Model for the Implementation of Knowledge Management System." Proceedings of ICCEM2009 Conference, Austin, TX.
15. S. Ping Ho, H. Wu, and E. Lin (2009). "Model for Partner Selection in Global Projects: A Game Theory Analysis." Proceedings of Lead 2009 Specialty Conference: Global Governance in Project Organizations, South Lake Tahoe, CA. [Keynote paper, invited to give a keynote speech] Proceedings of Lead 2009 Specialty Conference: Global Governance in Project Organizations.]
16. S. Ping Ho*, Y. Hsu, and C. Yeh (2008). "Long-Horizon Predictability of Equity REIT Returns: Is it There?" Proceedings of IREBS 2008 Conference on Real Estate Economics and Finance, Regensburg, Germany. [Only 11 papers were accepted and invited, each with an hour-long session of presentation and discussion].
17. S. Franceschini, C. Tsai, and S. Ping Ho (2008). "Application of Hilbert Huang Transform Method for Analysis of Containment Concentrations in the Niagara River." Proceedings of EWRI Congress, Hawaii, USA.
18. S. Ping Ho*, Y. Hsu, and C. Wang (2008). "How knowledge is shared in organizations: model and empirical evidence." Proceedings of the 11th EASEC, Taipei, TAIWAN.
19. Y. Lin, S. Ping Ho, and H. Wu (2008), "An Empirical Analysis of the Organizational Governance Structure Choices in International Construction Joint Ventures." Proceedings of the 11th EASEC, Taipei, TAIWAN.
20. M. Lin, H. Tserng, S. Ping Ho, and Young, D. L. (2008). "Modeling Predictive Construction Durations for Building Project in Taiwan." Proceedings of the 11th EASEC, Taipei, TAIWAN.
21. S. Ping Ho*, Y. Hsu, and C. Yeh (2008). "Long-Horizon Predictability of Equity REIT Returns: Is it There?" Proceedings of IREBS 2008 Conference on Real Estate Economics and Finance, Regensburg, Germany. [Only 12 papers were accepted and invited, each with a

- forty-minute-long session of presentation and discussion]
22. C. Yu, C. Lin, S. Ping Ho, G. Chen, and H. Luo (2007). "A Performance Evaluation Model of Knowledge Management System with a Knowledge-Growing Pint Mechanism-A Case Study of an Engineering Consulting Firm." Proceedings of 4th Civil Engineering Conference in the Asian Region (CECAR), Taipei.
 23. 楊佳璇、荷世平 (2012) “跨國工程顧問公司在中國之高階經理人本土化策略：制度理論觀點” 第十六屆營建工程與管理研究成果聯合發表會論文集。
 24. 李桓岳、荷世平 (2012) “跨國工程顧問公司在中國之進入模式策略：制度理論觀點” 第十六屆營建工程與管理研究成果聯合發表會論文集。
 25. 阮文山 (2012) “國際聯合承攬之夥伴選擇策略：越南之個案研究” 第十六屆營建工程與管理研究成果聯合發表會論文集。
 26. 許繼元、荷世平 (2011) “跨國企業在中國之經理人本土化個案研究-以營造業為例” 第十五屆營建工程與管理研究成果聯合發表會論文集。
 27. 尹慧雯、荷世平 (2011) “跨國企業在中國之進入策略-以營造業為例” 第十五屆營建工程與管理研究成果聯合發表會論文集。
 28. 彭宇聖、荷世平(2011) “以賽局理論建立備標補償決策模型” 第十五屆營建工程與管理研究成果聯合發表會論文集。
 29. 洪志嘉、荷世平(2011) “營建投資與經濟成長之關聯性-以VAR與小波轉換分析” 第十五屆營建工程與管理研究成果聯合發表會論文集。
 30. T. Lu and S. Ping Ho (2011) “Asymmetric Volatility in the Stock Market and REITs and the Implied Heterogeneous Beliefs.” 第十五屆營建工程與管理研究成果聯合發表會論文集。
 31. 張葳竹、荷世平、林恩霓 (2010) “營建業國際化之速度與規律性之策略影響因子,” 第十四屆營建工程與管理研究成果聯合發表會論文集。
 32. 劉昶甫、荷世平、葉崇熙 (2010) “股票與不動產市場泡沫崩盤之偵測機制-噪音交易與能量觀點,” 第十四屆營建工程與管理研究成果聯合發表會論文集。
 33. 荷世平、林培元 (2010) “超高層大樓施工管理之緊急應變作為-以台北101大樓為例,” 第十四屆營建工程與管理研究成果聯合發表會論文集。
 34. 荷世平、胡榮生 (2010) “基本設計階段成果辦理工程招標之探討-以國道1號五股楊梅段拓寬工程為例,” 第十四屆營建工程與管理研究成果聯合發表會論文集。
 35. Bui, Q. H., Ho, S. Ping, and Tsui, C. (2010) “Issues of PPP Infrastructure Projects in Vietnam A Perspective of Transaction Costs Theory.” 第十四屆營建工程與管理研究成果聯合發表會論文集。
 36. Pan, C.S., Ho, S. Ping, and Yeh, C. (2010) “The Relationship Between Housing Cycles and Economy Fluctuations,” 第十四屆營建工程與管理研究成果聯合發表會論文集 (榮獲營建財務類最佳論文獎)。
 37. Lin, Y., Ho, S. Ping, and Lin, E. (2010) “A Dynamic Eclectic Model of Internationalization Process of Firms in Construction Industry: Theory Development,” 第十四屆營建工程與管理研究成果聯合發表會論文集 (榮獲 大會最佳論文獎)。
 38. Ho, S Ping, Chang, C. (2008) “Financial Limited-Recourse in Public-Private Partnership Projects and Its Implications: A Real Option Based Analysis,” 第十二屆營建工程與管理研究成果聯合發表會論文集。

39. 林敏朝、曾惠斌、荷世平(2008)“建築工程專案工期預估模型建立之研究,”第十二屆營建工程與管理研究成果聯合發表會論文集。
40. 毛昭凱、荷世平 (2008)“營建產業國際化驅動因素與進入策略之研究,”第十二屆營建工程與管理研究成果聯合發表會論文集。
41. 黃德元、荷世平 (2008)“不動產投資信託 (REITs) 風險因子之研究-以美國市場為例,”第十二屆營建工程與管理研究成果聯合發表會論文集。
42. 周展民、荷世平、許耀文 (2007)“不動產投資信託之報酬及股利成長的可預測性,”第十一屆營建工程與管理研究成果聯合發表會論文集。
43. 王中杰、荷世平 (2007)“工程顧問公司知識分享與激勵制度之實證研究,”第十一屆營建工程與管理研究成果聯合發表會論文集。
44. 蘇惠秋、荷世平 (2007)“以不動產投資信託基金(REIT)投資特許開發區之可行性研究-以高鐵新竹站為例,”第十一屆營建工程與管理研究成果聯合發表會論文集。
45. 謝承翰、荷世平 (2007)“Empirical Study of the Location Behaviors for Cement and Cement Product Manufacturing Industries.”第十一屆營建工程與管理研究成果聯合發表會論文集。
46. 周易陵、荷世平 (2007)“機關委託專案管理技術服務費之研究-以鐵路地下化工程為例,”第十一屆營建工程與管理研究成果聯合發表會論文集。
47. 李宗白、荷世平 (2007)“PCM廠商服務品質與滿意度之研究-以公立醫療機構為例,”第十一屆營建工程與管理研究成果聯合發表會論文集。
48. 黎偉銘、荷世平 (2007)“我國促進民間參與公共建設制度採Green PPP之研究,”第十一屆營建工程與管理研究成果聯合發表會論文集。

C. 學術章節 (Review articles and book chapters)

1. S. Ping Ho* (2013). Chapter 8: Game Theory and PPP. In: P. de Vries & E. Yehoue (Eds.) The Routledge Companion to Public-Private Partnerships, pp.175-206 (31pages), Routledge, Abingdon, Oxon, UK. NSC 99-2628-E-002-023.
2. S. Ping Ho* (2011). Chapter 7: Globalization. In: P. Chinowsky & A. Songer (Eds.) Organization Management in Construction, pp.95-113 (18 pages), Spon Press, Abingdon, Oxon, UK.
3. S. Ping Ho* (2008). Chapter 15: Government Policy on PPP Financial Issues: Bid Compensation and Financial Renegotiation. In: A. Akintoye & M. Beck (Eds.) Policy, Finance and Management for Public-Private Partnerships, pp.267-300 (33pages). Wiley-Blackwell, Chichester, West Sussex, UK.

專書及專書論文

1. Ho, S. Ping (2011) “Chapter 7: Globalization” in Organization Management in Construction, pp. 95-113. Edited by Professor P. S. Chinowsky and Professer A. D. Songer, Spon Press, New York, NY.
2. Ho, S. Ping (2011) “Chapter 12: Game Theory and PPP” in The Routledge Companion to Public-Private Partnerships. Edited by Professor Piet de Vries and Etienne Yehoue, Taylor and Francis, In Print. (35 pages)

陳柏翰 教授 Po-Han Chen

Professor

學歷/ 美國普渡大學博士

Ph.D., Purdue Univ., USA

專長/ IT & AI applications, image processing, construction optimization & management,

IFC, financial

Refereed Journal Papers

A. Articles in Refereed Journals (*: Corresponding author)

1. Chen, P.H., Kan, M.S., and Chang, L.M. (2015). "Sustainable Design for Hospitals in Taiwan." International Journal of Civil Engineering and Architecture, Vol. 1, No. 1, August 2015, pp. 1-6.
2. Chowdhury, A.N., Chen, P.H.*, and Tiong, R.L.K. (2015). "Credit Enhancement Factors for the Financing of Independent Power Producer (IPP) Projects in Asia." International Journal of Project Management, Vol. 33, No. 7, October 2015, pp. 1576-1587. (SSCI/EI)
3. Chen, P.H., Ong, C.F., and Hsu, S.C* (2016). "The Linkages between Internationalization and Environmental Strategies of Multinational Construction Firms." Journal of Cleaner Production, Vol. 116, March 2016, pp. 207-216. (SCI/EI)
4. Chen, P.H., Ong, C.F., and Hsu, S.C* (2016). "Understanding the Relationships between Environmental Management Practices and Financial Performances of Multinational Construction Firms." Journal of Cleaner Production, Vol. 139, December 2016, pp. 750-760. (SCI/EI)
5. Chen, P.H.* and Tsay, I.S. (2017). "Transmission Network Price Setting Model for the Promotion of Liberalized Market for the Power Industry in Taiwan." Energy Policy, Vol. 104, May 2017, pp. 100-111. (SCI/SSCI/EI)
6. Chen, P.H.* and Nguyen, T.C. (2017). "Integrating Web Map Service and Building Information Modeling for Location and Transportation Analysis in Green Building Certification Process." Automation in Construction, Vol. 77, May 2017, pp. 52-66. (SCI/EI)
7. Li, Y.*, Chen, X., Wang, X., Xu, Y., and Chen, P.H. (2017). "A Review of Studies on Green Building Assessment Methods by Comparative Analysis." Energy and Buildings, Vol. 146, July 2017, pp. 152-159. (SCI/EI)
8. Kao, C.Y., Lin, M.F., Nguyen, N.T., Tsai, H.H., Chang, L.M., Chen, P.H., and Chang, C.T.* (2018). "Hexamethyldisilazane Removal with Mesoporous Materials Prepared from Calcium Fluoride Sludge." Journal of Nanoscience and Nanotechnology, Vol. 18, No. 5, May 2018, pp. 3314-3319. (SCI/EI)

9. Chen, P.H.* and Peng, T.T. (2018). "Value-at-Risk Model Analysis of Taiwanese High-tech Facility Construction." *Journal of Management in Engineering*, ASCE, Vol. 34, No. 2, March 2018, DOI: [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000585](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000585). (SCI/EI)
10. Shen, H.K., Chen, P.H.*, and Chang, L.M. (2018). "Human-Visual-Perception-Like Intensity Recognition for Color Rust Images Based on Artificial Neural Network." *Automation in Construction*, Vol. 90, June 2018, pp. 178-187. (SCI/EI)
11. Lin, Y.H., Chen, Q., Liao, P.C.*, Chen, P.H., and Cheng, S. (2018). "The Moderating Effect of Guanxi on the Dynamic Capacity and Competitive Advantage of Chinese International Contractors." *Advances in Civil Engineering*, Vol. 2018, Article ID 3638152, 17 pages, 2018, DOI: <https://doi.org/10.1155/2018/3638152>. (SCI)
12. Chen, P.H.* and Nguyen, T.C. (2019). "A BIM-WMS Integrated Decision Support Tool for Supply Chain Management in Construction." *Automation in Construction*, Vol. 98, February 2019, pp. 289-301. (SCI/EI)
13. Lin, M.F., Nguyen, N.T., Chang, C.T.*, and Chen, P.H.* (2019). "Preparation of Fe-SBC from Urban Sludge for Organic and Inorganic Arsenic Removal." *Journal of Nanoscience and Nanotechnology*, Vol. 19, No. 5, May 2019, pp. 2658-2663. (SCI/EI)
14. Nguyen, Q.L. and Chen, P.H.* (2019). "Statistical Analysis of Risks for Construction Projects in Vietnam: From Private Owners' Perspective." *SSRG International Journal of Civil Engineering (SSRG-IJCE)*, Vol. 6, No. 1, January 2019, pp. 13-21, ISSN: 2348-8352.
15. Lei, K.T., Tang, J.S., and Chen, P.H.* (2019). "Numerical Simulation and Experiments with Green Roofs for Increasing Indoor Thermal Comfort." *Journal of the Chinese Institute of Engineers*, Vol. 42, DOI: <https://doi.org/10.1080/02533839.2019.1585207>. (SCI/EI)
16. Liu, T.Y.*, Chen, P.H., and Chou, N.N.S. (2019). "Sustainability-based Construction of the Restoration Projects for the Guguan Hydropower Station." *Electronic Journal of Structural Engineering*, ISSN 1443-9255, accepted. (ESCI/EI)
17. Shau, H.J., Liu, T.Y., Chen, P.H.*, and Chou, N.N.S. (2019). "Sustainability Practices for the Suhua Highway Improvement Project in Taiwan." *International Journal of Civil Engineering*, Vol. 17, No. 10, October 2019, pp. 1631-1641, DOI: <https://doi.org/10.1007/s40999-019-00415-4>. (SCI/EI)
18. Liu, T.Y., Chen, P.H.*, and Chou, N.N.S. (2019). "Comparison of Assessment Systems for Green Building and Green Civil Infrastructure." *Sustainability (Special Issue: Sustainable Habitat)*, Vol. 11, No. 7, April 2019, DOI: <https://doi.org/10.3390/su11072117>. (SCI/SSCI)
19. Lin, Y.H., Shi, B, Chen, P.H.*, Xu, Z., and Liu, H. (2019). "A Grey-BPNN Model for Evaluating the Competitiveness of Chinese Contractors in the High-Speed Rail Market in Europe." *Advances in Civil Engineering*, Vol. 2019, May 2019, Article ID 5858094, 19 Pages, DOI: <https://doi.org/10.1155/2019/5858094>. (SCI)
20. Li, Y.*, Song, H., Sang, P., Chen, P.H., and Liu, X. (2019). "Review of Critical Success Factors (CSFs) for Green Building Projects." *Building and Environment*, Vol. 158, July 2019, pp. 182-191. (SCI/EI)
21. Tsay, I.S. and Chen, P.H.* (2019). "A Dual Market Structure Design for the Reform of an Independent Power Grid System – The Case of Taiwan." *Energy Reports*, Vol. 5, November 2019, pp. 1603-1615. DOI: <https://doi.org/10.1016/j.egyr.2019.11.001>. (SCI/EI)

22. Hsieh, C.M., Chen, C.J., Peng, T.T., Chen, S., and Chen, P.H. (2019). "The Relationship between Workplace Justice and Self-reported Occupational Accidents in Construction Employees of Taiwan." *Industrial Health*, November 2019, DOI: <https://doi.org/10.2486/indhealth.2019-0131>. (SCI)

B. ISI-indexed conference papers:

1. Chowdhury, A.N.*, Chen, P.H., and Tiong, R.L.K. (2015). "Credit Enhancement and Its Risk Factors for IPP Projects in Asia: An Analysis by Network Theory." *Procedia Engineering*, Vol. 125, pp. 133-142. (EI)
2. Chen, P.H.* and Nguyen, T.C. (2016). "Integrating BIM and Web Map Service (WMS) for Green Building Certification." *Procedia Engineering*, Vol. 164, pp. 503-509. (EI)

Refereed Conference Papers

1. Chen, P.H. and Nguyen, T.C. (2015). "Utilizing Building Information Modeling (BIM) in Green Building Certification." *Proceedings of the Fourth International Congress on Natural Sciences and Engineering (ICNSE 2015)*, May 7-9, 2015, Kyoto, Japan.
2. Chen, P.H. and Nguyen, T.C. (2015). "Integration of Building Information Modeling (BIM) and LEED's Location and Transportation Category." *Proceedings of the 32nd International Symposium on Automation and Robotics in Construction and Mining (ISARC 2015)*, June 15-18, 2015, Oulu, Finland.
3. Ong, C.F., Chen, P.H., and Hsu, S.C. (2015). "Internationalization and Environmental Strategies of Multinational Construction Firms" *Proceedings of the Creative Construction Conference 2015 (CCC2015)*, June 21-24, 2015, Krakow, Poland.
4. Chowdhury, A.N. and Chen, P.H. (2015). "Credit Enhancement and its Risk Factors for IPP Projects in Asia: An Analysis by Network Theory." *Proceedings of the 6th International Conference on Construction Engineering and Project Management (ICCEPM 2015)*, October 11-14, 2015, Busan, Korea.
5. Chen, P.H. and Su, C.L. (2015). "Development of an Optimized Value Engineering System for the Retail Industry." *Proceedings of the 28th KKHTCNN Symposium on Civil Engineering (KKHTCNN 2015)*, November 16-18, 2015, Bangkok, Thailand, pp. 188. (Abstract)
6. Chen, P.H. and Nguyen, T.C. (2015). "A Framework to Enhance BIM Application in Green Building Certification Analyses." *Proceedings of the 28th KKHTCNN Symposium on Civil Engineering (KKHTCNN 2015)*, November 16-18, 2015, Bangkok, Thailand.
7. Hung, S.M., Chen, P.H., and Yao, D.T.C. (2016). "The Trend of Risk Management for Construction industry in Taiwan." *Proceedings of the 14th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-14)*, January 6-8, 2016, Ho Chi Minh City, Vietnam, pp. 472-473. (Abstract)
8. Chen, P.H. and Chiu, Y.C. (2016). "Appraisal of Green Buildings with the Help of BIM – Taking Residential Buildings for Example." *Proceedings of the 14th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-14)*, January 6-8, 2016, Ho Chi Minh City, Vietnam, pp. 260-261. (Abstract)

9. Chen, P.H. and Lin, M.F. (2016). "Summarized Facility Energy Consumption in 200mm and 300mm fabs for the Semiconductor Industry in Taiwan." Proceedings of the 14th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-14), January 6-8, 2016, Ho Chi Minh City, Vietnam, pp. 461-462. (Abstract)
10. Chen, P.H. and Nguyen, T.C. (2016). "Integrating BIM and Web Map Service (WMS) for Green Building Certification." Proceedings of the Creative Construction Conference 2016 (CCC 2016), June 25-28, 2016, Budapest, Hungary, pp. 606-611.
11. Nguyen, T.C. and Chen, P.H. (2017). "A peer-to-peer reviewing framework for selecting construction material suppliers using the integration of Building Information Modeling and Web-Map Service." Proceedings of the World Sustainable Built Environment Conference 2017 (WSBE 2017), June 5-7, 2017, Hong Kong, China.
12. Chiu, Y.C. and Chen, P.H. (2017). "Building Carbon Footprint (BCF) Evaluation for Social Amenities and Education Center in Taipei." Proceedings of the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan.
13. Perng, N.H., Bai, B.S., Chen, P.H., Han, J.Y., Jiang, M.Y., Huang, J.H., Su, C.W., and Chen, P.Y. (2017). "Automatic Generation of 3D Models from UAV-captured Image Data for Immersive VR Applications." Proceedings of the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan.
14. Liu, W.T., Bai, B.S., and Chen, P.H. (2017). "Development of Smartphone Application for Real-Time Steel Rust Recognition." Proceedings of the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan.
15. Liao, J.M., Chang, L.M. and Chen, P.H. (2017). "Intelligent and Green Building for Sustainability (A Case Study of Central Taiwan Innovation Campus)." Proceedings of the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan.
16. Liu, T.Y., Ni, J.C., and Chen, P.H. (2017). "Enhancing the Safety Management of NATM Using the Tunnel Seismic Prediction (TSP) Method." Proceedings of the 30th International Symposium of KKHTCNN, November 2-4, 2017, Taipei, Taiwan.
17. Liu, T.Y., Chen, P.H., and Chou, N.S. (2017). "Practice on Sustainability of Infrastructure with the Suhua Highway Improvement Project as an Example." Proceedings of the International Symposium on Life-cycle Engineering and Sustainability of Infrastructure (ISLES2017), November 10-11, 2017, Taipei, Taiwan.
18. Liu, T.Y., Chen, P.H., and Chou, N.S. (2017). "Disaster Prevention and Carbon Reduction Effectiveness of a Special Retaining Method for Excavation." Proceedings of the HKIE-IEM-CIE Tripartite Seminar 2017 – Geotechnical Engineering Solutions for Natural Disaster Mitigation, December 12, 2017, Hong-Kong.
19. Kao, C.Y., Nguyen, N.T., Lin, M.F., Tsai, H.H., Chang, C.T., Chang, L.M., and Chen, P.H. (2018). "Preparation of Iron Mesoporous Catalysis from Hazardous Waste for Acetone Treatment." Proceedings of 2018 IEEE International Conference on Applied System Innovation (IEEE-ICASI), April 13-17, 2018, Chiba, Tokyo, Japan. (This paper received the Best Conference Paper Award from IEEE-ICASI 2018.)
20. Chen, P.H. and Nguyen, T.C. (2018). "A Decision-Supporting Tool for Selecting a Construction Material Regarding Its Location Aspect Using the Integration of Building

Information Modeling and Web-Map Services.” Proceedings of 31st KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.

21. Chen, S.K. and Chen, P.H. (2018). “Corrosion Recognition for Steel Bridges Using Convolutional Neural Network (CNN).” Proceedings of 31st KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
22. Dao, T.N. and Chen, P.H. (2018). “Legal Issues in the Integration of Building Information Modeling (BIM) into Construction Contracts.” Proceedings of 31st KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
23. Liu, T.Y., Chen, P.H., and Chou, N.S. (2018). “Case study of soil improvement under a rigid pavement airport runway.” Proceedings of 31st KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
24. Liu, T.Y., Chen, P.H., and Chou, N.S. (2018). “Sustainability-based Construction of the restoration projects for the Guguan hydropower station.” Proceedings of the 5th International Conference on Civil Engineering (ICCE2018), December 20-21, 2018, Nanchang, China.
25. Lin, K.S. and Chen, P.H. (2019). “Applying HSV Color Model to the Development of Handheld-Device-Based Steel Rust Image Recognition System (HSV 色彩模型應用於手持裝置鋼材鏽蝕影像辨識系統開發).” Proceedings of the 23rd Symposium on Construction Engineering and Management (SCEM 2019; 第 23 屆營建工程與管理學術研討會), July 4, 2019, Taichung, Taiwan. [This paper received the Best Paper Award (特優論文獎) in SCEM 2019.]
26. Liu, T.Y., Chen, P.H., Chou, N.N.S., Chou, M.Y., Lin, R.J.C., and Lo, H.T. (2019). “Environmental Sustainability Approaches Adopted for Anhsin Bridge Construction of Ankeng Metro System in New Taipei City in Taiwan.” Proceedings of the 2019 International Conference on Water Resource and Environmental Engineering (ICWREE 2019), August 22-23, 2019, Singapore. DOI: <https://doi.org/10.1051/e3sconf/201911700013>.
27. Cheng, H.Y. and Chen, P.H. (2019). “Promoting Urban Renewal through the Application of Security Token Offering and Building Information Modeling (BIM).” Proceedings of 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea.
28. Ko, H.L. and Chen, P.H. (2019). “Application of Blockchain in Construction Industry Loans.” Proceedings of 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea.
29. Lin, B.L. and Chen, P.H. (2019). “Automatic BIM Dimension Adjustment for Feng Shui Using the “Luban Ruler” Standard.” Proceedings of 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea.
30. Osorio Carrasco, M.D., Derbes, E.R., and Chen, P.H. (2019). “IRENO-ARCHITRECTURE: A Possible Adaption of Architecture for Peace in Honduras.” Proceedings of 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea.
31. Liu, T.Y., Chou, N.N.S, and Chen, P.H. (2019). “Case Study on Slope Stabilization by Bio-engineering in Taiwan – National Chi-Nan University.” Proceedings of 2019 Congres International de Geotechnique – Ouvrages – Structures (CIGOS 2019), October 31-November 1, 2019, Hanoi, Vietnam.

Patents:

- Computer-Aided System for Green Buildings, Taiwanese patent (Patent No.: I628612), patent period: 1 July 2018 to 21 July 2035.

謝尚賢 教授 Shang-Hsien Hsieh

Professor

學歷/ 美國康乃爾大學博士

Ph.D., Cornell University

專長/ 工程資訊管理、資訊系統整合、計算力學

Engineering Information Management, Information System Integration, Computational Mechanics

期刊論文 (Journal Paper)

A. 期刊論文

經學術審查期刊論文

1. Lin, S. Y., Y. H. Chin, F. L. Yang, J. F. Lin*, J. J. Hu, C. S. Chen, and S. H. Hsieh (2015). "A Unified Wall-Boundary Condition for the Lattice Boltzmann Method and its Application to Force Evaluation," Journal of Mechanics, Vol. 31, Issue 1, 55-68, DOI:10.1017/jmech.2014.80. [SCI/EI]
2. Luo, W. L., F. L. Yang*, C. S. Chen, and S. H. Hsieh (2015). "Studying the Weak Effect of Particle Friction on the Velocity Profile of Steady Dry Granular Flows in a Rotating Drum," Granular Matter, Vol. 17, Issue 6, pp 717-726, DOI 10.1007/s10035-015-0592-y. [SCI/EI]
3. 莊明介、謝尚賢*、吳安傑（2015），“實驗數據自動化參數擬合方法之研究-以 BRB 實驗為例”，結構工程，第 30 卷，第 4 期，第 79-106 頁。
4. Lin, S. Y., Y. C. Chen*, F. L. Yang, C. S. Chen, and S. H. Hsieh (2016). "A Parallel VOF IB Pressure-Correction Method for Simulation of Multiphase Flows," Applied Mathematical Modeling, Vol. 40, Issue 3, 1800-1815, DOI:10.1016/j.apm.2015.08.014). [SCI/EI]
5. Chi, N. W., K. Y. Lin*, N. El-Gohary, and S. H. Hsieh (2016). "Evaluating the Strength of Text Classification Categories for Supporting Construction Field Inspection," Automation in Construction, Vol. 64, 78-88. [SCI/EI]
6. Tserng, H. P.*., M. H. Lee, S. H. Hsieh, and H. L. Liu (2016). "The Measurement Factor of Employee Participation for Knowledge Management System in Engineering Consulting Firms," Journal of Civil Engineering and Management, Vol. 22, Issue 2, 154-167 (Published online: August 27, 2015; DOI:10.3846/13923730.2014.897963). [SCI]
7. Chegu Badrinath, A., Y. T. Chang, and S. H. Hsieh* (2016). "A Review of Tertiary BIM Education for Advanced Engineering Communication with Visualization," Visualization in Engineering, 2016, 4:9, doi: 10.1186/s40327-016-0038-6 (Published online: June 16, 2016).
8. Kuo, H. J., S. H. Hsieh*, R. C. Guo, and C. C. Chan (2016). "A Verification Study for Energy Analysis of BIPV Buildings with BIM," Energy and Buildings, Vol. 130, 676-691. [SCI/EI]

9. Chen, Y. C., H. L. Chi, S. C. Kang*, and S. H. Hsieh (2016). "Attention-Based User Interface Design for a Tele-Operated Crane," Computing in Civil Engineering, Vol. 30, Issue 3, 04015030 (Published online: May 14, 2015; DOI: [http://doi.org/10.1061/\(ASCE\)CP.1943-5487.0000489](http://doi.org/10.1061/(ASCE)CP.1943-5487.0000489)) [SCI/EI]
10. Chong, H.Y.*, S. L. Fan, M. Sutrisna, S. H. Hsieh, and C. M. Tsai (2017). "Preliminary Contractual Framework for BIM-enabled Projects," Journal of Construction Engineering and Management, ASCE, Vol. 143, Issue 7, 04017025 (Published online: March 07, 2017; DOI: 10.1061/(ASCE)CO.1943-7862.0001278). [SCI/EI]
11. Bussey, M.*, M. M. Song, and S. H. Hsieh (2017). "Anticipatory Imagination as a Tool for Rethinking Engineering Education," Journal of Professional Issues in Engineering Education and Practice, Vol. 143, No. 4, 02517004 (Published online: June 27, 2017; DOI: 10.1061/(ASCE)EI.1943-5541.0000342). [SCI/EI]
12. Chuang, M. C., S. H. Hsieh*, K. C. Tsai, C. H. Li, K. J. Wang, and A. C. Wu (2018). "Parameter Identification for On-line Model Updating in Hybrid Simulations Using a Gradient-based Method," Earthquake Engineering and Structural Dynamics, Vol. 47, Issue 2, 269–293. (Available online: August 30, 2017; <https://doi.org/10.1002/eqe.2950>). [SCI/EI]
13. 郭瀚嶸、紀乃文、謝尚賢 (2018), "導入 BIM 於藍綠設計框架進行建築設計階段資訊整合", 中國土木水利工程學刊, 第 30 卷, 第 2 期, 第 83-92 頁。[EI] [獲中國土木水利工程學會 108 年度論文獎]
14. Lai, S. Y., L. G. Yu, S. H. Hsieh, M. M. Song, and T. S. Chang (2019). "The Development and Application of Co-design Modules for Multidisciplinary Collaboration and Facilitating Creativity: An Experience from D-School@NTU," International Journal of Information and Education Technology, Vol. 9, No. 2, 82-91, February 2019. [MOST 105-2511-S-002-016-MY3] [EI]
15. Amarnath CB and S. H. Hsieh* (2019). "An Empirical Approach to Identify Operational Critical Success Factors for BIM Projects," Journal of Construction Engineering and Management, ASCE, Vol. 145, Issue 3, March 2019. (Published online: December 24, 2018; [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001607](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001607)). [SCI/EI]
16. Chi, N. W., Y. H. Jin, and S. H. Hsieh* (2019). "Developing Base Domain Ontology from a Reference Collection to Aid Information Retrieval," Automation in Construction, Vol. 100, 180-189 (<https://doi.org/10.1016/j.autcon.2019.01.001>). [SCI/EI]

(*) Corresponding author

其它期刊論文

1. 吳翌禎、謝尚賢 (2015), "BIM 應用 不可不知 COBie 標準", 营建知讯, 第 384 期, 第 56-63 頁。
2. 朱峻平、林泓邦、周建成、謝尚賢 (2015), "擴展 BIM 至空間資料庫之作法與應用", 营建知讯, 第 385 期, 第 57-63 頁。
3. 吳翌禎、謝尚賢 (2015), "BIM 於設施維護管理之機會與挑戰", 营建知讯, 第 386 期, 第 47-52 頁。
4. 謝尚賢 (2015), "BIM 發展應用 業主角色關鍵", 营建知讯, 第 389 期, 第 59-62 頁。

5. 謝尚賢 (2015), "從最新調查報告 看 BIM 應用發展", 營建知訊, 第 390 期, 第 63-67 頁。
6. 張國儀、謝尚賢 (2015), "BIM 教科書：機電篇 九月出版", 營建知訊, 第 391 期, 第 61-64 頁。
7. 柳儒錚、謝尚賢 (2015), "英國 NBS 之 BIM Toolkit 介紹", 營建知訊, 第 392 期, 第 61-70 頁。
8. 張國儀、謝尚賢 (2015), "BIM 課程上線 躍上國際教學平台", 營建知訊, 第 393 期, 第 62-65 頁。
9. 張國儀、謝尚賢 (2015), "英倫見聞筆記：上行下效推動 BIM", 營建知訊, 第 394 期, 第 61-69 頁。
10. 張國儀、謝尚賢 (2015), "BIM 技術優良獎 五案勝出", 營建知訊, 第 395 期, 第 62-66 頁。
11. 張國儀、謝尚賢 (2016), "<透過案例演練學習 BIM>系列之三：應用篇 三月上架", 營建知訊, 第 396 期, 第 72-75 頁。
12. 郭瀚嶸、謝尚賢 (2016), "應用 BIM 技術整合綠化與水資源系統設計", 臺灣建築學會會刊雜誌, 第 82 期, 第 6-12 頁。
13. 紀乃文、謝尚賢 (2016), "BIM 應用新時代：淺談 ifcOWL", 營建知訊, 第 397 期, 第 64-69 頁。
14. 范素玲、謝尚賢 (2016), "國內 BIM 契約問題探討與建議", 營建知訊, 第 399 期, 第 50-59 頁。
15. 王韋勳、謝尚賢 (2016), "橋梁工程 實務課程 BIM 應用", 營建知訊, 第 401 期, 第 64-69 頁。
16. 謝尚賢、蔡沅澔 (2016), "BIM 總整專題課程 下月初試啼聲", 營建知訊, 第 403 期, 第 82-85 頁。
17. 劉以晨、謝尚賢 (2016), "COBie 應用於智慧建築之設施管理", 營建知訊, 第 405 期, 第 59-64 頁。
18. 李伯青、謝尚賢 (2016), "BIM 技術輔助施工品質查驗作業", 營建知訊, 第 406 期, 第 59-67 頁。
19. 周敬淳、謝尚賢 (2016), "BIM 知識沙龍 交流新場域", 營建知訊, 第 407 期, 第 63-68 頁。
20. 謝尚賢 (2017), "淺談 BIM 成熟度評估", 營建知訊, 第 409 期, 第 61-64 頁。
21. 謝尚賢 (2017), "NIBS 級業主的國家 BIM 指引", 營建知訊, 第 410 期, 第 71-74 頁。
22. 周敬淳、謝尚賢 (2017), "基地綠化量估算 BIM 創造新機會", 營建知訊, 第 413 期, 第 55-59 頁。謝尚賢、魏嘉盈、王志源、簡榮鈞 (2017), "翻轉吧！BIM 課程", 工程, 第 90 卷, 第 4 期, 第 14-25 頁。
23. 許舜翔、陳以文、謝尚賢 (2017), "綠建築規範自動化計算 BIM 技術應用", 營建知訊, 第 416 期, 第 51-55 頁。
24. 許皓威、簡維廷、周敬淳、柳儒錚、謝尚賢 (2017), "應用 BIM 於橋梁施工之初步探討", 營建知訊, 第 417 期, 第 65-71 頁。

25. 周敬淳、謝尚賢 (2017), "歐盟 BIM 起飛 從公部門導入開始", 營建知訊, 第 419 期, 第 79-85 頁。
26. 謝尚賢 (2018), "BIM 專業人力認證 制度待研議", 營建知訊, 第 420 期, 第 79-81 頁。
27. 康仕仲、謝尚賢 (2018), "BIM 線上課程 工程教育南向", 營建知訊, 第 422 期, 第 56-59 頁。
28. 楊懿、張悠瑩、謝尚賢、韓仁毓、黃隆茂 (2018), "智慧工地即時查驗系統 應用 BIM、AR 與影像敷貼技術", 營建知訊, 第 424 期, 第 57-62 頁。
29. 張引玉、謝尚賢 (2018), "BIM 與 GIS 整合應用 回顧與展望", 營建知訊, 第 425 期, 第 61-66 頁。
30. 柳儒錚、謝尚賢 (2018), "淺談業主資訊需求書對 BIM 應用的重要性", 營建知訊, 第 427 期, 第 70-76 頁。
31. 謝尚賢 (2018), "淺談從 BIM 到智慧城市", 營建知訊, 第 428 期, 第 64-66 頁。
32. 李秋明、謝尚賢 (2018), "應用視覺化工具模擬建物智慧化防禦-輔以 C4ISR 之概念", 土木水利, 第 45 卷, 第 5 期, 第 82-87 頁。DOI: 10.6653/MoCICHE.201810_45(5).0011
33. 謝尚賢、劉欽正、黃隆茂、盧祥偉 (2018), "台灣 BIM 聯盟 2018 越南參訪交流", 營建知訊, 第 430 期, 第 55-60 頁。
34. 謝尚賢 (2019), "睽違 7 年, BIM Handbook 新版問世", 營建知訊, 第 433 期, 第 52-55 頁。
35. 許舜翔、劉鎧禎、林子皓、周敬淳、謝尚賢、曾榮川、李育謙 (2019), "橋梁於備標階段外觀塑形自動化之初步研究", 營建知訊, 第 434 期, 第 66-73 頁。
36. 謝尚賢、張國儀 (2019), "2019 BIM 基本能力認證 7 月 5 日首次登場", 營建知訊, 第 436 期, 第 49-51 頁。
37. 郭韋良、董自然、謝尚賢 (2019), "從 2019 ISARC 看營建自動化發展方向", 營建知訊, 第 437 期, 第 62-70 頁。
38. 周敬淳、郭韋良、謝尚賢 (2019), "2019 i3CE 會議有感：城市資訊整合技術之分享", 營建知訊, 第 438 期, 第 46-51 頁。
39. 莊明介、謝尚賢、葉芳耀、詹麒璋、黃朝揚 (2019), "太陽光電系統鋁合金棚架行支撐架結構分析與設計", 工業材料, 393 期, 第 146-153 頁。
40. 許皓威、謝尚賢 (2019), "應用 AR 結合 BIM 技術於鋼筋查驗之初探", 營建知訊, 第 440 期, 第 57-61 頁。
41. 許舜翔、潘瑀涵、謝尚賢 (2019), "從 KKHTCNN 研討會看資訊技術在土木工程之應用", 營建知訊, 第 442 期, 第 58-61 頁。

B. 研討會論文

- Lin, J. F., S. R. Lin, F. L. Yang, S. H. Hsieh, and C. S. Chen (2015). "Fraction Direct-Forcing Immersed-Boundary Method with Subgrid Enrichment," Proceedings of the 18th International Conference on Finite Elements in Flow Problems (FEF 2015), March 16-18, 2015, Taipei, Taiwan (invited talk).

2. Yang, F. L., S. R. Lin, C. S. Chen, S. H. Hsieh (2015). "A Flow-Particle Interaction Model for the Onset of Quicksand," Proceedings of the 18th International Conference on Finite Elements in Flow Problems (FEF 2015), 16-18 March 2015, Taipei, Taiwan (invited talk).
3. 蔡柏良、白博升、郭榮欽、謝尚賢 (2015), "BIM 模型室內環境持續監測及即時回饋離型系統", 第 19 屆營建工程與管理學術研討會論文集, 2015 年 7 月 3 日, 臺灣高雄, 1006-1014。
4. Chi, N. W., Y. H. Jin, and S. H. Hsieh (2015). "Applying a Reference Collection to Develop a Domain Ontology for Supporting Information Retrieval," Proceedings of the 2015 ASCE International Workshop on Computing in Civil Engineering, June 21-23, 2015, Austin, TX, USA, 445-452.
5. 郭瀚嶸、謝尚賢(2015), “應用 BIM 於都市水資源與植被系統整合的設計架構”，第十一屆中國城市住宅研討會論文集，2015 年 7 月 24-25 日，中國青島。
6. Hsieh, S. H., A. Chegu Badrinath, and Y. H. Tsai, "On Teaching BIM Technology in Civil Engineering," Proceedings of 2015 International Conference on Innovative Production and Construction, July 28-31, 2015, Perth, Australia, 27-30.
7. 徐偉哲、張佐安、楊舒涵、郭瀚嶸、謝尚賢 (2015), "綠屋頂 BIM 模型建置方式之比較分析" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 59-1, 2015 年 9 月 3-4 日, 臺灣台中市。
8. 劉以晨、陳以文、郭榮欽、謝尚賢 (2015), "能善用 BIM 雲端平台之設計檢討流程" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 47-1, 2015 年 9 月 3-4 日, 臺灣台中市。
9. 蕭又齊、吳柏勳、郭瀚嶸、謝尚賢 (2015), "綠屋頂資訊分享平台之建置研究-以台大校園為例" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 62-1, 2015 年 9 月 3-4 日, 臺灣台中市。
10. 張慰慈、謝尚賢 (2015), "應用連續—離散力學耦合系統於纜索系統動力行為分析" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 49-1, 2015 年 9 月 3-4 日, 臺灣台中市。
11. 簡榮均、謝尚賢 (2015), "應用 BIM 技術於建築節能與通風分析之案例研究" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 23-1, 2015 年 9 月 3-4 日, 臺灣台中市。
12. 郭子維、連嘉玟、張碩羽、張耀主、謝尚賢 (2015), "應用 BIM 技術於捷運系的人流分析—以台北捷運東門站為例" , 2015 電子計算機於土木水利工程應用研討會論文集, 論文編號: 63-1, 2015 年 9 月 3-4 日, 臺灣台中市。
13. Huang, C.H., and S. H. Hsieh (2015). "A Case Study on Assessing the Productivity of a BIM team in a Construction Company" proceedings of the 6th International Conference on Construction Engineering and Project Management, Busan, Korea, October 11-14, 2015, Paper No.FP-159.
14. Chang, W. T., and S. H. Hsieh (2015). "Modelling Contact and Collapse Behavior of Neighboring Trusses with Coupled Continuous-discontinuous Method," Proceedings of the Fifth Structural Engineers World Congress, October 19-22, 2015, Singapore.
15. Chang, W. T., and S. H. Hsieh (2015). "Design of a Coupled Continuous-Discontinuous Simulation Platform based on VFIFE-DEM Method," Proceedings of the First Computational Mechanics Conference in Taiwan, October 22-23, 2015, Taipei, Taiwan, Paper No. 143.

16. Chen, M. D., S. Y. Lai, M. M. Song, and S. H. Hsieh (2015). "Development of an Interdisciplinary Participatory Design Course with Futures Thinking for Engineering Students," Proceedings of the Fourth International Workshop on Design in Civil and Environmental Engineering, October 30-31, 2015, Taipei, Taiwan, 41-48. [NSC 102-2511-S-002-011-MY3]
17. Chang, S. Y., H. C. Wu, H. J. Kuo, and S. H. Hsieh (2015). "Progress Report on Green Roof Research by a Student BIM Study Society at National Taiwan University," Proceedings of the 28th KKHTCNN Symposium on Civil Engineering, November 16-18, 2015, Bangkok, Thailand.
18. Song, M. M., and S. H. Hsieh (2016). "Incorporating Futures Thinking in a Civil Engineering Cornerstone Course," Proceedings of the 123rd Annual Conference of American Society of Engineering Education, Paper No. 15506, June 26-29, 2016, New Orleans, USA.
19. Chang, Y. T., A. Chegu Badrinath, and S. H. Hsieh (2016). "A Preliminary Study on Current Practices and Barriers in Design Analysis and Decision Making at Conceptual Design Stage of Taiwan's Green Building Projects," Proceedings of the Integrated Design in Architecture, Engineering and Construction (AEC) International Conference (ID@50), June 29 - July 1, 2016, University of Bath, Bath, UK.
20. Chegu Badrinath, A., Y. T. Chang, E. Lin, S. H. Hsieh, and B. Zhao (2016). "A Preliminary Study on BIM Enabled Design Warning Analysis in T3A Terminal of Chongqing Jiangbei International Airport," Proceedings of the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE 2016), Paper No. 138, July 6-8, 2016, Osaka, Japan.
21. Chegu Badrinath, A., Y. T. Chang, and S. H. Hsieh (2016). "An Overview of Global Research Trends in BIM from Analysis of BIM Publications," Proceedings of the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE 2016), Paper No. 140, July 6-8, 2016, Osaka, Japan.
22. Chuang, M. C., S. H. Hsieh, A. C. Wu, and C. H. Li (2016). "Application of Automated Model Fitting to Simulation of a Steel Frame with Buckling-Restrained Braces," Proceedings of the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE 2016), Paper No. 152, July 6-8, 2016, Osaka, Japan.
23. Chang, W. T., and S. H. Hsieh (2016). "Coupled Continuous-discontinuous Simulation of Rockfall Protection Systems," Proceedings of the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE 2016), Paper No. 171, July 6-8, 2016, Osaka, Japan.
24. 謝尚賢、莊明介、葉芳耀、吳安傑、王弘毅、詹麒璋、黃朝揚 (2016), "太陽光電系統鋁合金造棚架型支撐架動力行為與耐震性能之研究", 中華民國第十三屆結構工程研討會暨第三屆地震工程研討會論文集, 論文編號: 1501, 民國 105 年 8 月 24-26 日, 臺灣桃園。
25. Chen, M. D., S. H. Hsieh, M. M. Song, and S. Y. Lai (2016). "Pedagogical Learning from a Future-Oriented Interdisciplinary Design Course," Proceedings of the 5th International Workshop on Design in Civil and Environmental Engineering, October 6-8, 2016, Rome, Italy. [NSC 102-2511-S-002-011-MY3]
26. Tsai, Y. H., C. Y. Wei, J. Y. Wang, M. H. Li, Y. H. Pan, I. F. Chen, and S. H. Hsieh (2016). "Designing a MOOC for a capstone project in Civil Engineering," Proceedings of the 5th International Workshop on Design in Civil and Environmental Engineering, October 6-8, 2016, Rome, Italy.

27. Amarnath, CB, S. H. Hsieh, and Manoj R. (2016). "A Preliminary Study on BIM-LEED Integration," Proceedings of the 29th KKHTCNN Symposium on Civil Engineering, December 3-5, 2016, Hong Kong, China, 50-53.
28. Amarnath, CB, S. H. Hsieh and N. Kumar (2016). "BIM Performance Assessments and Its Application in Indian AECO Industry – A Case Study," Proceedings of the 16th International Conference on Construction Applications of Virtual Reality, December 11-13, 2016, Hong Kong, China, 26-38.
29. Dawood, H., N. Dawood, S. H. Hsieh, and Y. W. Chen (2016). "Cut/Fill Optimisation Underpinned by BIM in Landscape Site Realization Process: A Case Study," Proceedings of the 16th International Conference on Construction Applications of Virtual Reality, December 11-13, 2016, Hong Kong, China, 327-337.
30. Chuang, M. C., S. H. Hsieh, W. C. Cheng, C. Y. Lin, K. C. Sung, F. Y. Yeh, C. C. Chan, C. Y. Hung, and Y. H. Ko (2017). "The Development of the Guideline Compliance Checking System for the PV Supporting Frame Design," Proceedings of the 3rd International Conference on Civil and Building Engineering Informatics in conjunction with 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, April 19-21, 2017, Taipei, Taiwan.
31. Kuo, W. L., J. Y. Wang, and S. H. Hsieh (2017). "Managing Variable Parameters in BIM Models," Proceedings of the 3rd International Conference on Civil and Building Engineering Informatics in conjunction with 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, April 19-21, 2017, Taipei, Taiwan.
32. Zhang, Z. Z., and S. H. Hsieh (2017). "A Domain-Specific Approach to Speeding up IFC Parsing," Proceedings of the 3rd International Conference on Civil and Building Engineering Informatics in conjunction with 2017 Conference on Computer Applications in Civil and Hydraulic Engineering, April 19-21, 2017, Taipei, Taiwan.
33. 謝尚賢, 賴仕堯, 宋政政 (2017), "工程 × 跨域 × 新時代課程", 「2020 高教新視界：全球創新與新課綱後的下一步」學術研討會, 海報發表, 2017 年 5 月 26 日, 淡江大學, 台北市。
34. Song, M. M., and S. H. Hsieh (2017). "When Futures Meets Engineering: Pedagogical Journey and Learning," Abstract presented at the 18th International Futures Conference of the Finland Futures Research Centre and Finland Futures Academy: Futures of a Complex World, June 12-13, 2017, Turku, Finland.
35. Chi, N. W., K. Y. Lin, N. El-Gohary, and S. H. Hsieh (2017). "Gazetteers for Information Extraction Applications in Construction Safety Management," Proceedings of the 2017 International Workshop on Computing in Civil Engineering (IWCCE 2017), June 25 – 27, 2017, Seattle, Washington, USA.
36. Song, M. M., S. H. Hsieh, and S. Y. Lai (2017). "The Journey to One: Teachers' Transformation in Multidisciplinary Cooperation on Engineering Education," Proceedings of the 124th Annual Conference of American Society for Engineering Education (ASEE), June 25-28, 2017, Columbus, Ohio, USA.
37. 楊金澤、李秋明、邱仁鉅、謝尚賢 (2017), "探討深度學習在智慧城市中的應用方法：以 AI 風水助手為例", 第十二屆中國城市住宅研討會論文集, 2017 年 7 月 7-8 日, 中國廣州。

38. 郭韋良、李秋明、吳軒竹、謝尚賢（2017），“基於 BIM 的主動式防災通知系統之即時通訊架構設計”，第十二屆中國城市住宅研討會論文集，2017 年 7 月 7-8 日，中國廣州。[MOST 106-2221-E-002-046]
39. Lee, C. M., H. W. Hsu, and S. H. Hsieh (2017). "Develop a Prototype Virtual Trainer for Construction Crane Operations," Proceedings of the 30th KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
40. Lee, C. M., W. L. Kuo, A. Quintero, Y. Zhang, Y. Yang, W. Chien, S. H. Hsu, and S. H. Hsieh (2017). "A BIM-based Visual Design of Flexible Space," Proceedings of the 30th KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
41. 謝尚賢（2018），“從 BIM 到智慧城市的土木工程”，第九屆臺灣濕地生態係研討會論文摘要集，2018 年 5 月 5 日，國立臺灣大學，台北市。[大會專題演講]
42. Amarnath, CB, and S. H. Hsieh (2018). "Identifying the Critical Success Factors for BIM Projects in Taiwan," Proceedings of the 17th International Conference on Computing in Civil and Building Engineering, June 5-7, 2018, Tampere, Finland.
43. 張德勝、王鴻哲、謝尚賢、宋政政、賴仕堯（2018），“工程創造力量表之初探”，2018 高教深耕暨教學實踐研究研討會論文集，2018 年 5 月 9 日，臺灣宜蘭，235-244。
44. Lai, S. Y., L. G. Yu, S. H. Hsieh, M. M. Song, and T. S. Chang (2018). "The Development and Application of Collaborative Design Modules for Multidisciplinary Collaboration and Facilitating Creativity: An Experience from D-School@NTU," Proceedings of the 7th International Conference on Knowledge and Education Technology (ICKET 2018), August 22-24, 2018, Edinburgh, Scotland, UK. [MOST 105-2511-S-002-016-MY3]
45. 謝尚賢（2018），“從 BIM 到智慧城市-從土木工程的角度來看”，2018 臺灣形象展高科 技產業合作論壇：「智慧城市與環境」，2018 年 8 月 31 日，泰國曼谷。[受邀專題演講]
46. Chang, T. S., H. C. Wang; S. H. Hsieh, M. M. Song, S. Y. Lai (2018). "Gender Difference in University Students' Engineering Creative in Taiwan," Proceedings of the 46th SEFI Annual Conference, September 17-21, 2018, Copenhagen, Denmark, 124-131. [MOST 105-2511-S-259-013]
47. 莊明介，謝尚賢，葉芳耀，鄭維中，林峻毅，宋孔慶，林昱成，詹麒璋，黃朝揚（2018），“太陽光電系統支撐架結構耐風設計之線上輔助檢核技術”，第七屆全國風工程研討會論文集，2018 年 10 月 18 日，淡江大學，新北市。
48. Song, M. M., and S. H. Hsieh (2018). "Cultivating Civil Engineering Students' Foresight to Design for the Future," Proceedings of the 31st KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
49. Chang, Y. T., and S. H. Hsieh (2019). "A Preliminary Case Study on Circular Economy in Taiwan's Construction," Proceedings of the SBE19 Brussels BAMB-CIRCPATH Conference, IOP Conf. Series: Earth and Environmental Science 225 (2019) 012069, February 5-7, 2019, Brussels, Belgium (doi:10.1088/1755-1315/225/1/012069)
50. Chi, N. W., and S. H. Hsieh (2019). "Using Text-mining Skills to Establish Concept Maps for Construction Fatality Assessment and Control Applications," Proceedings of the 8th Civil Engineering Conference in the Asian Region, April 16-19, 2019, Tokyo, Japan.
51. 張德勝、王鴻哲、賴仕堯、宋政政、謝尚賢（2019），“創新社會設計工程跨領域教學對大學生設計思考特質及工程創造力影響之研究”，2019 教學實踐研究暨校務研究學術研討會論文集，2019 年 4 月 26 日，臺灣宜蘭，41-51。

52. Lee, C. M., W. L. Kuo, T. J. Tung, B. K. Huang, S. H. Hsu and S. H. Hsieh (2019). "Government Open Data and Sensing Data Integration Framework for Smart Construction Site Management," Proceedings of the 36 th International Symposium on Automation and Robotics in Construction (ISARC 2019), May 21-24, 2019, Banff, AB, Canada, 1261-1267. DOI: <https://doi.org/10.22260/ISARC2019/0169> [MOST107-2221-E-002-058-MY2]
53. Hsu, H. W., and S. H. Hsieh (2019). "Applying Augmented Reality Technique to Support On-site Rebar Inspection," Proceedings of the 36 th International Symposium on Automation and Robotics in Construction (ISARC 2019), May 21-24, 2019, Banff, AB, Canada, 1312-1318. DOI: <https://doi.org/10.22260/ISARC2019/0176>
54. Chou, C. C., Y. T. Chang, and S. H. Hsieh (2019). "A BIM-Enabled Design Method for Green Plantation on Building Sites," Proceedings of the ASCE International Conference on Computing in Civil Engineering 2019, June 17 – 19, 2019, Atlanta, GA, USA, 200-206.
55. Kuo, W. L., H. X. Lee, and S. H. Hsieh (2019). "Designing a Database Schema for Supporting Visual Management of Variable Parameters in BIM Models," Proceedings of the ASCE International Conference on Computing in Civil Engineering 2019, June 17-19, 2019, Atlanta, GA, USA, 425-431. [MOST 107-2221-E-002-058-MY2]
56. Hsu, S.H., S.H. Hsieh, T.H. Lin, and T.Y. Dai (2019). "A Re-identification System for Multi-Target, Multi-Camera Tracking of Building Occupants," Proceedings of the 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea.
57. Song, M. M., S.Y. Lai, and S.H. Hsieh (2019). "Crossing the Line: Interdisciplinary Learning for Engineering Students," Proceedings of the 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea. [MOST 105-2511-S-002-015-MY3, MOST 105-2511-S-032-006-MY3, and MOST 105-2511-S-002-016-MY3]
58. Pan, Y. H., S. H. Hsieh, M. M. Song, S. Y. Lai, and T. S. Chang (2019). "On Group Dynamics in an Interdisciplinary Project-based Course," Proceedings of the 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea. [MOST 105-2511-S-002-015-MY3]
59. Chi, N. W., Y. W. Chen, S. H. Hsieh, J. Y. Han, and L. M. Huang (2019). "A BIM-based AR Application for Construction Quality Inspection," Proceeding of the 4th International Conference on Civil and Building Engineering Informatics, November 7-8, 2019, Sendai, Japan, 191-196.

C. 專書及專書論文

1. Hsieh, S. H., K. Y. Lin, N. W. Chi, and H. T. Lin (2015). "Domain Knowledge-based Information Retrieval for Engineering Technical Documents," Ontology in the AEC Industry – A Decade of Research and Development in Architecture, Engineering, and Construction, R. R. A. Issa and I. Mutis (Eds.), American Society of Civil Engineers, 1-25, ISBN: 9780784479124.
2. 謝尚賢、郭榮欽、陳以文、劉以晨（2015），透過案例演練學習 BIM：機電篇，國立臺灣大學出版中心，ISBN: 978-986-350-101-5。
3. 謝尚賢、郭榮欽、陳奐廷、蔡沅澔（2016），透過案例演練學習 BIM：基礎篇，增訂一版，國立臺灣大學出版中心，ISBN: 978-986-350-134-3。

4. 謝尚賢、郭榮欽、莊明介、郭瀚嶸、蔡沅皓、郭敬淳、陳以文（2016），透過案例演練學習 BIM：應用篇，國立臺灣大學出版中心，ISBN: 978-986-350-151-0。
5. 蔡榮得、謝尚賢（客座編輯）(2016)，「2015 電子計算機於土木水利工程應用研討會」特刊，中國土木水利工程學刊，第 28 卷，第 4 期，304 頁。
6. Hsieh, S. H., Amarnath C. B., and Y. H. Tsai (2017). “Development of BIM Courses in Civil Engineering,” Chapter 11, Integrated Building Information Modeling, P. Wu, H. Li, and X. Wang (Eds.), 262-286, Bentham Science Publishers - Sharjah, UAE, eISBN: 978-1-68108-457-2, ISBN: 978-1-68108-458-9.
7. Hsieh, S. H., and S. C. Kang (Guest editors) (2019). Special Issue of the 3rd International Conference on Civil and Building Engineering Informatics, Advanced Engineering Informatics, Vol. 40.
8. 柳儒錚、林祐正、謝佑明、謝尚賢、溫子馨、黃紋玉、陳柏肇（2019），透過案例演練學習 BIM：Tekla 結構篇，國立臺灣大學出版中心，ISBN: 978-986-350-371-2。

陳俊杉 教授 Chuin-Shan Chen

Professor

學歷/ 美國康乃爾大學博士

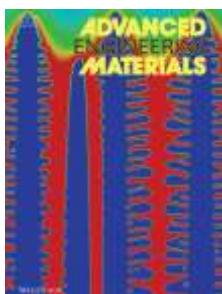
Ph.D., Cornell University

專長/ 多尺度模擬、計算力學、材料模擬、奈米力學、軟體開發、設計創新

Multiscale Modeling, Computational Mechanics, Materials Modeling, Nanomechanics, Software Development, Design Innovation

期刊論文 (Journal Paper)

1. T-H Huang, T-H Huang, Y-S Lin, C-H Chang, P-Y Chen, S-W Chang[#], C-S Chen[#] (2018) "Phase-Field Modeling of Microstructural Evolution by Freeze-Casting," *Advanced Engineering Materials*, **20**(3), 1870007. [SCI]. 荣登 Very Important Paper, Cover Image, 荣登期刊封面。



2. T-H Huang, C-S Chen[#], S-W Chang[#] (2018), "Microcrack Patterns Control the Mechanical Strength in the Biocomposites," *Materials and Design*, **140**, 505–515. [SCI].
3. C-H Wu, M-K Sun, J. Shieh, C-S Chen, C-W Huang, C-A Dai, S-W Chang, T-H Young[#] (2018). "Ultrasound-responsive NIPAM-based hydrogels with tunable profile of controlled release of large molecules," *Ultrasonics*, **83**, 157-163 [SCI].
4. C-S Lee, Y-Y Chen, C-H Yu, Y-C Hsu, C-S Chen[#] (2017), "Semi-analytical solution for the generalized absorbing boundary condition in molecular dynamics simulations," *Computational Mechanics*, **60**, 23-37. [SCI].
5. C-C Lin, Y-C Shih, C-S Chen[#] (2017), "Adsorption-induced surface stress on a c(4×2) adatom surface by an alkanethiol," *Materials Research Express*, **4**, 015020 [SCI].
6. J-F Wu, C-W Yang, N-T Tsou[#], C-S Chen[#] (2017), "Identification of crystal variants in shape-memory alloys using molecular dynamics simulations," *Coupled Systems Mechanics*, **6**(1), 41-54.
7. W-L Lo, N-J Wu, C-S Chen[#], T-K Tsay (2016), "Exact Boundary Derivative Formulation for Numerical Conformal Mapping Method," *Mathematical Problems in Engineering*, 5072309. [SCI]
8. M-K Sun, J. Shieh, C-S Chen, H Chiang, C-W Huang[#], W-S Chen[#] (2016), "Effects of an implant on temperature distribution in tissue during ultrasound diathermy." *Ultrasonics Sonochemistry*, **32**, 44-53. [SCI]

9. S-Y Lin, Y-C Chen[#], F-L Yang, C-S Chen, S-H Hsieh (2016), "A parallel VOF IB pressure-correction method for simulation of multiphase flows," *Applied Mathematical Modeling*, **40**(3), 1800-1815. [SCI]
10. W-L Lo, F-L Yang[#], C-S Chen, S-H Hsieh (2015), "Studying the Weak Effect of particle friction on the velocity profile of steady granular flows in a rotating drum." *Granular Matter*, **17**, 717–726. [SCI]
11. C-W Huang[#], M-K Sun, B-T Chen, J. Shieh, C-S Chen, W-S Chen[#] (2015), "Simulation of thermal ablation by high-intensity focused ultrasound with temperature-dependent properties." *Ultrasonics Sonochemistry*, **27**, 456-465. [SCI]
12. N-T Tsou[#], C-H Chen, C-S Chen, S-K Wu (2015), "Classification and analysis of trigonal martensite laminate twins in shape memory alloy." *Acta Materialia*, **89**, 193–204. [SCI]
13. M-K Sun, J. Shieh, C-W Lo, C-S Chen, B-T Chen, C-W Huang, W-S Chen[#] (2015), "Reusable tissue-mimicking hydrogel phantoms for focused ultrasound ablation." *Ultrasonics Sonochemistry*, **23**, 399-405. [SCI]
14. SY Lin, JF Lin[#], YH Chin, JJ Hu, FL Yang, CS Chen, SH Hsieh (2015), "A unified wall-boundary condition for the lattice Boltzmann method and its application to force evaluation," *Journal of Mechanics*, **31**, 55-68. [SCI]

研討會論文 (Conference Paper)

1. C-S Chen, H Lee, S-W Chang (2018). "Bioinspired Structural Materials: Modeling, Design and AI." The Second International Conference on Mechanics (ICM 2018) in conjunction with the 4th ACMT, the 12th ACFD, and the 25th NCFD, Oct. 15-18, YiLan, Taiwan. (**invited talk**)
2. C-S Chen, S-W Chang, H Lee (2018). "Bioinspired Structural Materials: Modeling, Design and Machine Learning." *The 2018 World Congress on Advances in Civil, Environmental, & Materials Research (ACEM18)*, August 28-31, Incheon, Korea. (**semi-plenary talk**)
3. C-S Chen, C-H Yu, Y-C Hsu (2018). "Multiscale Non-Equilibrium Molecular Dynamics Simulation and Applications," *13th World Congress on Computational Mechanics (WCCM XIII)*, July 24-29, New York, USA.
4. C-S Chen (2018). "Bioinspired Structural Materials: Virtual Processing and Virtual Testing." *RISUD Annual International Symposium 2018 – Inter-disciplinary Research for Societal Impact*, June 29-30, Hong Kong. (**invited talk**)
5. C-S Chen, S-W Chang, Y-S Lin (2018). "Phase Field Method for Freeze Casting of Bio-inspired Materials." *18th U.S. National Congress on Theoretical and Applied Mechanics (USNCTAM)*, June 5-9, Chicago, USA.
6. C-S Chen, H Lee, S-W Chang, Y-S Lin (2017). "Bioinspired Structural Materials: Virtual Processing and Virtual Testing." *IUMRS International Conference in Asia (IUMRS-ICA) 2017*, November 5-9, Taipei, Taiwan. (**invited talk**)
7. C-S Chen, H Lee, S-W Chang, Y-S Lin (2017). "Bioinspired Structural Materials: Virtual Processing and Virtual Testing." 2017 World Congress on Advances in Structural Engineering and Mechanics (ASEM17), August 28-Sepember 1, Seoul, Korea, 9 pages. (**semi-plenary talk**)
8. C-S Chen (2017). "Dynamic Multiscale Method and Applications," *14th U.S. National Congress on Computational Mechanics*, July, Montreal, Canada.

9. C-S Chen, C-S Lee, Y-Y Chen, C-H Yu, Y-C Hsu (2016). "Dynamic Multiscale Method and Applications," 第40屆全國力學會議，新竹、台灣。**(invited forum talk)**
10. C-W Huang, C-H Yu, S-W Chang, C-S Chen (2016). "Rolling Resistance of Adhesive Nanoparticle: Molecular Dynamics Simulation and Continuum Model," 第40屆全國力學會議，新竹、台灣。**(10頁，學生論文競賽入圍)**
11. T-H Huang, H Li, T-H Huang, C-S Chen (2016). "Phase-Field Modeling for Microstructural Evolution of Bioinspired Materials by Freeze-Casting," 第40屆全國力學會議，新竹、台灣。**(10頁)**
12. Y-C Hsu, C-S Chen, C-S Lee, Y-Y Chen, C-H Yu (2016), "Two Way Implicit Dynamic Multiscale Method for Phonon Propagation in Molecular Dynamic Simulations," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
13. Y-H Lee, S-R Lin, F-L Yang, C-S Chen (2016), "Influence of boundary effect on quicksand modeling," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
14. Y-H Chen, S-W Chang, C-S Chen (2016), "Full atomic simulation of the parathyroid hormone/parathyroid hormone-related protein type 1 receptor ligand binding," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
15. S-R Lin, C-S Chen, F-L Yang, S-H Hsieh (2016), "Direct Numerical Simulation of Immersed Particle-particle Collisions within a Fluid Cell," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
16. M-Y Chen, S-W Chang, C-S Chen (2016), "Influence of Porous Microstructure on Acoustic Absorption," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
17. C-H Yu, K-P Lin, C-S Chen (2016), "Atomistic Study and Theoretical Model for Nanoindentation Size Effects," *Second Computational Mechanics Conference in Taiwan (ACMT 2016)*, Oct. 20-21, Taipei, Taiwan.
18. C-S Chen (2016). "Bio-inspired materials modeling." *International Symposium on Computational Mechanics (ISCM)*, October 16-20, Hangzhou, China. **(plenary talk)**
19. C-S Chen, C-S Lee, Y-Y Chen, C-H Yu, Y-C Hsu (2016). "When waves do not spuriously reflect: dynamic multiscale method and applications." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea. **(plenary talk, WCCM is the largest congress on computational mechanics and I was the first plenary speaker from Taiwan since its debut in 1986.)**
20. T-H Huang, T-H Huang, C-S Chen (2016). "FFT-based method for characterization and analysis of microstructures and mechanical properties from freeze-casting process." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea.
21. T-H Huang, T-H Huang, C-S Chen (2016). "Phase-field modeling for dendritic solidification in freeze-casting process." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea.
22. C-H Yu, K-P Lin, C-S Chen (2016). "Atomistic study and theoretical model for nanoindentation size effects." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea.
23. S-R Lin, J-F Lin, F. Yang, S-H Hsieh, C-S Chen (2016). "Image-based fluid-solid interaction analysis." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea.

24. Y-H Lee, S-R Lin, C-S Chen (2016). "Fluid-solid interaction simulation of liquefaction of granular solid particles in viscous fluid." *12th World Congress on Computational Mechanics (WCCM XII)*, Seoul, July 24-29, South Korea.
25. Shin-Ruei Lin, Jeng-Feng Lin, Chuin-Shan Chen, Fuling Yang, Shang-Hsien Hsieh (2015). "A New Immersed Boundary Method with Blending Cell," 第39屆全國力學會議, 台北、台灣。(7頁, 學生論文競賽佳作)
26. Tsung-Hui Huang, Tzu-Hsuan Huang, Chuin-Shan Chen (2015). "Phase-field Model for Dendritic Solidification in Freeze Casting," 第39屆全國力學會議, 台北、台灣。(8頁)
27. Kuan-Po Lin, Chi-Hua Yu, Chuin-Shan Chen (2015). "Effects of grain boundary heterogeneity on creep fracture studied by rate-dependent cohesive model," 第39屆全國力學會議, 台北、台灣。(10頁)
28. Y-C Liao, S-W Chang, C-S Chen (2015), "Influence of Coverage of Alkanethiolates on Surface Stresses of Au Surface," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
29. T-H Huang, T-H Huang, C-S Chen (2015), "Diffusion-Controllable Phase-Field Model for Freeze-Casting of Porous Materials," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
30. T-H Huang, T-H Huang, C-S Chen (2015), "Stability and Accuracy of Differential-Algebraic Phase-Field Equations," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
31. S-R Lin, J-F Lin, C-S Chen, F-L Yang, S-H Hsieh (2015), "Immersed Boundary of Blending Cell: A Unified Approach for Arbitrary Geometric Solid Boundary Immersed in Fluid Flow," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
32. M-Y Chen, T-H Huang, T-H Huang, C-S Chen (2015), "Microstructural Characterization from Freeze-Casting Process by Two-Point Correlation Function," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
33. K-P Lin, C-H Yu, C-S Chen (2015), "Geometric Necessary Dislocations and Nanoindentation Size Effects," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
34. J-F Wu, C-W Yang, N-T Tsou, C-S Chen (2015), "Molecular Dynamics Simulation and Crystal Variant Identification of Shape Memory Alloys," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
35. J-F Lin, S-R Lin, F-L Yang, S-H Hsieh, C-S Chen (2015), "Subgrid Enriched Direct-Forcing Immersed Boundary Method," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
36. C-S Lee, Y-Y Chen, C-S Chen (2015), "Non-Reflection Scheme for Atomistic-to-continuum Coupling," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
37. C-W Huang, C-H Yu, S-W Chang, C-S Chen (2015), "Friction Coefficient and Rolling Resistance of a Nanosphere on a Flat Substrate," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
38. C-Y Fan, T-H Huang, C-S Chen, L-S Huang (2015), "Predictive Modeling of Piezoresistive Microcantilever Biosensors by Finite Element Analysis and Molecular Dynamics Simulation," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.

39. C-H Yu, C-C Lin, C-S Chen (2015), "Multiscale Modeling of Strength and Toughness of 3D IC Intermetallic Microbump," *First Computational Mechanics Conference in Taiwan (ACMT 2015)*, Oct. 22-23, Taipei, Taiwan.
40. J-F Wu, C-W Yang, C-S Chen, N-T Tsou (2015), "The Variant Identification in Molecular Dynamics Simulations for Shape Memory Alloys," *2015 World Congress on Advances in Structural Engineering and Mechanics (ASEM15)*, August 25-29, Incheon, Korea, 8 pages.
41. C-S Chen, C-S Lee, Y-Y Chen (2015). "Non-Reflection Scheme for Atomistic-to-continuum Coupling," *13th U.S. National Congress on Computational Mechanics*, July, San Diego, CA, USA.
42. C-H Yu, C-C Lin, C-S Chen (2015). "Multiscale Modeling of Strength and Toughness of 3D IC Intermetallic Micro Bumps," *13th U.S. National Congress on Computational Mechanics*, July, San Diego, CA, USA.
43. J-F Lin, S-R Lin, F-L Yang, S-H Hsieh, C-S Chen (2015), "Fraction Direct-Forcing Immersed-Boundary Method with Subgrid Enrichment," *18th International Conference on Finite Elements in Flow Problems (FEF 2015)*, 16-18 March 2015, Taipei, Taiwan (**invited talk**).
44. F-L Yang, S-R Lin, C-S Chen, S-H Hsieh (2015), "A Flow-Particle Interaction Model for the Onset of Quicksand," *18th International Conference on Finite Elements in Flow Problems (FEF 2015)*, 16-18 March 2015, Taipei, Taiwan (**invited talk**).

C. 專書、技術報告等 (Book, Technical Report)

1. C-H Hsueh, S. Schmauder, C-S Chen, K. K. Chawla, N. Chawla, W. Chen, Y. Kagawa (2018), *Handbook of Mechanics of Materials*, Springer Nature, Singapore (ISBN 978-981-10-6855-3).
2. C-H Yu, K-P Lin, and C-S Chen[#] (2018), "Nanindentation and Indentation Size Effects: Continuum Model and Atomistic Simulation," Chapter in *Handbook of Mechanics of Materials*, Ed. by C-H Hsueh, S. Schmauder, C-S Chen, K. K. Chawla, N. Chawla, W. Chen, Y. Kagawa, Springer Nature, Singapore.
3. C-H Yu[#], C-W Huang, C-S Chen, C-H Hsueh (2018), "Micromechanics Modeling of Creep Fracture of High-Temperature Ceramics," Chapter in *Handbook of Mechanics of Materials*, Ed. by C-H Hsueh, S. Schmauder, C-S Chen, K. K. Chawla, N. Chawla, W. Chen, Y. Kagawa, Springer Nature, Singapore.
4. C-S Chen[#], Y-C Shih, C-C Chou, S-W Chang, C. Liou (2016), "Multiscale modeling of nano-biosensors," Chapter 14 in *Multiscale Materials Modeling, Approaches to Full Multiscaling*, Ed. by Schmauder, Siegfried and Schäfer, Immanuel, De Gruyter, Germany.

專利 (Patent)

1. 顏家鈺、陳俊杉、謝宗霖、吳嘉苓、陳仁偉、陳惠萍、林念真、林詠彬，太陽能發電裝置用集電體及其製造方法，中華民國專利發明第I 476941號，專利權期間 2015/03/11 -- 2029/11/04。

2. 陳文翔、連德軒、陳俊杉、謝宗霖、陳炯年、張建成、舒宇辰、黃仲偉，超音波測溫系統與方法，中華民國專利發明第I 443319 號，專利權期間 2014/07/01 -- 2031/11/02。
3. 林嘉宇、鄭志強、李世光、吳文中、陳俊杉、張培仁，“超音波測距感測器總成及其超音波測距感測器”，中華民國專利發明第I 329585 號。
4. 王安邦、李佳峯、蔡文欽、林怡君、陸非遙、陳志傑、呂良正、陳俊杉、施文彬，“風力輔助的溫溼度調節裝置”，中華民國專利發明第I 346266 號，專利權期間 2011/08/01 -- 2027/10/29。

韓仁毓 教授 Jen-Yu Han

Professor

學歷/ 美國普渡大學土木工程學博士

Ph.D., Purdue University, USA

專長/ 衛星大地測量、變形監測、空間資訊處理與分析、誤差理論、網形平差與分析

期刊論文 (Journal Papers)

1. Guo, J., and Han, J.Y. (2015) Quality assessment for strain field determination based on the NISLT approach, *J. Chin. Inst. Eng.*, 38(6): 801-810, [doi: 10.1080/02533839.2015.1016881](https://doi.org/10.1080/02533839.2015.1016881). (SCI, EI) (NSC101-2221-E-002-123-MY2)
2. Han, J.Y.*., Chou, J.Y., and Tsai, M.J. (2015) Mapping road surface features using single-camera images acquired by a mobile mapping system, *J. Chin. Inst. Eng.*, 38(4): 486-493, [doi: 10.1080/02533839.2014.998289](https://doi.org/10.1080/02533839.2014.998289). (SCI, EI) (MOST103-2221-E-002-128-MY2)
3. 林彥廷，韓仁毓（2015）應用最小二乘技術於河川水文因子動態分析，*國土測繪與空間資訊*，第4卷第1期，第39-52頁。
4. Han, J.Y.*., Guo, J., and Chuang, J.Y. (2015) Efficient obstruction analysis for GNSS relative positioning of terrestrial mobile mapping system, *Surv. Rev.*, 47(342): 153-162, [doi: 10.1179/1752270614Y.0000000110](https://doi.org/10.1179/1752270614Y.0000000110). (SCI) (NSC101-2221-E-002-123-MY2)
5. Guo, J., Tsai, M.J., and Han, J.Y.* (2015) Automatic reconstruction of road surface features by using terrestrial mobile lidar, *Autom. Constr.*, 58: 165-175, [doi: 10.1016/j.autcon.2015.07.017](https://doi.org/10.1016/j.autcon.2015.07.017). (SCI, EI) (MOST103-2221-E-002-128-MY2、MOST103-2622-E-002-036-CC2)
6. 賴進松，韓仁毓，張文鎰，劉寅春，康仕仲，謝其泰，譚義績，黃振家，李豐佐，林彥廷，林聖峰，張睿宇，溫明璋（2015）UAV 影像技術應用於河道洪水位及流場之模擬分析，*中國土木水利工程學刊*，第27卷第3期，第231-240頁。(EI)
7. Soler, T., Han, J.Y.*., and Weston, N.D. (2016) Variance-covariance matrix of transformed GPS positions: case study for the NAD83 (2011) geodetic datum, *J. Surv. Eng. – ASCE*, 142(1): 04015004, [doi: 10.1061/\(ASCE\)SU.1943-5428.0000143](https://doi.org/10.1061/(ASCE)SU.1943-5428.0000143). (SCI, EI)
8. Han, J.Y.*., Chen, A., and Lin, Y.T. (2016) Image-based approach for road profile analyses, *J. Surv. Eng. – ASCE*, 142(1): 06015003, [doi: 10.1061/\(ASCE\)SU.1943-5428.0000160](https://doi.org/10.1061/(ASCE)SU.1943-5428.0000160). (SCI, EI) (MOST 103-2622-E-002-036-CC2、MOST 103-2221-E-002-128-MY2)
9. Han, J.Y.*., and Juan, T.H. (2016) Image-based approach for satellite visibility analysis in critical environments, *Acta Geod. Geophys.*, 51(1):113-123, [doi: 10.1007/s40328-015-0114-8](https://doi.org/10.1007/s40328-015-0114-8). (SCI, EI) (MOST 103-2221-E-002-128-MY2)
10. Lin, Y.C., and Han, J.Y. (2016) Strain field determination using displacement gradient model and unified least-squares technique, *Sci. Res. Essays*, 11(7): 80-89, [doi: 10.5897/SRE2015.6377](https://doi.org/10.5897/SRE2015.6377) . (Scopus) (MOST 103-2221-E-002-128-MY2)
11. Soler, T., and Han, J.Y. (2017) On rotation of frames and physical vectors: an exercise based on plate tectonics theory, *GPS Solut.*, 21: 345-361, [doi: 10.1007/s10291-016-0521-5](https://doi.org/10.1007/s10291-016-0521-5). (SCI, EI)
12. Han, J.Y.*., and Lo, C.T. (2017) Adaptive time-variant adjustment for the positioning errors of a mobile mapping platform in GNSS-hostile areas, *Surv. Rev.*, 49(352): 9-14, [doi: 10.1080/03601235.2017.1338030](https://doi.org/10.1080/03601235.2017.1338030).

[10.1080/00396265.2015.1104091](https://doi.org/10.1080/00396265.2015.1104091). (SCI) (MOST 103-2622-E-002-036-CC2 、 MOST 103-2221-E-002-128-MY2)

13. Soler, T., and Han, J.Y. (2017) Rigorous estimation of local accuracies revisited, *J. Surv. Eng.*, 143(4): 06017002, [doi: 10.1061/\(ASCE\)SU.1943-5428.0000240](https://doi.org/10.1061/(ASCE)SU.1943-5428.0000240). (SCI/EI)
14. Han, J.Y., Huang, N.J., and Chuang, J.T.Y (2017) Application of laser scanning for rapid geologic documentation of trench exposures, *Eng. Geol.*, 224: 97-104, [doi: 10.1016/j.enggeo.2017.05.010](https://doi.org/10.1016/j.enggeo.2017.05.010). (SCI, EI)
15. 胡通哲，賴進松，施上粟，韓仁毓（2017）十文溪橫向構造物改善規劃研究，農業工程學報，第六十三卷第二期，第 78-93 頁。(EI)
16. 賴進松，韓仁毓，李豐佐，張文鎰，楊淑媛（2018）應用 UAV 影像分析技術於固床工變動與周邊流場之研究，農業工程學報，第六十四卷第二期，第 1-11 頁 [doi: 10.29974/JTAE.201806_64\(2\).0001](https://doi.org/10.29974/JTAE.201806_64(2).0001)。(EI)
17. Lin, Y.T., Chen, W.B., Su, Y.F., Han, J.Y., and Jang, J.H. (2018) Improving river stage forecast by bed reconstruction in sinuous bends, *J. Hydroinform.*, 20(4): 960-974, [doi: 10.2166/hydro.2018.119](https://doi.org/10.2166/hydro.2018.119). (SCI)
18. Lin, Y.T., Lin, Y.C., and Han, J.Y. (2018) Automatic water-level detection using single-camera images with varied poses, *Measurement*, 127: 167-174 [doi: 10.1016/j.measurement.2018.05.100](https://doi.org/10.1016/j.measurement.2018.05.100). (SCI, EI)
19. 李豐佐、賴進松、韓仁毓、張文鎰、楊淑媛、郭文達（2018）影像分析技術辨釋丁壩變動結合水理動床模擬分析，臺灣水利，第六十六卷第四期，第 18-32 頁。(EI)
20. 楊明德、莊子毅、韓仁毓（2018）結合光學與紅外線熱影像正射鑲嵌處理，航遙測學刊，第二十三卷第二期，第 71-81 頁。
21. Soler, T., and Han, J.Y. (2019) Closure to “Rigorous estimation of local accuracies revisited” by Tomás Soler and Jen-Yu Han, *J. Surv. Eng. – ASCE*, 145(2): 07019002. (SCI, EI)
22. 黃春嘉、韓仁毓、陳杰宗（2019）正常高系統於臺灣地區之可應用性研究，中國土木水利工程學刊, 36(6): 533-543, [doi: 10.6652/JoCICHE.201910_31\(6\).0002](https://doi.org/10.6652/JoCICHE.201910_31(6).0002)。(EI)
23. Chuang, T.Y., Perng, N. H., and Han, J. Y.* (2019) Pavement performance monitoring and anomaly recognition based on crowdsourcing spatiotemporal data, *Autom. Constr.*, 106, [doi: 10.1016/j.autcon.2019.102882](https://doi.org/10.1016/j.autcon.2019.102882). (SCI, EI)
24. Han, J.Y., Juan, T.H., and Chuang, T.Y. (2019) Traffic sign detection and positioning -based on monocular camera, *J. Chin. Inst. Eng.*, 42(8): 757-769, [doi: 10.1080/02533839.2019.1660220](https://doi.org/10.1080/02533839.2019.1660220). (SCI, EI)
25. Soler, T., Han, J. Y.*, and Huang, C. J. (2019) Estimating the variance-covariance matrix of the parameters of a fitted triaxial ellipsoid, *J. Surv. Eng. – ASCE*, accepted 3 Oct 2019. (SCI, EI)

研討會論文 (Conference Papers)

1. 林詩婷、黃文正、林彥廷、韓仁毓（2015）台灣東部石梯坪中酸性凝灰岩內變形條帶之研究，中華民國地質與地球物理年會暨學術研討會，5 月 13-14 日，臺灣臺北。
2. 林彥廷，韓仁毓（2015）以無人載具影像技術輔助山區渠道空間資訊分析，第三十四屆測量與空間資訊研討會，8 月 27-28 日，臺灣宜蘭。

3. 周君芸，韓仁毓（2015）臺灣地區地表動態行為自適應區塊化分析，第三十四屆測量與空間資訊研討會，8月27-28日，臺灣宜蘭。
4. 阮宗憲，韓仁毓（2015）以影像為基礎之公路標誌自動化辨識技術，第三十四屆測量與空間資訊研討會，8月27-28日，臺灣宜蘭。
5. 曾于健，韓仁毓（2015）隧道內長鍊狀控制網最佳化規劃，第三十四屆測量與空間資訊研討會，8月27-28日，臺灣宜蘭。
6. 曾于健，王泰典，韓仁毓（2015）三維雷射掃瞄在工程地質調查之誤差評估，第三十四屆測量與空間資訊研討會，8月27-28日，臺灣宜蘭。
7. 曹孟真，吳東洹，林文正，韓仁毓，王泰典（2015）不同類型光達測繪點雲疊合與後續應用探討-以台8線公路168k附近邊坡為例，第三十四屆測量與空間資訊研討會，8月27-28日，臺灣宜蘭。
8. Peng, Y.Y., Lin, Y.T., and Han, J.Y. (2015) An image-based approach for the automatic adjustment of multi-track mobile lidar point clouds, *The 36rd Asian Conference on Remote Sensing*, October 19-23, Manila, Philippines. (MOST-103-2221-E-002-128-MY2 、 MOST-104-2221-E-002-169-MY3) (EI)
9. Kuan, H.C., and Han, J.Y. (2016) Performance evaluation for surface deformation analysis based on multi-constellation GNSS techniques, *International Symposium of Remote Sensing 2016*, April 20-22, Jeju, Korea. (MOST-104-2221-E-002-169-MY3)
10. 周君芸，韓仁毓（2016）GNSS 時間序料資料處理策略與分析流程，第三十五屆測量與空間資訊研討會，8月25-26日，臺灣臺北。
11. 黃迺絜，韓仁毓（2016）光達技術於斷層槽溝分析之應用，第三十五屆測量與空間資訊研討會，8月25-26日，臺灣臺北。
12. 關涵蓁，韓仁毓（2016）以粒子群演算法建構最佳化多星系GNSS地表變形監測網，第三十五屆測量與空間資訊研討會，8月25-26日，臺灣臺北。
13. 林彥廷，韓仁毓（2016）以無人飛行載具影像技術輔助都市區域淹水時序分析，第三十五屆測量與空間資訊研討會，8月25-26日，臺灣臺北。
14. Kuan, H.C., Chou, C.Y., and Han, J.Y. (2016) Design of multi-constellation GNSS deformation monitoring network by particle swan optimization method, *The 38th Asian Conference on Remote Sensing*, October 17-21, Colombo, Sri Lanka. (MOST-104-2221-E-002-169-MY3) (EI)
15. Jhan, D.J., and Han, J.Y. (2017) Detection and positioning of moving objects using surveillance cameras, *International Symposium on Remote Sensing 2017*, May 17-19. Nagoya, Japan.
16. Chen, L.S., Chu, T.C., and Han, J.Y. (2017) Integration of digital photogrammetry and laser scanning technique for generating high-quality 3D point clouds, *International Symposium on Remote Sensing 2017*, May 17-19. Nagoya, Japan. (MOST-105-2119-M-002-050)
17. 張郁翎，韓仁毓（2017）利用Google街景影像評估地形遮蔽效益，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。
18. 李雨澈，韓仁毓（2017）整合BIM與空間資訊技術於施工監造，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。
19. 詹登傑，韓仁毓（2017）應用單一旋轉像機影像於物件定位與追蹤，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。

20. 陳立笙，韓仁毓（2017）基於單張影像資料之三維點雲密化與重建方法，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。
21. 簡瑜玲，韓仁毓（2017）結合高解析度數值地形模型與橋梁水情防災預警機制之研究，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。
22. 張喆，韓仁毓（2017）多種類地面粗糙度指標於崩塌地災害上之研究，第三十六屆測量與空間資訊研討會，8月30日-9月1日，臺灣臺南。
23. Perng, N.H., Bai, B.S., Chen, P.H., Han, J.Y., Jiang, M.Y., Huang, J.H., Su, C.W., and Chen, P.Y. (2017) Automatic generation of 3Dmodel from UAV-captured image data for immersive VR applications, Proceedings of the International Symposium on Automation and Robotics in Construction, 34: 1-4. (EI)
24. Yeh, F.H., Huang, C.J., Han, J.Y., and Ge, L. (2017) Modeling slope topography using unmanned aerial vehicle image technique (2017) The 3rd International Conference on Sustainable Infrastructure and Built Environment, Sep 26-27, Bandung, Indonesia.
25. Hsu, J.Y., and Han, J.Y. (2017) Sub-footprint roughness analysis for riverbeds using full-waveform LiDAR data, The Thirtieth KKHTCNN Symposium on Civil Engineering, Nov 2-4, 2017, Taipei, Taiwan.
26. Chu, T.C., and Han, J.Y. (2018) Development of a dual-camera drone system for thermal conductivity analysis of building envelop, International Symposium of Remote Sensing 2018, May 9-11, Pyeongchan, Korea (MOST 106-2119-M-002 -036)
27. Hsu, J.Y., and Han, J.Y. (2018) A preliminary results of riverbeds roughness analysis using full-waveform LiDAR data, International Symposium of Remote Sensing 2018, May 9-11, Pyeongchan, Korea. (MOST-104-2221-E-002-169-MY3)
28. 徐若堯，韓仁毓（2018）應用全波形光達資料於河床粒徑之分析，第三十七屆測量與空間資訊研討會，9月4-5日，臺灣桃園。(MOST 107-2119-M-002 -046)
29. 黃春嘉，韓仁毓（2018）利用全球重力場模型精化臺灣大地起伏模式，第三十七屆測量與空間資訊研討會，9月4-5日，臺灣桃園。
30. 周君芸，韓仁毓（2018）GNSS 時間序列資料處理與分析實作，第三十七屆測量與空間資訊研討會，9月4-5日，臺灣桃園。(MOST 104-2221-E-002 -169 -MY3)
31. 朱庭蓁，韓仁毓（2018）以無人飛行載具及熱紅外影像技術輔助建物外殼熱傳導效能之分析，第三十七屆測量與空間資訊研討會，9月4-5日，臺灣桃園。(MOST 106-2119-M-002 -036)
32. 柯永彥，周君芸，韓仁毓（2018）近景影像測量於地工構造災損檢測之應用，臺灣岩盤工程研討會（2018TRES），9月6-7日，臺灣台南。
33. Chou, C.Y., and Han, J.Y. (2018) Local strain behavior in Taipei Basin based on continuous GNSS observations, The 39th Asian Conference on Remote Sensing, October 15-19, Kuala Lumpur, Malaysia. (MOST-104-2221-E-002-169-MY3) (EI)
34. Haung, C.J., Hsu, J.W, and Han, J.Y. (2018) Feasibility study on normal height system in Taiwan, The 39th Asian Conference on Remote Sensing, October 15-19, Kuala Lumpur, Malaysia. (EI)
35. 楊淑媛，李豐佐，賴進松，張文鎰，韓仁毓（2018）應用 UAV 影像結合數值模式分析碧潭堰流場流向之研究，2018 農業工程研討會，11月9日，臺灣高雄。
36. Chu, T.C., and Han, J.Y. (2018) Integration of 3D photogrammetry and infrared thermography for thermal transmittance analysis of opaque building envelop, The

Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, Kyoto, Japan.
(MOST 106-2119-M-002 -036)

37. Hung, K.C., and Han, J.Y. (2019) Preliminary study on river grain size analysis using UAV image techniques, International Symposium of Remote Sensing 2019, April 17-19, Taipei, Taiwan.
38. 洪愷頡，韓仁毓（2019）應用無人機影像技術於河床粒徑特性分析，第三十八屆測量與空間資訊研討會，8月 29-30 日，臺灣桃園。
39. 陳思恩，韓仁毓（2019）應用連續運行衛星基準站於區域框架之更新與運用策略，第三十八屆測量與空間資訊研討會，8月 29-30 日，臺灣桃園。
40. 許仁璋，韓仁毓（2019）考慮地表動態條件下之都市地區高程控制系統維護策略，第三十八屆測量與空間資訊研討會，8月 29-30 日，臺灣桃園。
41. Lu, Y.H., and Han, J.Y. (2019) A Preliminary Study on Utilizing 3D Vector Terrain Data for Satellite Visibility Analysis in Urban Area, *The 40th Asian Conference on Remote Sensing*, October 14-18, Daejeon, Korea.
42. Hung, K.C., and Han, J.Y. (2019) Riverbed grain size analysis using uav images techniques, *The 40th Asian Conference on Remote Sensing*, October 14-18, Daejeon, Korea.

技術報告及其他

1. 王泰典、韓仁毓（2015）三維雷射掃描在工程地質調查計量化與座標化技術研發(1/2)，103 年度科技部補助專題研究計畫期中報告書，計畫編號：MOST 103-2622-E-027-006-CC2。
2. 韓仁毓（2015）以影像技術為基礎之時序型光達點雲自動改正分析，103 年度科技部補助專題研究計畫期中報告書，計畫編號：MOST 103-2221-E-002-128-MY2。
3. 韓仁毓、陳艾慤（2015）道路鋪面車載測繪與分析系統研發(1/2)，103 年度科技部補助專題研究計畫期中報告書，計畫編號：MOST 103-2622-E-002-036-CC2。
4. 韓仁毓（2016）以影像技術為基礎之時序型光達點雲自動改正分析，104 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 103-2221-E-002-128-MY2。
5. 王泰典、韓仁毓（2016）三維雷射掃描在工程地質調查計量化與座標化技術研發(2/2)，104 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 104-2622-E-027 -002 -CC2。
6. 賴進松、韓仁毓、邱昱嘉等（2016）淡水河流域水砂運移機制分析模擬及監測(2/3)，105 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 105-2119-M-002-018。
7. 韓仁毓、陳艾慤（2016）道路鋪面車載測繪與分析系統研發(2/2)，104 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 103-2622-E-002-036-CC2。
8. 韓仁毓（2016）新的 GNSS 與 Radar 技術與應用發展—多星系 GNSS 技術於地表變形監測與分析(1/3)，104 年度科技部補助專題研究計畫期中報告書，計畫編號：MOST 104-2221-E-002-169-MY3。
9. 賴進松、韓仁毓、邱昱嘉等（2017）淡水河流域水砂運移機制分析模擬及監測(3/3)，106 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 106-2119-M-002-021。

10. 韓仁毓（2017）三維光達點雲之超解析產製技術研發，105 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 105-2119-M-002-050。

11. 韓仁毓（2017）新的 GNSS 與 Radar 技術與應用發展－多星系 GNSS 技術於地表變形監測與分析(2/3)，105 年度科技部補助專題研究計畫期中報告書，計畫編號：MOST 104-2221-E-002-169-MY3。
12. 韓仁毓（2018）以無人飛行載具紅外光影像技術輔助建物外殼熱傳導之分析 106 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 106-2119-M-002-036。
13. 韓仁毓（2018）新的 GNSS 與 Radar 技術與應用發展－多星系 GNSS 技術於地表變形監測與分析(3/3)，106 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 104-2221-E-002-169-MY3。
14. 韓仁毓（2019）次足跡全波形光達技術於地表粗糙度分析，107 年度科技部補助專題研究計畫期末報告書，計畫編號：MOST 107-2119-M-002-046。

趙鍵哲 副教授 Jen -Jer Jaw

Associate Professor

學歷/ 美國俄亥俄州立大學博士

Ph.D., Ohio state University

專長/ 攝影測量、遙感探測、影像處理、誤差理論

Photogrammetry, Remote Sensing, Image Processing, Error Theory

期刊論文 (Journal Paper)

中文期刊

1. 莊子毅、趙鍵哲，2016。光達點雲幾何特徵萃取及匹配，航測及遙測學刊，20(2): 109-128。
2. 丁皓偉、趙鍵哲，2017。結合十字區塊匹配之半全域匹配法，航測及遙測學刊，22(3): 157-180。
3. 李冠臻、趙鍵哲，2018。以光學框幅式影像進行水位面及水下物點定位之定性分析，航測及遙測學刊，23(4): 223-243。
4. 張雅博、趙鍵哲，2019。利用衛星影像以有理函數物像對應解算水位面高程及水下物點三維坐標，航測及遙測學刊，24(2): 89-110。

英文期刊

1. Chuang, T.Y., and J.J. Jaw, 2015. Automated 3D Feature Matching, The Photogrammetric Record, 30(149):8-29. (SCI)
2. Chuang, T.Y., and J.J. Jaw, 2017. Multi-Feature Registration of Point Clouds. Remote Sensing, 9,281. (SCI).
3. Chuang, T. Y., H.W. Ting, and J.J. Jaw, 2018. Dense Stereo Matching With Edge-Constrained Penalty Tuning, IEEE Geoscience And Remote Sensing Letters, 15(5): 664-668. (SCI)

研討會論文 (Conference Papers)

中文論文

1. 李欣錡、趙鍵哲，2016。結合特徵資訊之半全域匹配法優化作業，第三十五屆測量及空間資訊研討會，政治大學，台北，CD-ROM。
2. 邱庭萱、趙鍵哲，2016。以攝影測量進行水面及水下物點定位分析，第三十五屆測量及空間資訊研討會，政治大學，台北，CD-ROM。(學生論文獎)

3. 張雅博、趙鍵哲，2017。衛星影像動態共線式解算水位面及水下物點三維坐標成效分析，第三十六屆測量及空間資訊研討會，成功大學，台南，CD-ROM。(學生論文獎)
4. 邱鼎方、趙鍵哲，2017。次像元邊緣偵測輔助於視差不連續處密匹配，第三十六屆測量及空間資訊研討會，成功大學，台南，CD-ROM。
5. 李冠臻、趙鍵哲，2017。以光學影像幾何法解算水位面及水下物點三維坐標，第三十六屆測量及空間資訊研討會，成功大學，台南，CD-ROM。
6. 楊軒、趙鍵哲，2018。基於魚眼物像對應模式之魚眼相機率定的策略研擬，第三十七屆測量及空間資訊研討會，中央大學，中壢，CD-ROM。
7. 張家綿、趙鍵哲，2019。考量Mixed Pixels Effect之雷射測距修正，第三十八屆測量及空間資訊研討會，國防大學，大溪，CD-ROM。(學生論文獎)

英文論文

1. Cheng, H.Y., and J.J. Jaw, 2015. Assessing Water-depth Measurement by a LiDAR Bathymetry Simulator, International Symposium on Remote Sensing, 22-24 April 2015, Tainan, Taiwan, CD-ROM. (Abstract only)
2. Chien, C.P., and J.J. Jaw, 2015. Insight into Line-based versus Point-based 2D Transformation, International Symposium on Remote Sensing, 22-24 April 2015, Tainan, Taiwan, CD-ROM.
3. Chiu, T.H., and J.J. Jaw, 2015. Air-to-water Photogrammetric Intersection Using Frame Imagery, In Proceeding of the 36th Asian Conference on Remote Sensing, 19-23 October 2015, Manila, Philippines.
4. Lee, H.C., and J.J. Jaw, 2015. Edge-enhanced SGM, In Proceeding of the 36th Asian Conference on Remote Sensing, 19-23 October 2015, Manila, Philippines.
5. Chen, W.T. and J.J. Jaw, 2016. The uncertainty estimation of interior and exterior orientation parameters based on vanishing point measurements, The 37th Asian Conference on Remote Sensing, 17-21, October, Colombo, Srilanka, CD-ROM.
6. Chen, W.T. and J.J. Jaw, 2016. Using artificial texture to assist 3D reconstruction, The 37th Asian Conference on Remote Sensing, 17-21, October, Colombo, Srilanka, CD-ROM.
7. Chiu, T.H., and J.J. Jaw, 2016. The solvability analysis of simultaneously determining water surface and underwater object point using a stereopair. International Symposium on Remote Sensing, 20-22 April 2016, Jeju, Korea, CD-ROM.
8. Chuang, T.Y., H.W. Ting, and J.J. Jaw, 2016. Hybrid-Based Dense Stereo Matching, ISPRS-International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Prague, Czech, Vol. XLI(B3), pp495-501.
9. Lee, H.C., and J.J. Jaw, 2016. Generalized Hough Transform-enhanced semi-global matching, International Symposium on Remote Sensing, 20-22 April 2016, Jeju, Korea, CD-ROM. (Student Award)

10. Chiu, T.F., and J.J. Jaw, 2017. Performance Comparison of Canny and Edge Drawing Operators in Edge Detection and Matching, International Symposium on Remote Sensing, 17-19 May 2017, Nagoya, Japan, CD-ROM. (Student Award)
11. Chang, Y.P., and J.J. Jaw, 2017. Simultaneously Determining Water Surface and Underwater Object Points through Rational Functional Model, International Symposium on Remote Sensing, 17-19 May 2017, Nagoya, Japan, CD-ROM.
12. Lee, K.C., and J.J. Jaw, 2017. Study on Air-to-Water Photogrammetric Intersection Solving for Water Surface and Underwater Object Points, International Symposium on Remote Sensing, 17-19 May 2017, Nagoya, Japan, CD-ROM.
13. Chiu, T.F., and J.J. Jaw, 2017. Subpixel Edge Detection with Quality Indicator Aided to Preserving the Depth Discontinuities, The 38th Asian Conference on Remote Sensing, 23-27, October, New Delhi, India, CD-ROM.
14. Lee, K.C., and J.J. Jaw, 2017. Quality and Effectiveness of Geometric Approach Solving Water Surface and Underwater Object Points, The 38th Asian Conference on Remote Sensing, 23-27, October, New Delhi, India, CD-ROM. (Poster Award)
15. Chang, Y.P., and J.J. Jaw, 2018. Rational Function Based Water Surface and Underwater Object Point Determination, International Symposium on Remote Sensing, Pyeongchang, Korea, CD-ROM. (Student Award)
16. Lee, K.C., and J.J. Jaw, 2018. Water Surface Determination through Photogrammetric Intersection Employing Control Information, International Symposium on Remote Sensing, Pyeongchang, Korea, CD-ROM. (Student Award)
17. Yang, H., and J.J. Jaw, 2018. The Preliminary Study on Optical-Based Speed Enforcement System (OBSES), International Symposium on Remote Sensing, Pyeongchang, Korea, CD-ROM.
18. Yang, H., and J.J. Jaw, 2018. Effective Implementation of Fisheye Lens Calibration Based on Geometric Projection Model, The 39th Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia, CD-ROM.
19. Chang, C.M., and J.J. Jaw, 2019. Mixed Pixels Effect Modeling of Laser Rangefinder, CD-ROM Proceedings of International Symposium on Remote Sensing, Taipei, Taiwan.
20. Liu, H.H., and J.J. Jaw, 2019. Refinement of Dense Image Matching Strategy and Point Cloud Through Multiple Views, CD-ROM Proceedings of International Symposium on Remote Sensing, Taipei, Taiwan.
21. Yang, H., and J.J. Jaw, 2019. Analyzing The Object-To-Image Correspondence Alternatives of Fisheye Lens Based on Geometric Projection Models, CD-ROM Proceedings of International Symposium on Remote Sensing, Taipei, Taiwan. (Student Award)
22. Chang, C.H., and J.J. Jaw, 2019. Laser Ranging Correction Under Mixed Pixels Effect. CD-ROM Proceedings of The 40th Asian Conference on Remote Sensing, Daejeon, Korea.

23. Liu, H.H., and J.J. Jaw, 2019. The Strategy for Multi-view Dense Image Matching and Point Cloud Refinement. CD-ROM Proceedings of The 40th Asian Conference on Remote Sensing, Daejeon, Korea.
24. Liu, Y.J., and J.J. Jaw, 2019. Solution Analysis of Scale Factor in 3D Spatial Similarity Transformation. CD-ROM Proceedings of The 40th Asian Conference on Remote Sensing, Daejeon, Korea.

專書及專書論文

Chio, S.H., T.Y. Chuang, P.H. Hsu, J.J. Jaw, S.Y. Lin, Y.C. Lin, T.A. Teo, F. Tsai, Y.H. Tseng, C.K. Wang, C.K. Wang, M. Wang, and M.D. Yang, 2015. LiDAR Data Processing and Applications, in “Remote Sensing Handbook I: Remotely Sensed Data Characterization, Classification, and Accuracies”, editor: P.S. Thenkabail, CRC Press

技術報告及其他

1. 趙鍵哲，2016。以最佳化立體匹配演算法產製高密度點雲之研究，一百零三年度科技部專題研究成果報告書，計畫編號: MOST 103-2119-M-002 -015。
2. 趙鍵哲，2017。以最佳化立體匹配演算法產製高密度點雲之研究(2)，一百零四年度科技部專題研究成果報告書，計畫編號: MOST 104-2119-M-002 -025。
3. 趙鍵哲，2018年。光學影像水下物點三維定位。一百零五年度科技部專題研究成果報告書。計畫編號: MOST 105-2119-M-002-053。
4. 趙鍵哲，2018年。光學影像水下物點三維定位（二）。一百零六年度科技部專題研究成果報告書。計畫編號: MOST 106-2119-M-002-037。

徐百輝 助理教授 Pai-Hui Hsu

Assistant Professor

學歷/ 國立成功大學測量工程學系博士

專長/ 遙感探測、空間資訊於災害管理之應用、統計圖樣識別、小波理論及其應用、測量工程與空間資訊、地理資訊系統

期刊論文 (Journal Paper)

1. 林耿帆、徐百輝，2014，以物件為基礎之光達點雲分類，航測及遙測學刊，第十九卷第1期，pp. 19-41。
2. 徐百輝，2014，以遙測技術獲取三維地理空間資訊，國土資訊系統通訊季刊，第九十二期—遙測技術與 3D GIS，pp. 67-75。
3. 徐百輝、陳志丞，2013，以特徵點為基礎的航測影像浮水印，航測及遙測學刊，第十七卷第4期，pp. 251-266。
4. 洪榮宏、徐百輝、楊錦松、陳欣宜，2013，開放式地形圖徵架構之研究-以通用版電子地圖為例，地籍測量，第三十二卷第二期，June 2013，pp. 28-47。
5. Wen-Ray Su; Chun-Hung Huang, Shang-Yu Wu; Jerry Chow, Mei-Chun Kuo, **Pai-Hui Hsu**, and Hsueh-Cheng Chou, 2011, "Disaster Prevention and Rescue Information Service Platforms", International Journal of Automation and Smart Technology, Vol. 1, No. 2, pp. 63-71.
6. 蘇文瑞、黃俊宏、吳上煜、周恆毅、郭政君、徐百輝、周學政，2011，應用災害防救資訊服務平台於防災應變，自動化科技學會會刊，2011(6), pp. 4-1~4-11。
7. Wen-Ray Su, **Pai-Hui Hsu**, Shang-Yu Wu; Feng-Tyan Lin, and Hsueh-Cheng Chou, 2010, "Development of Safe Taiwan Information System (SATIS) for Typhoon Early Warning in Taiwan", *Journal of Systemics, Cybernetics and Informatics*, Vol. 8, No. 4, pp. 48-52. (corresponding author)
8. 蘇文瑞、徐百輝、吳上煜、黃俊宏、葉家承、周恆毅、周學政，2010，空間資訊科技於災害防救之應用-以颱風災害應變為例，前瞻科技與管理期刊，pp. 29-46. (通訊作者)。

研討會論文 (Conference Papers)

2014:

1. 江宜庭、徐百輝，2014，以映成函數為基礎之空間向量資料數位浮水印演算法，第三十三屆測量及空間資訊研討會暨國土測繪成果發表會，臺北，4-5 September。
2. 徐百輝、郭巧玲、洪榮宏，2014，由語意觀點探討地形資料之應用與發展，第三十三屆測量及空間資訊研討會暨國土測繪成果發表會，臺北，4-5 September。
3. 張智昌、徐百輝，2014，空間資訊模式運算效能改善策略—以網格式資料為例，第三十三屆測量及空間資訊研討會暨國土測繪成果發表會，臺北，4-5 September。

4. 黃媚綺、徐百輝，2014，以小波轉換為基礎之影像匹配法，第三十三屆測量及空間資訊研討會暨國土測繪成果發表會，臺北，4-5 September。
5. 黃琇蔓、徐百輝，2014，改良小波支持向量機於高光譜影像分類，第三十三屆測量及空間資訊研討會暨國土測繪成果發表會，臺北，4-5 September。
6. 江宜庭、陳志丞、徐百輝，2014，以特徵點為基礎之衛星影像數位浮水印演算法，2014台灣地理資訊學會年會暨學術研討會論文集，高雄，26-27 June。
7. 張瑋、徐百輝，2014，多光譜影像之地形改正，2014 台灣地理資訊學會年會暨學術研討會論文集，高雄，26-27 June。
8. 黃媚綺、徐百輝，2014，不同小波內插法用於影像全色銳化之比較與探討，2014 台灣地理資訊學會年會暨學術研討會論文集，高雄，26-27 June。
9. 黃琇蔓、徐百輝，2014，訓練樣本影像支持向量機分類準確度之探討—以高光譜影像分類為例，2014 台灣地理資訊學會年會暨學術研討會論文集，高雄，26-27 June。
10. Chih-Cheng Chen and Pai-Hui Hsu, "Digital Watermarking for Grid DEM Data Using Surjective Function", *Proceedings of The International Symposium on Remote Sensing 2014*, Busan, Korea, 16-18 April.
11. Xiu-Man Huang and Pai-Hui Hsu, "Modified Wavelet Support Vector Machines for Hyperspectral Image Classification", *Proceedings of The International Symposium on Remote Sensing 2014*, Busan, Korea, 16-18 April.

2013:

12. Pei-Chi Huang and Pai-Hui Hsu, "Blob Feature Extraction for Aerial Images Using Wavelet Transform", *Proceedings of 34th Asian Conference on Remote Sensing*, Bali, Indonesia, 20-24 October.
13. Keng-Fan Lin, Chi-Pei Wang and Pai-Hui Hsu, "Object-Based Classification for Lidar Point Cloud", *Proceedings of 34th Asian Conference on Remote Sensing*, Bali, Indonesia, 20-24 October.
14. Wei Chang and Pai-Hui Hsu, 2013, "Topographic Correction Of Hyperspectral Images Using Lidar Data", *Proceedings of 34th Asian Conference on Remote Sensing*, Bali, Indonesia, 20-24 October.
15. 葉家承、徐百輝、張智昌、張子瑩、蘇文瑞，2013，影像拼接技術應用於 UAV 勘災，2013 台灣地理資訊學會年會暨學術研討會論文集，高雄，27-28 June。
16. 陳志丞、徐百輝，2013，網格式 DEM 數位浮水印演算法之研究，2013 台灣地理資訊學會年會暨學術研討會論文集，高雄，27-28 June。
17. 江宜庭、徐百輝，2013，以映射為基礎之向量式圖檔數位浮水印演算法，第三十二屆測量及空間資訊研討會暨第二屆兩岸重力及大地水準面研討會論文集，新竹，29-30 October。
18. 黃媚綺、徐百輝，2013，以小波轉換進行航照影像點塊特徵萃取，第三十二屆測量及空間資訊研討會暨第二屆兩岸重力及大地水準面研討會論文集，新竹，29-30 October。
19. 張瑋、黃琇蔓、徐百輝，2013，地形效應對於高光譜影像反射資料之影響，第三十二屆測量及空間資訊研討會暨第二屆兩岸重力及大地水準面研討會論文集，新竹，29-30 October。

2012:

20. 林耿帆、徐百輝，2012，以物件為基礎之光達點雲分類，第三十一屆測量及空間資訊研

- 討會論文集，台北，27-28 September。
21. 邱彥瑋、徐百輝，2012，混合式多光譜影像全色態銳化之方法探討，第三十一屆測量及空間資訊研討會論文集，台北，27-28 September。
 22. 陳志丞、徐百輝，2012，以影像紋理及特徵點為基礎的衛星影像浮水印，第三十一屆測量及空間資訊研討會論文集，台北，27-28 September。
 23. 洪榮宏、徐百輝、羅麥可、陳欣宜，2012，開放地形資料標準之研擬，第三十一屆測量及空間資訊研討會論文集，台北，27-28 September。
 24. 洪榮宏、徐百輝、蔡博文、郭巧玲、陳欣宜，2012，由國土資訊系統資料共享觀點初探地形資料語意之發展，2012 台灣地理資訊學會年會暨學術研討會論文集，台中，27-28 June。
 25. Pai-Hui Hsu and Wen-Ray Su, 2012, "Hazard Hotspots Analysis from Geospatial Database using Geospatial Data Mining Technology", *Proceedings of IGARSS 2012*, Munich, Germany, 22-27 July, pp.962-965. (EI)
 26. Pai-Hui Hsu and Chih-Cheng Chen, 2012, "Feature-based Digital Watermarking for Remote Sensing Images", International Archives of Photogrammetry and Remote Sensing, Melbourne, Australia, XXXIX-B3, pp.473-478.
 27. Xiu-Man Huang and Pai-Hui Hsu, 2012, "Comparison of Wavelet-based and HHT-based Feature Extraction Methods for Hyperspectral Image Classification", International Archives of Photogrammetry and Remote Sensing, Melbourne, Australia, XXXIX-B7, pp.121-126.
- 2011:**
28. Pai-Hui Hsu and Wen-Ray Su, 2011, "Hazards Analysis and Prediction From Remote Sensing and GIS Using Spatial Data Mining and Knowledge Discovery: A Case Study for Landslide Hazard Mitigation", Proceedings of SPIE Remote Sensing, Prague, Czech Republic, 19-22 September, Vol. 8181 pp. 81810R-1~81810R-8. (EI)
 29. 陳志丞、徐百輝，2011，航測影像數位浮水印之研究與分析，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 30. 莊璧華、徐百輝，2011，航帶法自由網平差應用於無地面控制點之近景攝影測量，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 31. 陳昱芸、徐百輝，2011，無人飛行載具系統之空中三角測量精度分析，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 32. 黃琇蔓、徐百輝，2011，應用 Hilbert-Huang Transform 於高光譜影像特徵萃取及分類，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 33. 李庭誼、徐百輝，2011，結合光譜與空間紋理特徵於高光譜影像分類，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 34. 廖晟福、徐百輝，2011，遙測衛星靈活取像模式之模擬與分析，第三十屆測量及空間資訊研討會論文集，台中，01-02 September。
 35. Xiu-Man Huang and Pai-Hui Hsu, 2011, "Hyperspectral Image Analysis Using Hilbert-Huang Transform", *Proceedings of 32th Asian Conference on Remote Sensing*, Taipei, Taiwan, 03-07 October. TS2-3.
 36. Pai-Hui Hsu and Chih-Cheng Chen, 2011, "Study and Analysis of Digital Watermarking for Photogrammetric Images", *Proceedings of 32th Asian Conference on Remote Sensing*, Taipei, Taiwan, 03-07 October. TS4-9.
 37. Ting-Yi Li and Pai-Hui Hsu, 2011, "Hybrid Feature Extraction for Object-Based Hyperspectral Image Classification", *Proceedings of 32th Asian Conference on Remote*

- Sensing*, Taipei, Taiwan, 03-07 October. PS-3.
38. Ching-Fu Liao and Pai-Hui Hsu, 2011, "Simulation and Analysis of Satellite Smart Agility Imaging System", *Proceedings of 32th Asian Conference on Remote Sensing*, Taipei, Taiwan, 03-07 October. PS-3.
 39. 張智昌、徐百輝，2011，利用 GPU 提升高光譜影像分類中特徵萃取的計算效能，2011 台灣地理資訊學會年會暨學術研討會論文集，台北，09-10 November。
 40. 林耿帆、邱彥瑋、張智昌、徐百輝，2011，以物件導向結合影像與光達點雲資料之地物分類，2011 台灣地理資訊學會年會暨學術研討會論文集，台北，09-10 November。
 41. 顏怡和、邱式鴻、徐百輝、劉正倫、蔡季欣、施錦揮，2011，不同相機率定條件對 UAV 影像空三精度之探討，2011 台灣地理資訊學會年會暨學術研討會論文集，台北，09-10 November。
 42. 王建道、任念志、徐百輝、張智昌，2011，以符號表示法設計基於 3D Symbol 的 GIS 呈現，2011 台灣地理資訊學會年會暨學術研討會論文集，台北，09-10 November。

2010:

43. 葉家承、蘇文瑞、徐百輝、張智昌、包正芬、盧玉芳，2010，重大災害受災範圍初判機制的建立-以莫拉克颱風事件為例，2010 年全國災害危機處理學術研討會，台南，99 年 4 月 30 日。
44. Pai-Hui Hsu, Wen-Ray Su, Chung-Hung Tsai, 2010, "Land Subsidence Analysis And Inundation Prediction Based On Multi-Temporal Digital Elevation Model Data", *Proceedings of IGARSS 2010*, Honolulu, HI, USA, 25-30 July, pp. 3339~3342. (EI)
45. 徐百輝、陳志丞，2010，數位航測影像浮水印分析及對影像量測之影響，第六屆海峽兩岸測繪發展研討會論文集，澳門，14-16 October。
46. 徐百輝、蘇文瑞，2010，多時期空間資料於地層下陷分析及淹水模擬，第二十九屆測量及空間資訊研討會論文集，台北，02-03 November。
47. 陳志丞、徐百輝，2010，向量圖檔版權保護之研究-以地籍圖為例，第二十九屆測量及空間資訊研討會論文集，台北，02-03 November。
48. 莊璧華、徐百輝，2010，無地面控制資訊時之近景攝影測量施作策略，第二十九屆測量及空間資訊研討會論文集，台北，02-03 November。
49. 葉家承、蘇文瑞、徐百輝、周學政、張智昌、劉俊志、包正芬、施奕良，2010，航遙測影像應用於災害預警及監測機制之建立，2010 年亞洲地理資訊系統國際研討會暨台灣地理資訊學會年會、兩岸四地 GIS 與應用遙感研討會，高雄，99 年 11 月 4~6 日。

技術報告及其他：

1. 徐百輝、黃琇蔓，2014，無人飛行載具建置開發區影像工作案，高雄市政府地政局工作總報告書，高雄。
2. 徐百輝、蘇文瑞、黃琇蔓，2013，颱洪災防數位境況決策支援系統之建立及測試應用一子計畫六：由颱洪災害歷史資料建立可能災害動態景況(完整報告)，行政院國家科學委員會 101 年度專題研究計畫成果報告 NSC 99-2625-M-002-019-MY3)，台北。
3. 林永仁、徐百輝、邱式鴻，2012，101 年度發展無人飛行載具航拍技術作業，內政部國土測繪中心工作總報告書，台中。

4. 林永仁、徐百輝、邱式鴻，2011，100 年度發展無人飛行載具航拍技術作業，內政部國土測繪中心工作總報告書，台中。
5. 徐百輝、黃琇蔓、林耿帆、邱彥瑋、卓怡岑，2011，巨量衛星影像系統評估與開發，國立中央大學前瞻通訊實驗室 100 年度專案研究計畫期末報告，桃園。
6. 徐百輝、莊璧華、李庭誼、廖晟福，2010，多時序三維空間資訊於地層下陷監測及分析-子計畫五：多時序及多來源數值地形模型資料之比較分析及三維空間資訊在災害模擬之應用 (III) (完整報告)，行政院國家科學委員會 98 年度專題研究計畫成果報告(NSC 98-2625-M-002-016)，台北。
7. 徐百輝、張嘉珮，2010，物件導向分類演算法於衛星影像分析之應用，國立中央大學前瞻通訊實驗室 99 年度專案研究計畫期末報告，桃園。
8. 徐百輝、張嘉珮，2010，物件導向分類演算法於衛星影像分析之應用，國立中央大學前瞻通訊實驗室 99 年度專案研究計畫期中報告書，桃園。
9. 周學政、蘇文瑞、周恆毅、葉家承、包正芬、劉俊志、施亦良、張智昌、黃俊宏、陸淑菁、紀和欣、徐百輝，2010，國土資訊系統災害防救應用推廣，國家災害防救科技中心 99 年度期末報告，台北。