國立臺灣大學工學院土木工程學系

Department of Civil Engineering

National Taiwan University

教師研究概況及成果

Research Summary

(2016-2020)

2021 年 3 月

土木工程學系 (Department of Civil Engineering)

(本資料由教師本人提供彙集而成)

大地工程組 (Geotechnical Engineering)

結構工程組 (Structural Engineering)

交通工程組 (Transportation Engineering)

營建工程與管理組 (Construction Engineering and Management)

電腦輔助工程組 (Computer-Aided Engineering)

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

期刊論文(Journal Papers)

1. 林美聆，陳德偉，陳彥澄（2019年09月）。大規模崩塌判釋圈繪方法之建立及驗證。**地工技術**，第161期，第53-62頁。本人為第一作者。

研討會論文(Conference Papers)

英文部份

1. Meei-Ling Lin, and Ting-Kuo Chiang (2019, Oct). Long term effects of landslides induced by catastrophic events. The 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, Invited lecture, IS-07, Taipei, Taiwan. 本人為第一作者、通訊作者.
2. Meei Ling Lin, and Te Wei Chen (2019, Feb). Effects of Extreme Rainfall on Debris Transportation by Debris Flow in Taiwan. Symposium Climate Change and Natural Hazards: coping with and managing hazards in the context of a changing climate, 義大利. 本人為第一作者.
3. Lin, M.L.*, and Lan, S.T. (2018, Oct). Modelling of the Topographic Effects on the Seismic Responses of Slopes. The Eighth Japan - Taiwan Joint Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall, Kyoto, Japan. 本人為第一作者、通訊作者.
4. Meei-Ling, Lin* ; Kuo-Lung, Wang ; Ruey-Juin, Rau (2018, Oct). Monitoring and Evolution Analysis of Large-scale Landslides in the Lushan Area Using Multi-scale Remote Sensing Techniques, invited speaker. International Workshop on Disaster Prevention and Mitigation Technology for Large-scale Landslide, Taipei,Taiwan. MOST 105-2625-M-002-015. 本人為第一作者、通訊作者.
5. Meei-Ling, Lin; Kuo-Lung, Wang; Ruey-Juin, Rau, (2018, Oct). Monitoring and Evolution Analysis of Largescale Landslides in the Lushan Area Using Multiscale Remote Sensing Techniques. International Conference on Hazard Mitigation Technology for Large-scale Landslides, Taipei, Taiwan. 本人為第一作者、通訊作者. Invited lecture.
6. Lin, M.L.* and Tien, Y.S. (2018, Aug). Effects of Parameter Uncertainty on Slope Stability- A

Case Study of the Mt. Shihgonge Landslide. The 2nd KGSCTGS and TC305 Geotechnical Seminar, Kazakhstan . 本人為第一作者、通訊作者.

7. Kuo-Lung Wang, Jun-Tin Lin, Yi-Hsuan Lee, Jheng-Ru Lai, Li-Wen Chen, Tsung-Wen Chen, Chin-Wei Wu, Meei-Ling Lin, and Hao-Nien Chen (2018, Apr). Rainfall induced landslide investigation and back analysis using UAV results and GPS monitoring results. European Geosciences UnionGeneral Assembly 2018, viena, Austria. MOST 106-2625-M-002-014.
8. Meei-Ling Lin, Yi-Ting Wu, Kuo-Lung Wang, and Yo-Ming Hsieh (2018, Apr). Monitoring of the Deep-seated Landslide using MEMS- a Case Study of Lantai Landslide, Taiwan. European Geosciences UnionGeneral Assembly 2018, Viena, Austria. MOST 106-2119-M-006-009. 本人為第一作者、通訊作者.
9. Te-Wei Chen, Meei-Ling Lin, and Yen-Chen Chen (2018, Apr). Discriminant analysis of shallow landslides potential in the debris flow basins in Taiwan. European Geosciences Union.
9. Meei-Ling Lin*, and Wun-Bin Yan (2017, Nov). “Construction of Large-scale Landslide Potential Analysis Model”, Keynote Lecture. International Conference on Disaster Prevention and Mitigation Technology for Large-scale Landslides,, Taiwan. MOST 105-2625-M-002-015. 本人為第一作者、通訊作者.
10. Meei Ling Lin*, Te Wei Chen, Yong Sheng Chen, and Han Sin Jhuang (2017, Sep). Sediment transportation caused by deep-seated landslide in a debris flow river basin- a case study of Typhoon Morakot. Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering. 本人 為第一作者、通訊作者.
11. Meei Ling Lin*, Te Wei Chen, Yong Sheng Chen, and Han Sin, Jhuang (2017, Sep). “Sediment transportation caused by deep-seated landslide in a debris flow river basin- a case study of Typhoon Morakot". Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering, Korea. 本人為第一作者、通訊作者.
12. Meei-Ling Lin ,Te-Wei Chen and Kuo-Chiang Hsia (2017, Sep). Evolution and Stability Analysis of a Deep-Seated Landslide in Lantai Area, Taiwan. 5th International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation (5th GEDMAR), Taiwan. MOST 106-2119-M-006-009. 本人為第一作者、通訊作者.
13. Kuo-Lung Wang, Yo-Ming Hsieh, Meei-Ling Lin, Jun-Tin Lin, and Yi-Hsuan Lee, (2017, Jun). “Observation and Mapping of Complex Landslides Using Field Investigation and Remote Sensed Data". 4th World Landslide Forum, Slovenia. MOST 105-2625-M-002-015.
14. Te-Wei Chen, Meei-Ling Lin.*, Kuo-Chiang Hsia (2016, Sep). Identification of Deep-Seated Landslide - a Case Study of Lantai Area in Taiwan. 7th Japan- Taiwan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall, 台灣. 本人為通訊作者.

15.Meei-Ling Lin, Ching-Ya Huang, Tseng-Chih Kao (2016, Jun). Threshold conditions and run-out displacements of the landslides induced by the Chi-Chi earthquake, Taiwan. 12th International Symposium on Landslides , 義大利. 本人為第一作者、通訊作者.

16. Meei Ling Lin, Te Wei Chen, Yong Sheng Chen, and Han Sin Jhuang (2016, Apr). Sediment Transportation Induced by Deep-Seated Landslides in a Debris Flow Basin in Taiwan. EGU General Assembly 2016, 維也納. 本人為第一作者、通訊作者.

17. Meei-Ling Lin and Li-Sheng Chou (2016, Apr). Hydrological Effects on Failure Mechanism of the Shiaolin Landslide, Taiwan Induced by Typhoon Morakot. EGU General Assembly 2016, 維也納. 本人為第一作者、通訊作者.

中文部份

1. 林美聆、陳德偉（2019年08月）。利用衛星影像進行崩塌長期監測－以廬山及蘭台大規模崩塌為例。第38屆測量及空間資訊研討會，桃園，台灣。本人為第一作者。
2. 林美聆（2017年08月）。”極端降雨引致坡地崩塌對流域土砂災害之影響”，專題演講。2017海峽兩岸大規模崩滑災害論壇，中國四川成都。本人為第一作者、通訊作者。
3. 林美聆，陳德偉，夏國強（2017年08月）。蘭台地區大規模崩塌潛勢區判釋及穩定分析。第十七屆大地工程學術研究討論會。本人為第一作者、通訊作者。
4. 林美聆，嚴文彬（2017年08月）。”邊坡單元劃設與大規模崩塌潛勢分析”。第十七屆大地工程學術研究討論會。，台灣宜蘭。科技部：105-2625-M-002-015。本人為第一作者、通訊作者。

專書及專章

1.Lin, M.L., Chen, T.W., and Hsia, K.C., 2017, “Evolution and stability analysis of a deep-seated landslide in Lantai Area, Taiwan”, Geotechnical Hazard Mitigations, Ed. Lin,M.L., pp. 391-402. ISBN: 978-986-437-141-9

2.Lin, M.L., Lin, S.C., And Lin, Y.C. , 2017, “Review of landslide occurrences and climate change in Taiwan”, Slope safety preparedness for impact of climate change, Ed. JTC-1, 409-435, ISBN: 978-1-138-03230-9

3. 林美聆，2017, “氣候變遷下之天然災害潛勢與國土規劃”，氣候變遷下的國家發展藍圖，主編：林俊全，周桂田，國立台灣大學全球變遷研究中心，113-128，ISBN: 978-986-05-0593-1.

4. 林美聆，2016，土石流災害發生潛勢與危害度評估，土石流系列工程小叢書，主編：林美聆，中興工程科技研究發展基金會，62p. ISBN: 978-986-7142-69-6.

5. 林美聆（2016年）。**土石流災害發生潛勢與危害度評估**（ISBN：978-986-7142-69-6）（第一版）。台北台灣：中興工程科技研究發展基金會。

專書論文

1.Meei-Ling, Lin, Sheng-Chi, Lin, and Yu-Ching, Lin, , , Ed. , CRC Press, 2017,p.409. Review of landslide occurrence and climate change in Taiwan. *Slope*

Safety Preparedness for Impact of Climate Change

(ISBN: 978-1-138-03230-9).

EH Leiden, TheNetherlands: CRC Press/Balkema. 2017: pp.409-435.

2. 林美聆（2017年01月）。氣候變遷下之天然災害潛勢與國土規劃。氣候變遷下的國家發展藍圖（ISBN：978-986-05-0593-1）（115-130）。台北台灣：國立臺灣大學全球變遷中心。

技術報告

1. 王國隆，林美聆，倪春發，陳建志，陳柔妃，陳宏宇，陳昭維，郭志禹，許雅儒，張國楨，黃信樺，謝佑明，林柏宏，李苡宣（2020年01月）。蘭台大規模崩塌潛勢示範區觀測科技整合研究。行政院農業委員會水土保持局研究委託研究計畫報告。
2. 林美聆，劉德礎（2019年12月）。建立沉積岩地質區帶廣域性淺層崩塌潛勢模式。行政院農業委員會水土保持局研究創新研究計畫報告。
3. 林美聆，王國隆，陳彥澄，李苡宣（2018年12月）。淺層崩塌影響範圍調查劃設及聚落致災評估方法之研究。農委會：水土保持局。
4. 王國隆，林美聆，許雅儒，郭力維，郭志禹，陳建志，陳柔妃，陳宏宇，陳昭維，張國楨，黃信樺，謝佑明，林柏宏，李苡宣（2018年12月）。蘭台大規模崩塌潛勢示範區觀測科技整合研究。行政院農業委員會水土保持局研究委託研究計畫報告。
5. 林美聆，陳天健，王國隆，陳彥澄，蘇意筑，李苡宣（2017年12月）。淺層崩塌防災管理規劃與研究。行政院農業委員會水土保持局研究委託研究計畫報告。農委會：SWCB-106-199。
6. 林美聆，饒瑞鈞，王國隆（2017年07月）。精緻化坡地大規模崩塌調查、監測技術及潛勢與影響分析研究-以荖濃溪流域及廬山地區板岩帶為例-總計畫暨子計畫：荖濃溪流域大規模崩塌創新潛勢分析及影響評估之研究(III)。

   科技部計畫報告。科技部：105-2625-M-002-015。
7. 林美聆（2016年12月）。高屏溪流域研究區坡地崩塌與致災降雨關聯性分析。行政院農業委員會水土保持局創新研輳?　　究計畫(編號: SWCB-105-123)。

8. 林美聆，饒瑞鈞，王國隆（2016年07月）。精緻化坡地大規模崩塌調查、監測技術及潛勢與影響分析研究-以荖濃溪流域及廬山地區板岩帶為例-總計畫暨子計畫：荖濃溪流域大規模崩塌創新潛勢分析及影響評估之研究(II)。

科技部計畫報告。科技部：104-2625-M-002-026。

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Rock Mechanics, Numerical Analysis, Engineering Geology

期刊論文(Journal papers)

註：加 * 者，為通訊作者。

1. Wang, T.T., O.L.A. Kwok, **F.S. Jeng** (2020): Seismic response of tunnels revealed following the Chi-Chi earthquake: a review, *Engineering Geology*, (SCI, revision)
2. Wang, T.T*., **F.S. Jeng**, T.T. Lee (2020): Environmental impact of Hsuehshan Tunnel on water quality at Feitsui Reservoir and its tributaries, *Environmental Monitoring and Assessment*, 192, 700.
3. 李紫彤、陳玟伶、楊宜蓉、**鄭富書**、王泰典、劉曉樺、曹孟真、黃奉琦(2020)：精細測繪於岩坡脆弱度評估及監測應用，*土木水利*(審查中)。
4. M.C. Weng*, C.Y. Chang, **F.S. Jeng**, H.H. Li (2020) Evaluating the stability of anti-dip slate slope using an innovative failure criterion for foliation. *Engineering Geology* 275:105737. (SCI, 1/39, IF=4.78)
5. M.C. Weng*, **F.S. Jeng**, C.C. Chiu, Y.C. Lin (2020) Modeling rock bolt reinforcement by using the particulate interface model of DEM. *Journal of Geoengineering.* (EI, accepted)
6. 曹孟真、陳玟伶、李文正、**鄭富書**、王泰典(2019)：中橫公路大沙溪路段工程地質特性對公路養護之影響，*工程環境會刊*，39，131-159。
7. **Jeng,F.S.**, M. C. Weng*, F.H. Yeh, Y.H. Yang, T.H. Huang (2019). A Constitutive model of sandstone considering the post peak behavior. *Journal of Mechanics 35(1), 13-25*. [NSC 101-2628-E-390-001-MY2 and MOST 103-2625-M-390-004](2017-02,SCI/EI)
8. Zhan, S.S., T.T. Wang*, **F.S. Jeng** (2018). Fracture characterization usinghydrogeological approaches and measures taken for groundwater inrush mitigation in shaft excavation. Tunnelling *and Underground Space Technology*, 82, 554-567.(2017-08,SCI/EI)
9. **Jeng, F.S.**, K.P. uang, K.J. Chang* (2018). Analytical Solution of Folding Behaviors of Multi-layer Viscous Strata, *Terr. Atmos. Ocean. Sci.* 29(4):355-370. [NSC89-2211-E002-150, NSC89-2211-E002-152, SC98-2116-M-002-014, and NSC103-2116-M-002-007](2017-07,SCI)

研討會論文(Conference papers)

1. 黃宥傑、蘇仁偉、蘇芳郁、王泰典、**鄭富書**(2020)：板岩邊坡穩定受不連續面影響探討－以田古爾溪口附近為例，*第 18 屆大地工程學術研究討論會論文集*，9 月 1-3 日，墾丁，B27。
2. 陳玟伶、曹孟真、王泰典、**鄭富書**(2020)：岩坡上潛在移動岩塊辨識與視覺化技術，*第 18 屆大地工程學術研究討論會論文集*，9 月 1-3 日，墾丁，P05。(本文獲選為特優論文)
3. 楊宜蓉、Johnson, K.M.、王泰典、**鄭富書**(2020)：利用震源機制解與大地震同震應力變化量逆推地殼三維應力場與軸差應力絕對值，以日本 311 大地震為例，*第 18 屆大地工程學術研究討論會論文集*，9 月 1-3 日，墾丁，I09。
4. Tsao, M.C., W.L. Chen, **F.S. Jeng**, T.T. Wang (2019): Influence of engineering geological characteristics on highway maintenance: Example of Dasha River section of Central Cross-Island Highway. Proceedings of the 5th ISRM Young Scholars' Symposium on Rock Mechanics and International Symposium on Rock Engineering for Innovative Future *(YSRM 2019& REIF 2019)*, December 1-4, Okinawa, Japan. P-30.(2019-12)
5. 劉曉樺、王泰典、**鄭富書**、黃燦輝(2017)：圍岩應力狀態及節理面剪脹效應對岩栓支撐功效的影響，*第十六屆海峽兩岸隧道與地下工程學術與技術研討會論文集*，8 月 19-20 日，貴州貴陽，168-175。(2017-08)
6. 李紫彤、王泰典、翁祖炘、**鄭富書**(2016)：岩石隧道依時變形案例模擬及圍岩變位特性探討，*第十五屆海峽兩岸隧道與地下工程學術與技術研討會論文集*，8 月 12-14 日，湖南長沙，231-238。(2016-08)

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Engineering Geology, Rock Mechanics, Slope Stability

期刊論文 (Journal Papers)

1. 董家鈞、 陳天健、 陳江淮、**林銘郎** (2020) 大地工程發展史-天然災害，地工技術，164 期，101-116 頁。
2. Yang, Kuo-Hsin, Chiang, Jung, Lai, Chao-Wei, Han, Jie, Ming-Lang Lin (2020) Performance of geosynthetic-reinforced soil foundations across a normal fault. Geotextiles and Geomembranes 48 (2020) 357–373. (SCI)
3. Lin, Hsi-Hung, **Lin, Ming-Lang**, Lu, Jia-Hao, Chi, Chung-Chi, Fei, Li-Yuan (2020) Deep-seated gravitational slope deformation in Lushan, Taiwan: transformation from cleavage-controlled to weakened rockmass-controlled deformation. Engineering Geology, 264 https://www.sciencedirect.com/science/article/pii/S0013795218319586 (SCI)
4. 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)
5. 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, 16:2233–2245, https://doi.org/10.1007/s1034 (SCI)
6. 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)
7. 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)
8. 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)

9. 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)
10. 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
11. 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)。
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13. 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。
14. 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)
15. 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
16. 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)
17. 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)

研討會論文 (Conference Papers)

1. **Chang, Yu-Hsuan,** Lin, Cheng-Han and **Lin, Ming-Lang** (2020). Influences of Joint Persistence and Groundwater on Wedge Failure Potential of Jointed Rock Slope. 2020 EGU-7303.
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專長/ 土壤力學試驗；土壤液化；組成律模式

Laboratory Soil Testing; Soil Liquefaction; Constitutive Modeling

(A) 期刊論文(Journal Papers)

1. Weidinger, D.M., Zhao, H., Kwok, A.O.L., Kang, X., and Ge, L. (2020) Small strain moduli of compacted silt by ultrasonic pulse velocity measurements, *Marine Georesources & Geotechnology*, 38(10), 1257-1264. (SCI)
2. Jhuo, Y.S., Yeh, Y.H., and Ge*, L. (2020) Shear strength and volume change behavior of binary granular mixtures, *Journal of GeoEngineering*, 15(2), 103-108. (EI)
3. Hung, W.Y., Tran, M.C., Yeh, F.H., Lu, C.W., and Ge, L. (2020) Centrifuge modeling of failure behaviors of sandy slope caused by gravity, rainfall, and base shaking, *Engineering Geology*, 271(20), 105609. (SCI)
4. Ng, T.T. and Ge, L. (2020) Packing void ratios of very dense ternary mixtures of similar ellipsoids, *Granular Matter*, 22, 53. (SCI)
5. Yeh, F.-H., Chuang, T.-S., Tsai, F.-J., and Ge*, L. (2020) Calibration of advanced constitutive model using optimization methods, *Journal of Testing and Evaluation*, 48(3), 2196-2212. (SCI)
6. Lu, C.W., Chu, M.C., Ge, L., and Peng, K.S. (2020) Estimation of settlement after soil liquefaction for structures built on shallow foundations, *Soil Dynamics and Earthquake Engineering*, 129, 105916. (SCI)
7. Wang, C., Deng, A., Taheri, A., and Ge, L. (2020) A mesh-free approach for multiscale modeling in continuum-granular systems, *International Journal of Computational Methods*, 17(10), 2050006. (SCI)

8. Hsieh, H.S., Wang, Z.Y., Lin, T.M., and Ge, L. (2019) The system stiffness and wall displacement of a deep excavation strengthened with cross walls in soft clay, *Journal of* GeoEngineering, 14(4), 203-217. (EI)

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10. 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)

11. 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)

12. 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)

13. 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)

14. 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)

15. 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)

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17. 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)

18. 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)

19. 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)

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23. 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)

(B) 研討會論文集(Conference Papers)

1. Hsiao, C.H., Ge, L., Lu, C.W. (2020) Development of a machine learning model for slope failure prediction, the 2nd International Symposium on Seismic Performance and Design of Slopes, Edinburgh, UK, January ,2020.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

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12. 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.

13. 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.

14. 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 defection considering buttress walls, the 2nd International Symposium on Asia Urban GeoEngineering, Changsha, China, November 25-26, 2017.

15. 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 Infrastrcuture and Built Environment, Bandung, Indonesia, September 26-27, 2017.

16. 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.

17. 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.

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22. 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.

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24. 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.

25. 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.

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Tunnel Engineering, Rock Mechanics, Tunnel Maintenance, Engineering Geology

(一) SCI/Scopus 期刊論文 (✉表通訊作者)

1. Wang, T.T., O.L.A. Kwok, F.S. Jeng (2020): Seismic response of tunnels revealed following the Chi-Chi earthquake: a review, Engineering Geology, (SCI, revision)
2. Lo, P.C., W. Lo, Y.C., Chiu, T.T. Wang✉ (2020): Influence of river erosion and aggradation on characteristics of movement of a slope with creeping deformation in Southeastern Taiwan, Landslides, (SCI, revision)
3. Shu, P.Y., H.H. Li, T.W. Cheng, T.H. Ueng, T.T. Wang✉ (2020): Revealing significant microproperties to mesoscale mechanical parameters of rock and systematic method for their evaluation, International Journal of Rock Mechanics and Mining Sciences (SCI, submitted)
4. Wang✉, T.T., F.S. Jeng, T.T. Lee (2020): Environmental impact of Hsuehshan Tunnel on water quality at Feitsui Reservoir and its tributaries, *Environmental Monitoring and Assessment*, 192, 700.
5. Tsao, M.C., W. Lo, W.L. Chen, T.T. Wang✉ (2020): Landslide-related maintenance issues around mountain road in Dasha River section of Central Cross Island Highway, Taiwan, *Bulletin of Engineering Geology and the Environment*. https://doi.org/10.1007/s10064-020-01967-9.
6. Shu P.Y., C.Y. Lin, H.H. Li, T.W. Cheng, T.H. Ueng, T.T. Wang✉ (2020): Dynamic response of rock containing regular sawteeth joints under various loading rates and angles of application, *Applied Sciences*, 10(15), 5204.
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11. Chiu, Y.C., C.H. Lee, T.T. Wang✉ (2017): Lining crack evolution of an operational tunnel influenced by slope instability, *Tunnelling and Underground Space Technology*, 65, 167-178.

12. Wang✉, T.T., S.S. Zhan, C.H. Chen, W.C. Su (2017): Characterizing fractures to mitigate inrush of water into a shaft using hydrogeological approaches, *Tunnelling and Underground Space Technology*, 61, 205-220.
13. Zhan, S.S., T.T. Wang✉, T.H. Huang (2016): Variations of hydraulic conductivity of fracture sets and fractured rock mass with test scale: case study at Heshe well site in central Taiwan, *Engineering Geology*, 206, 94-106.
14. Lee, C.H., T.T. Wang✉ (2016): Invert anomalies in operational tunnels – Appearance, causes and countermeasures, *Journal of Performance of Constructed Facilities*, 30(3), 04015048. DOI: http://dx.doi.org/10.1061/(ASCE)CF.1943-5509.0000726.

(二) 非 SCI 期刊論文：

1. 羅百喬、潘立慈、羅偉、李紫彤、陳玟玲、王泰典、謝有忠(2021)：板岩片岩交界帶附近邊坡穩定與岩體工程特性探討～以南橫公路摩天下馬沿線為例，地工技術(審查中)。
2. 李紫彤、陳玟伶、楊宜蓉、鄭富書、王泰典、劉曉樺、曹孟真、黃奉琦(2020)：精細測繪於岩坡脆弱度評估及監測應用，土木水利(審查中)。
3. 邱雅筑、李佳翰、王泰典(2020)：營運中隧道監測成果之特徵化數字化現況與智慧化展望，地工技術，166，35-46。
4. 曹孟真、陳玟伶、李文正、鄭富書、王泰典(2019)：中橫公路大沙溪路段工程地質特性對公路養護之影響，工程環境會刊，39，131-159。
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6. 羅國峯、曾正郎、郭鑑智、王泰典(2018)：台 9 線南迴公路安朔草埔段隧道異常湧水案例，地工技術，158，75-86。
7. 王泰典、陳正勳、邵厚潔(2018)：新奧工法在我國隧道工程應用回顧及蘇花公路山區路段改善計畫的精進，地工技術，157，7-16。
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9. 王泰典(2018)：精細三維測繪世代的岩盤工程地質調查展望，土木水利，45(3)，57-66。
10. 王泰典、邱雅筑、劉曉樺、陳俊樺、周永川、何泰源(2018)：鐵路隧道結構長期穩定影響因素探討暨維護管理準則與解說研訂(草案)初步應用，*地工技術*，155，89-98。
11. 王泰典、莊海岳、蘇威元、邱雅筑、羅百喬(2017)：無人載具攝影產製數值地表模型在隧道洞口段及倒懸邊坡崩塌調查的應用，*地質*，36(3)，55-60。
12. 林文正、王泰典、陳營富、廖吳章(2017)：台 9 線 112K+600 致災原因研析及工程改善報告，*臺灣公路工程*，43(7)，2-38。
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15. 王泰典、李亮瑩、郭育安、許宗傑(2016)：岩石隧道開挖面工程地質特性及開挖支撐快速量化評估新技術，*大地技師*，12，14-27。
16. Lee✉, C.H., T.T. Wang, S.H. Chang, S.Y. Lien, S.W. Huang (2016): Rock Tunneling Applied to Steady Water Resources Supply in Taiwan: Challenges and Examples, *Geotechnical*

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17. Chiu✉, Y.C., T.T. Wang, T.H. Huang (2016): State-of-the-art of the tunnel maintenance in Taiwan and challenges to sustainable development, *Geotechnical Engineering Journal of the SEAGS & AGSSEA*, 47(2), 7-13. (EI)
18. Wang✉, T.T., T.T. Lee, S.M. Lee, K.S. Li, C.H. Chen (2016): Tunneling issues regarding the rock tunnel - shaft intersection in Taiwan, *Geotechnical Engineering Journal of the SEAGS & AGSSEA*, 47(3), 14-23. (EI)

(三) 研討會論文(Conference papers)：

1. 黃宥傑、蘇仁偉、蘇芳郁、王泰典、鄭富書(2020)：板岩邊坡穩定受不連續面影響探討－以田古爾溪口附近為例，第 18 屆大地工程學術研究討論會論文集，9 月 1-3 日，墾丁，B27。
2. 李紫彤、王楷霖、陳玟伶、王泰典(2020)：倒懸邊坡潛在岩塊穩定性之微振動特性探討-以物理模型實驗驗證，第 18 屆大地工程學術研究討論會論文集，9 月 1-3 日，墾丁，E17。
3. 陳玟伶、曹孟真、王泰典、鄭富書(2020)：岩坡上潛在移動岩塊辨識與視覺化技術，第 18 屆大地工程學術研究討論會論文集，9 月 1-3 日，墾丁，P05。(本文獲選為特優論文)
4. 楊宜蓉、Johnson, K.M.、王泰典、鄭富書(2020)：利用震源機制解與大地震同震應力變化量逆推地殼三維應力場與軸差應力絕對值，以日本 311 大地震為例，第 18 屆大地工程學術研究討論會論文集，9 月 1-3 日，墾丁，I09。
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7. Lo, P.C., W. Lo, T.T. Wang, Y.C. Chiu (2019): Geological characteristics of tunnel surrounding rocks in heavily deformed ground: Case study of Dongao Tunnel, Taiwan. *Proceedings of the 5th ISRM Young Scholars' Symposium on Rock Mechanics and International Symposium on Rock Engineering for Innovative Future (YSRM 2019& REIF 2019), December 1-4, Okinawa, Japan.*3-5-3.
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12. Chiu, Y.C., C.L. Kung, T.T. Wang (2019): Site characteristics of a rock tunnel based on field-monitored seismic response. *Proceeding of 2019 Rock Dynamics Summit*, May 8-10, Okinawa, Japan.
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14. Hsiao, F.Y., C.C. Lin, T.T. Wang (2018): Assessment of hard rock strength degradation under high stress condition, *Proceedings of the 10th Asian Rock Mechanics Symposium- The ISRM International Symposium for 2018*, October 29-Novermber 3, Singapore.
15. Chiu, Y.C., P.C. Lo, W.Y. Shu, H.Y. Chuan, T.T. Wang (2018): Investigating continual collapse of a coastal highway cliff, *Proceedings of the 10th Asian Rock Mechanics Symposium- The ISRM International Symposium for 2018*, October 29-Novermber 3, Singapore.
16. Wang T.T., M.C. Tsao, W. Lo (2018): Risk identification and mitigation for potential rock falls through point clouds obtained by LiDAR techniques: A case study in eastern Taiwan, 2018 AEG/IAEG Congress, September 15-23, San Francisco, TS34.
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22. 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.
23. 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.
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25. 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.

研討會論文 (Conference Papers)

International Conference Publications

1. Zheng, S-J.ⓢ, Yang, K-H, and Tsai, Y-K. (2021) "Experimental and Numerical Studies on the Blast-Resistant Performance of Geotextile-Reinforced Soil", *Proceedings of the 7th Asian Regional Conference on Geosynthetics*, *Geosynthetics Asia 2021*, Taipei, Taiwan, November 2021.
2. Wu, H-M.ⓢ, Yang, K-H, and Tseng, T-L, and Chou, N-S. (2021) "Use of Sand Cushions as a Countermeasure for Geosynthetic-Reinforced Soil Walls with Marginal Backfill subjected to Rainfall", *Proceedings of the 7th Asian Regional Conference on Geosynthetics*, *Geosynthetics Asia 2021*, Taipei, Taiwan, November 2021.
3. Chiang, J-C.ⓢ, Yang, K-H, and Chan, Y-H. (2021) "Finite Element Analysis and Design Method of Geosynthetic-Reinforced Soil Foundation subjected to Normal Fault Movement", *Proceedings of the 7th Asian Regional Conference on Geosynthetics*, *Geosynthetics Asia 2021*, Taipei, Taiwan, November 2021.

4. Tseng, T-L ⓢ ,, Wu, H-M ⓢ ,, Yang, K-H✉, Hsiung, B., Ge, L. (2021) "Performance of Geosynthetic-Reinforced Soil Walls with Marginal Backfill subjected Rainfall", *Proceedings of the 20th* International *Conference on Soil Mechanics and Geotechnical Engineering, ICSMGE 2021*, Sydney, Australia, September 2021.
5. Yang, K-H✉, Nguyen, T.S.ⓢ, and Harianto Rahardjo. (2020) "Deformation Characteristics with Porewater Pressure Development of Shallow Landslides Triggered by Rainfall Infiltration", Proceedings *of the 5th World Landslide Forum, WLF5*, Kyoto, Japan, November 2020.
6. 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.
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8. 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.
9. Nguyen, T.S.ⓢ, 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.
10. 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.
11. Rus, T.Y.ⓢ, 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.
12. 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.
13. 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.
14. 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.
15. Yang, K-H✉, Adilehou, W. M.ⓢ, Jian, S-T.ⓢ, 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.
16. 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.
17. 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.
18. 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.

19. Yang, K-H✉, Thuo, J.N. ⓢ, Chen, J-Wⓢ, 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.
20. 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.
21. Thuo, J.N.ⓢ, Huynh, V.D.A.ⓢ, 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.

Domestic Conference Publications

1. 林彥廷、顏筱穎ⓢ、張乃軒ⓢ, 韓仁毓、陳俊杉、楊國鑫, 鄭宏逵, 徐若堯 (2020) "結合時空因子與 InSAR 與地表變化相關性分析", *Proceedings of the 2020 Taiwan Geographic Information System Conference, TGIS 2020*, 2020 臺灣地理資訊學會年會暨學術研討會，Tainan Taiwan, December 2020.
2. 吳昱葵ⓢ, 楊國鑫, 鄧福宸, 陳昭維 (2020) "邊坡破壞過程與機制之物質點法分析", *Proceedings of the 18th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2020,* 第 18 屆臺灣大地工程研討會，Pingtung Taiwan, September 2020.
3. 蔣榮ⓢ, 詹于瑄ⓢ,楊國鑫, 阮仲如 (2020) "加勁土壤基礎受正斷層錯動之有限元素法分析與設計方法建立", *Proceedings of the 18th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2020,* 第 18 屆臺灣大地工程研討會，Pingtung Taiwan, September 2020.
4. 吳昕明ⓢ, 曾婷苓ⓢ,楊國鑫 (2020) "降雨作用下加勁擋土牆破壞機制之試驗研究", *Proceedings of*

the 18th Conference of Taiwan Geotechnical Engineering, GeoTaiwan 2020, 第 18 屆臺灣大地工程研討會，Pingtung Taiwan, September 2020. *Best Paper Award from this conference.

5. 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.
6. 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
7. 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
8. 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.

技術報告 (Technical Report)

1. 楊國鑫、何嘉浚等 (2020) 「山坡地多元擋土設施運用研究」, 農委會水土保持局委託研究案期末報告, 中華民國 109 年 12 月。
2. 韓人毓、楊國鑫等 (2020) 「結合時空因子與 InSAR 觀測資料之地表變位分析與預測」, 臺灣世曦工程顧問公司委託研究案期末報告, 中華民國 109 年 12 月。
3. 黃尹男、楊國鑫等 (2020)「臺北市災害防救深耕計畫(第三期第三年)」, 臺北市政府消防局委託研究案期末報告, 中華民國 109 年 12 月。
4. 潘宗毅、楊國鑫等 (2020)「109 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 109 年 12 月。
5. 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。
6. 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。
7. 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。
8. 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。
9. 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。
10. 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。
11. 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。
12. 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。
13. 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。
14. 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。
15. 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.

16. 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。

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Geotechnical Earthquake Engineering including Soil Dynamics.

Ground Motion Characterization and Site Response Analysis

期刊論文 (Journal papers)

1.David M. Weidinger, Honghua Zhao, Annie On-Lei Kwok, Xin Kang & Louis Ge (2019). Small strain moduli of compacted silt by ultrasonic pulse velocity measurements. *Marine Georesources & Geotechnology*, DOI: 10.1080/1064119X.2019.1657209. SCI

2.Chien-Ting Sun, On-Lei Annie Kwok, Pai-Chen Guan, and Wen-Kai Shih (2018). Using Reproducing Kernel Particle Method for Shallow Water Problems. *Journal of Marine Science and Technology*, 26 (3), 431-440. SCI

3.OLA Kwok, JP Stewart, DY Kwak, and PL Sun (2018). Taiwan-Specific Model for VS30 Prediction Considering Between-Proxy Correlations. *Earthquake Spectra*, 34 (4), 1973-1993. SCI

4.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*, 149, 325-340. SCI

5.PC Guan, OL Kwok, WC Yao, YF CHen, JS Li, YL Chen, LC Chen, HH Chou (2017). 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

6.X. Kang, L. Ge, K.T. Chang, A.O.L. Kwok (2016). Strain-Controlled Cyclic Simple Shear Tests on Sand with Radial Strain Measurements. *Journal of Materials in Civil Engineering*, 28 (4). SCI

研討會論文（Conference papers）

1.C.C Yao, and O.L.A. Kwok (2019, Oct). Site Response at the Vertical Arrays in the Taiwan Surface Downhole Monitoring Network. The 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea. 本人為通訊作者.

2.Jia Ren Liu and On Lei Annie Kwok (2019, Oct). Experimental Investigation of Soil Behavior of Partially Saturated Penghu Calcareous Sand. The 32nd KKHTCNN Symposium on Civil

Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea. 本人為通訊作者.

3. On Lei Annie Kwok, Jia Ren Liu and Chia Ying Lien (2019, Sep). Liquefaction Resistance of Penghu Calcareous Sand. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan. 本人為第一作者、通訊作者.
4. On Lei Annie Kwok, Zhi Rong Yang, and Chun Chieh Yao (2019, Sep). Numerical Study of Ground Response for Sites with Inclined Layers . International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan. 本人為第一作者、通訊作者.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.

14. 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.
15. 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.
16. 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.
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Foundation Engineering, Geotechnical Earthquake Engineering, Seismic Design of Foundations, Soil-Structure Interaction

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1. Chiou, J.S.*, Huang, J.S., Chen, C.L., and Chen, C.H. (2021, Feb). Shaking table testing of two single piles of different stiffnesses subjected to liquefaction-induced lateral spreading. *Engineering Geology*, 105956. MOST 105-2625-M-002-024. 本人為第一作者、通訊作者.
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Structural Mechanics, Sound &Vibration, Boundary Elements, Lie Group, Clifford Analysis

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Passive Structural Control, Dynamic Structural Tests, Earthquake Resistance Design

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3. 李冠慧、汪向榮、蘇于琪、游忠翰、張國鎮、陳東陽，地震超材料設計之減震分析及效益評，中國土木水利工程學刊，第32卷第7期，2020年(EI)。
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16. 周中哲*，陳冠維，林德宏(2020)「高強度銲接箱型鋼柱側向耐震實驗：近斷層載重歷時與背骨曲線發展」，鋼結構工程 12 月(**2020 中華民國鋼結構協會第 10 屆比賽得獎文章**)。

17. 李中生，周中哲*，譚皓祥，陳威霖(2020)「玻璃纖維包覆金屬螺紋管圍束混凝土之軸壓試驗與力學模型」，結構工程，第三十五卷，第一期，25-39 頁。

18. 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，第三十四卷，第二期，43-75 頁 。

19. 周中哲*，汪家銘，黃漠見(2019) 「地牛翻身也不怕-大橋抗震新標竿」，科學月刊 12 月號第 600 期，62-65 頁。(前瞻未來專欄)

20. 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)

21. 周中哲*，蔡文璟，鍾秉庭 (2019)「鋼造自復位挫屈束制斜撐(SC-SBRB)發展及耐震試驗」，結構工程，第三十四卷，第一期，57-76 頁 。

22. 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 。

23. 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)**

24. 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)。

25. 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)。(**2017 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**)

26. 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)。

研討會論文(Conference Papers)

1. Chou, C. C., Lin, T. H., Lai, Y. C., Xiong, H. C., Uang, C. M., El-Tawil, S., McCormick, J. P., Mosqueda G. (2020). "US-Taiwan Collaborative Research on Steel Column Through Cyclic Testing of Two-Story Subassemblages", ***17th World Conference on Earthquake Engineering***, Paper No. C4352 (2i-0213), Sep. 13-18, Sendai, Japan.

2. Chou, C. C., Chen, G. W. (2020). “Cyclic Lateral Testing and Backbone Curve Development of Steel Built-up Hollow Box Columns in High Axial Load”, ***17th World*** Conference ***on Earthquake Engineering***, Paper No. C313 (2c-0023), Sep. 13-18, Sendai, Japan.

3. 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,*** Feb. 3-5, Christchurch, New Zealand. **(Invited Speaker for Special Session)**

4. 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.

5. 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)**

6. 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.

7. 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)**

8. 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.

9. 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.

10. 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.

11. 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.
12. 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.
13. 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.
14. 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.
15. Chou, C. C. (2018). "Smart Monitoring and Earthquake Reduction Technologies for High-Tech Fabs", ***SEMICON Japan***, 13-14 December 2018, Tokyo, Japan. **(Invited Speaker)**
16. 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.
17. 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)**
18. 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.
19. 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.

20. 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.

21. 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)**

22. 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)**

23. Pham, D. H., Chou, C. C. (2017). Stability of Sandwiched Buckling Restrained Braces in Full-Scale Two-Story Steel X-BRBF Tests. ***The Thirtieth KKHTCNN Symposium on Civil Engineering***, November 2-4, Taipei.

24. 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)**

25. 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.

26. 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.

27. 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.

28. 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.

29. 周中哲，鍾秉庭，凌郁婷(2020)「預力自復位系統的應用與研究:摩擦接合板結合自復位斜撐耐震性能」，2020 鋼筋混凝土與鋼結構設計技術研討會，12 月 17~18 日，臺北市**(Invited Speaker)**

30. 周中哲(2020)「離岸風機複合結構柱耐震研究：大徑厚比鋼管柱及高分子複合材料包覆鋼管柱試驗及規範比較」，2020 國家地震工程研究中心實驗成果研討會，11 月 30 日，臺北市

31. 周中哲(2020)「兩層樓高強度鋼構架之鋼柱於高軸力下的側向耐震實驗」，2020 國家地震工程研究中心實驗成果研討會，11 月 30 日，臺北市

32. 周中哲(2020)「應用摩擦接合於高性能自復位斜撐之耐震性能研究」，2020 國家地震工程研究中心實驗成果研討會，11 月 30 日，臺北市

33. 周中哲，陳冠維，林德宏(2020)「高強度銲接箱型鋼柱於中高軸力下之側向耐震實驗與背骨曲線發展」，中華民國第 15 屆結構工程及第 5 屆地震工程研討會，9 月 2~4 日，臺南市

34. 林德宏，周中哲(2020)「七層樓挫屈束制斜撐構架受遠域與近斷層地震之鋼柱載重歷程發展: 高強度鋼柱實驗驗證」，中華民國第 15 屆結構工程及第 5 屆地震工程研討會，9 月 2~4 日，臺南市

35. 劉郁芳，周中哲(2020)「ETABS 非線性動力評估鋼筋混凝土高層建築結構補強效益」，中華民國第 15 屆結構工程及第 5 屆地震工程研討會，9 月 2~4 日，臺南市

36. 李中生，蘇仁康，周中哲(2020)「以 LS-Dyna 模擬複合材料加勁皺褶鋼管填充混凝土的軸壓行為」，中華民國第 15 屆結構工程及第 5 屆地震工程研討會，9 月 2~4 日，臺南市

37. 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)**

38. 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

39. 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

40. 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

41. 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

42. 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**)**

43. 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**)**

44. 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**)**

45. 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

46. 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

47. 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

48. 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**)**

49. 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**)**

50. 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)

51. 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)

52. 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)

53. 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)

研究報告(Research Reports)

1. Pham, D. H. (2020) 「Stability of Sandwiched Buckling Restrained Braces in a Steel Full-Scale, Two-Story Steel Frame」, Ph.D. Thesis Advisor：周中哲，國立臺灣大學土木工程學系。(in English)
2. 周中哲、鍾秉庭、覃文康、黃立宇、周延勳(2020)「板橋馥華艾美大樓新建工程夾型鋼骨挫屈束制消能支撐試驗」，成果報告，中華民國結構工程學會。(東鋼構、in Chinese)
3. 劉郁芳 、周中哲、曾郡于、孫琛琛（2020）「國內外規範之鋼骨鋼筋混凝土構造梁柱接合設計」，國家地震工程研究中心技術報告，Report NCREE-20-017。(in Chinese)

4. 賴耘川(2020) 「H 型鋼柱耐震行為: 兩層樓子構架與固接柱之試驗」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。(in Chinese)
5. 熊厚淳(2020) 「兩層樓子構架高強度箱型鋼柱耐震試驗與模擬分析」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。(in Chinese)
6. 劉琨耀(2020) 「評估風機鋼管圓柱撓曲強度與鋼板受腐蝕影響之行為」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。(in Chinese)
7. 陳建豪(2020) 「含橡膠墊之自復位斜撐耐震性能: 震動台試驗與動力分析」碩士論文指導教授：周中哲，國立臺灣大學土木工程學系。(in Chinese)
8. 周中哲、陳冠維、賴耘川、熊厚淳、鍾秉庭(2020)「高強度鋼柱於高軸力下的耐震行為研究」，科技部計畫編號: **MOST 107-2625-M-002-013** (in Chinese)
9. 林瑞良、陳雯惠、劉郁芳、周德光、葉勇凱、趙書賢、郭俊翔、蕭輔沛、翁元滔、周中哲 (2020) 「鋼筋混凝土建築之非線性反應歷時分析」, Report NCREE-20-001，國家地震工程研究中心。(in Chinese)
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13. 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。(in Chinese)
14. 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。(in Chinese)
15. 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。(in Chinese)
16. 周中哲、劉郁芳、鍾秉庭(2019)「2019 高層建築發展及補強研討會論文集」, Report NCREE-2019-002，國家地震工程研究中心。(in Chinese)
17. 周中哲、鍾秉庭(2018)「臺北市私立延平高級中學夾型鋼骨挫屈束制消能支撐試驗」，東鋼鋼結構股份有限公司，2018/10/22，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、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。(in Chinese)
19. 周中哲、陳建豪、林春霖、鍾秉庭(2018) 「應用高性能材料於自復位斜撐之耐震性能研究」，科技部計畫編號:**MOST 106-2625-M-002-004** (in Chinese)
20. 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。(in Chinese)

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23. 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。(in Chinese)
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33. 周中哲、鍾秉庭、凌郁婷 (2016)「拆解式夾型鋼骨挫屈束制消能支撐試驗及構架耐震分析」，廣宇建設股份有限公司，國立臺灣大學地震工程研究中心。(in Chinese)
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中華民國及國外專利

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利核准日期	科技部計畫編號
A	用於支撐結構的複合管及其製法	中華民國	I623672	周中哲，李中生，譚皓祥，吳愷毅	國家實驗研究院	2018/3/10	MOST 103-2119-M-002-010
A	用於支撐結構的複合管及其製法	中國	審核通過	周中哲，李中生，譚皓祥，吳愷毅	國家實驗研究院	2017/12/8	MOST 103-2119-M-002-010
A	制震裝置	中國	審核通過	周中哲，曾冠霖，陳永祥，張陸滿	國立臺灣大學	2017/11/28	經濟部計畫: 102-EC-17-A-15-S1-223 科技部計畫: 103-2119-M-002-010
A	FRP Composite Wrapped Grooved-Wall Lining Tubular Structure, and Method of Manufacturing	USA	US 9566748 B2	周中哲，李中生，譚皓祥，吳愷毅	國家實驗研究院	2017/2/14	MOST 103-2119-M-002-010
A	制震裝置	中華民國	I 571550	周中哲，曾冠霖，陳永祥，張陸滿	國立臺灣大學	2016/11/30	經濟部計畫: 102-EC-17-A-15-S1-223 科技部計畫: 103-2119-M-002-010
A	Lever Viscoelastic Damping Wall Assembly	USA	US9316014 B2	周中哲，曾冠霖，陳永祥，張陸滿	國家實驗研究院	2016/4/19	經濟部計畫: 102-EC-17-A-15-S1-223 科技部計畫: 103-2119-M-002-010
A	Lever Viscoelastic Damping Wall Assembly 槓桿粘彈制震壁	Japan	特願 2014-147714	周中哲，曾冠霖，陳永祥，張陸滿	國家實驗研究院	2016/5/31	經濟部計畫: 102-EC-17-A-15-S1-223 科技部計畫: 103-2119-M-002-010

A	Lever Viscoelastic Damping Wall Assembly	New Zealand	New Zealand Patent No. 628246	周中哲，曾冠霖，陳永祥，張陸滿	國家實驗研究院	2016/2/12	經濟部計畫: 102-EC-17-A-15-S1-223 科技部計畫: 103-2119-M-002-010

專利技術移轉(2016~2020 年授權)

技術名稱	應用案例	授權單位	被授權單位	簽約日期	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公司	2016/1	102-17-A-15-S1-223 103-2119-M-002-010
夾型挫屈束制消能斜撐	台北中山北路 13 層住宅大樓	臺大	鴻舜機械有限公司	2016/6	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	台北市私立延平高級中學/新竹市華邦電子總部 19 層大樓	臺大	東鋼鋼結構股份有限公司	2017/9	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	台北市廣慈博愛園區 D 標 20 層大樓	臺大	長榮鋼鐵股份有限公司	2018/9	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	新北市板橋馥華艾美大樓/新北市振業化工辦公大樓	臺大	東鋼鋼結構股份有限公司	2020/5	98-2625-M-002-017 100-2625M-002-012

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Reinforced Concrete (RC) Structures, Prestressed Concrete (PC) Structures, Earthquake Engineering, Bridge Engineering

期刊論文(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)

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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.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.

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27.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.

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31.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.

研究會討論(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.

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Computational Mechanic, Computational Materials, Biomechanics; Collagen; Mechanobiology, Atomic Scale Modeling, Multi-Scale/Multi-Physics Modeling

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18. D. Li, **S.W. Chang** (2018, Nov). Characterizing the conformational ensemble of aggrecan core protein cleavage sites: a bottom up computational mechanics approach. 31th KKHTCNN, Kyoto, Japan.
19. W.H. Hui, **S.W. Chang** (2018, Nov). The influence of aging and disease on the mechanical and structural properties of collagen fibers in tissues: A molecular dynamics approach. 31th KKHTCNN, Kyoto, Japan.
20. W.H. Hui and **S.W. Chang** (2018, Nov). Molecular mechanisms of tendon and bone: multiscale modeling of the structures and mechanical responses of collagen fibril. GCMBE and TSBME, Taoyuan, Taiwan.
21. Y.H. Chen, C.S. Chen, **S.W. Chang**. (2018, July) Full Atomic Modeling of the Parathyroid Hormone/parathyroid Hormone-related Protein Type 1 Receptor and Its Ligand Binding. WCCM, New York City, USA.
22. H.C. Li, **S.W. Chang** (2018, May). Structural characteristics of 8- oxoguanine during DNA replication: A molecular dynamics approach. EMI, Boston, USA.
23. Y.C. Lai, T.Y. Shih, **S.W. Chang** (2018, May). Molecular mechanisms of the inhibitory effect of Hya-HEAL+ on collagen degradation. EMI, Boston, USA.
24. C.H. Wen, Y.H. Kuan, S.H. Hsu, **S.W. Chang** (2017, Nov). The self-assembly of waterborne biodegradable polyurethane hydrogel: A molecular dynamics study. IUMRS-ICA, Taipei, Taiwan.
25. C.H. Wen, Y.H. Kuan, S.H. Hsu, **S.W. Chang** (2017, Oct). Molecular Dynamics Simulations of Waterborne Biodegradable Polyurethane Hydrogel for 3D Printing. Simulation for Additive Manufacturing, Munich, Germany.
26. H.C. Li and **S.W. Chang** (2017, Oct) Structural characteristics of 8-oxoguanine during DNA replication— a molecular dynamics approach. ACMT 2017, Taiwan.
27. Y.Y. Tsai, C.C. Watanabe and **S.W. Chang** (2017, Oct) Effective Elastic Properties of Nano-scale Gold Honeycombs. ACMT 2017, Taiwan.
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29. Y.H. Kuan, C.H. Wen and **S.W. Chang** (2017, Oct) The Properties of Waterborne Biodegradable Polyurethane Hydrogel: A Molecular Dynamics Study. ACMT 2017, Taiwan.
30. I.I. Ng, **S.W. Chang**, H.H. 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.

31. 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).
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33. C.H. Wen, Y. Chang and **S.W. Chang** (2016, Oct) Nanoindentation of Waterborne Biodegradable Polyurethane Hydrogel: A Molecular Dynamics Study. ACMT 2016, Taiwan
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35. M.Y. Chen, **S.W. Chang** and C.S. Chen (2016, Oct) Influence of Porous Microstructure on Acoustic Absorption. ACMT 2016, Taiwan
36. 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.
37. **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.

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Structural Control, Advanced Large-Scale Structural Testing, Smart Structures, Earthquake Engineering

期刊論文 (Journal Papers)

英文 SCI 期刊

1. Liu, J., Yu, A., **Chang, C. M.**, and Ren, W. X. (2020). "A new physical parameter identification method for shear frame structures under limited inputs and outputs." submitted to *Advances in Structural Engineering*, online. (**SCI, Engineering-Civil, Q3, 2019**)
2. **Chang, C. M.** and Chou, J. Y. (2020). "Modal tracking of seismically-excited buildings using stochastic system identification." *Smart Structures and Systems*, 26(4), 419-433. (**SCI, Engineering-Civil, Q1, 2019**)
3. Chen, Y. Y., Qian, Z. C., Zhao, W., and **Chang, C. M.** (2020). "A magnetic bi-stable nonlinear energy sink for structural seismic control." *Journal of Sound and Vibration*, 473, 155233. (**SCI, Mechanics, Q1, 2019**)
4. Liu, J., Wang, S., Zheng, J., **Chang**, **C. M.**, Wei, X., and Ren, W. (2020). "Time-frequency signal processing for integrity assessment and damage localization of concrete piles." *International Journal of Structural Stability and Dynamics*, 20(02), 2050020. (**SCI, Engineering-Civil, Q2, 2019)**
5. **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**)
6. 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**)

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10. **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**)

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12. **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**)

13. 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**)

14. 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**)

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[3] **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**)

[4] 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**)

[5] **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**)

[6] **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**)

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[1] Song, W., **Chang, C. M.**, and Dertimanis, V. K. (2020). "Recent advances and applications of hybrid simulation." *Frontiers in Built Environment*, 6, 203.

[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.

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1. 許舜翔、張庭維、**張家銘**、陳俊杉、韓仁毓、林曜滄、林魁士、張廷瑩，2020，「深度學習應用於影像裂縫辨識：發展智慧維運系統以監控結構安全性」，中華技術，第 128 期，76-87 頁。
2. 林子剛、**張家銘**、張至維，2018，「應用模型參數識別及類神經網路畚結構健康診斷」，土木水利學會會刊，第四十五卷第五期，101-110 頁。
3. 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。

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[1] **Chang, C. M.** and Hsu, T. W. (2020). "Performance evaluation and design of seismic isolation systems with geometric nonlinearity for important equipment." 17th World Conference on Earthquake Engineering, Sendai, Japan.

[2] **Chang, C. M.** and Chou, J. Y. (2020). "Near real-time building damage detection based on a bank of Kalman estimators." IMAC-XXXVIII, Texas, USA.

[3] **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.

[4] 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.

[5] 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.

[6] 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.

[7] **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.

[8] 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.

[9] 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.

[10] **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.

[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., **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.

[14] 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.

[15] 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.

[16] 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.

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[18] 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.

[19] **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.

[20] 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.

[21] 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.

[22] **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.

[23] **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.

[24] **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.

[25] 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.

[26] **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.

[27] **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.

[28] 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.

[29] 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.

[30] **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.

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[33] 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.

中文會議論文

[1] 楊耀畬、葉芳耀、**張家銘**、康仕仲，2020，「自動化施工之模組化結構接頭設計」，第 24 屆營建工程與管理學術研討會，臺北，臺灣，5 Aug.
[2] 許維倫、**張家銘**，2020，「利用振動時頻域資料解析模式進行列車車輪即時狀態識別」，第 20 屆非破壞檢測技術研討會，高雄，臺灣，22-23 Oct.
[3] 巫宜謙、楊卓諺、**張家銘**，2020，「基底隔震建築上部構造高寬比上限值之探討」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[4] 莊奕婕、黃謝恭、**張家銘**，2020，「感測器融合用於軌跡重建慣性測量單元」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[5] 劉倢妤、**張家銘**，2020，「具斜交黏滯阻尼器之幾何非線性隔震系統」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[6] 劉峻呈、**張家銘**，2020，「基於磁流變阻尼器之新型半主動控制方法」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[7] 張庭維、許舜翔、**張家銘**，2020，「利用機器學習影像辨識技術於隧道裂縫偵測」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[8] 莊智豪、**張家銘**，2020，「結合隨機遞減法與頻率域分解法之結構常時模態分析」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[9] 周肇昱、**張家銘**，2020，「基於相機影像捕捉之模態動力特性萃取」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[10] 黃謝恭、**張家銘**、趙品鈞，2020，「以生成對抗網路製造人造地震」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[11] 葉芳耀、楊耀畬、李柏翰、蕭勝元、**張家銘**、張國鎮，2020，「桁架式複合材料組合結構應用於救災用輕便橋之研究」，第十五屆結構工程及第五屆地震工程研討會，臺南，臺灣，2-4 Sep.
[12] 謝承穎、周肇昱、**張家銘**，2019，「結合影像處理、電腦視覺與人工智慧之混凝土結構表面裂縫識別研發」，2019 電子計算機於土木水利工程應用研討會，臺北，臺灣，9 Sep.
[13] 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.
[14] 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.
[15] 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.
[16] 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.
[17] 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.
[18] **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.
[19] **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.
[20] 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.
[21] **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.

專利 (Patents)

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利核准日期	科技部計畫編號
發明專利	起重機負載之減盪系統	中華民國	I671256	康仕仲、**張家銘**、楊耀畬、陳鵬元	祐彬營造股份有限公司	201909~203808	
發明專利	Geometrically Nonlinear Vibration Isolation System	美國	US 10,655,704	**Chia-Ming Chang**, Shieh-Kung Huang, Cho-Yen Yang	國家實驗研究院國家地震工程研究中心	202005~203901	
發明專利	Vertical Vibration Isolation System	美國	US 10,670,109	**Chia-Ming Chang**, Cho-Yen Yang, Shieh-Kung Huang, Chen-Hao Hsu	國家實驗研究院國家地震工程研究中心	202006~203902	
發明專利	幾何非線性隔振系統	中華民國	I706095	**張家銘**、黃謝恭、楊卓諺	國家實驗研究院國家地震工程研究中心	202010~203808	

技術移轉 (Technology Transfers)

技術名稱	專利名稱	授權單位	被授權單位	簽約日期	權利金,衍生利益金等	科技部計畫編號
應用加速度資訊進行建築震後快速安全診斷技術	無	國立臺灣大學	中保防災科技股份有限公司	201904~202403	授權金為350,000元	

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

期刊論文(Journal Papers)

1. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2020, Jun). Influence of Seismic Design Evolution on the Seismic Collapse Behavior and Losses of Prototype Steel Buildings with Moment-Resisting Frames. *Journal of Structural Engineering*, 146(9). SCI. 本人為第一作者、通訊作者.
2. Omar A. Sediek; Tung-Yu Wu; Jason McCormick; Sherif El-Tawil (2020, Mar). Collapse Behavior of Hollow Structural Section Columns under Combined Axial and Lateral Loading. *Journal of Structural Engineering*, 146(6). SCI.
3. 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. SCI.本人為第一作者、通訊作者.
4. 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). SCI. 本人為第一作者、通訊作者.
5. Tung-Yu Wu; Sherif El-Tawil; Jason McCormick (2018, Jan). Highly Ductile Limits for Deep Steel Columns. *Journal of Structural Engineering*, 144(4). SCI. 本人為第一作者、通訊作者.
6. 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). SCI.

研討會論文(Conference Papers)

1. Tung-Yu Wu (2020, Sep). Collapse Behavior of Steel Buildings with Deep Columns under Horizontal and Vertical Ground Motions. 17th World Conf. on Earthquake Engineering, Sendai, Japan. 本人為第一作者、通訊作者.

2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. Feng-Hsuan Chang; Tung-Yu Wu（2020 年 11 月）。Evolution of Seismic Resilience of Steel Buildings in Taipei Basin。Conference on Theoretical and Applied Mechanics, CTAM 2020，Yilan, Taiwan。科技部：109-2222-E-002-001-MY2。本人為通訊作者。
11. Ting-Hao Chang; Tung-Yu Wu（2020 年 09 月）。Influence of geometric initial imperfection on seismic collapse capacity of steel special moment frames with deep columns。15th National Conf. on Structural Engineering and 5th National Conf. on Earthquake Engineering，Tainan, Taiwan。本人為通訊作者。

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Reinforced Concrete, Seismic design, evaluation, and retrofit, Large-scale experiments

JOURNAL PAPERS

1. Suzuki, T., **Puranam, A**., Elwood, K.J., Lee, H-J, Hsiao, F-P., Hwang, S-J. "Shake-Table Tests of Seven-story Reinforced Concrete Structures with Torsional Irregularities: Test program and datasets," EERI Data Paper (Tentatively accepted for publication in November 2020).
2. Lund, A., **Puranam, A.**, Whelchel, R., Pujol, S. (2020) "Serviceability of Elements with High-Strength Steel Reinforcement," Concrete International, V. 42, No. 9.
3. Alcocer, S., Behrouzi, A., Brena, S., Elwood, KJ., Irfanoglu, A., Kreger, M., Lequesne, R., Mosqueda, G., Pujol, S., **Puranam, A**., Rodriguez, M., Shah, P., Stavridis, A., and Wood, R. (2020)., " Observations about the Seismic Response of RC Buildings in Mexico City", EERI Spectra.
4. **Puranam, A.**, Filippova, O., Pastor-Paz, J., Stephens, M., Elwood, K.J., Ismail, N., Noy, I., and Opabola, T. (2019) " A Snapshot of the Building Inventory in Wellington" Bulletin of New Zealand Society of Earthquake Engineering, Vol. 52, No. 4.
5. **Puranam, A.**, Pujol, S. (2019) "Reinforcement Limits in RC Elements with High-Strength Steel," ACI Structural Journal, V. 116, No. 5.
6. **Puranam, A.**, Pujol, S. (2019) "Investigation of Corner Column Axial Failure in a 14-Story RC Building," American Concrete Institute Structural Journal, V. 116, No. 1
7. **Puranam, A.**, Irfanoglu, A., Pujol, S., Chiou, T.C., Hwang, S.J. (2018) "Evaluation of Seismic Vulnerability Indices using data from the Taiwan Earthquake of 6 February 2016," Bulletin of Earthquake Engineering. DOI: 10.1007/s10518-018-0519-1
8. **Puranam, A.**, Wang, Y., Pujol, S. (2018) "Estimating Drift Capacity of Reinforced Concrete Structural Walls," American Concrete Institute Structural Journal, V. 115, No. 6.
9. Catlin, A.C., HewaNadungodage, C., Pujol, S., Laughery, L., Sim, C., **Puranam, A.**, Bejarno, A. (2018) " A Cyberplatform for Sharing Scientific and Research Data at DataCenterHub,"

Computing in Science and Engineering, Vol. 20, No.3, pp. 49-70.
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1. Suzuki, T., **Puranam, A.**, Elwood, KJ., Lee, H-J., Hsiao, F-P., Tsai, R-J., Hwang, S-J. (2019), "Seismic response of a half-scale seven-story reinforced concrete structure with torsional and damage irregularities", International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake.
2. **Puranam, A.**, Bueker, F., and Elwood, KJ. (2019). "Assessment of Reinforced Concrete Buildings with Hollow-core Floors". Pacific Conference on Earthquake Engineering, Paper 0148, Auckland, NZ.
3. Pujol, S., **Puranam, A.** (2017) "Recommended Thicknesses for Structural Walls to Resist Earthquake Demands in Colombia," 8th National Congress of Seismic Engineering, May, Barranquilla, Colombia.
4. **Puranam, A.**, Pujol, S. (2017) "Minimum Flexural Reinforcement in Reinforced Concrete Walls," Proceedings, 16th World Conference on Earthquake Engineering, January 9-14, 2017, Santiago, Chile.

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Hydroinformatics, Artificial Intelligence, Stochastic Hydrology and Hydraulics, Rainfall and Flood Forecasting, Computational Hydraulics

期刊論文 (Journal Papers)

1.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

2.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. (EI)

3.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

4.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)

5.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

6.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

7.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

8.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

9.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

10.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

11.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

12.Chang MJ, Chang HK, Chen YC, Lin GF*, Chen PA, Lai JS, Tan YC, 2018.12, A support vector machine forecasting model for typhoon flood inundation mapping and early flood warning systems, *Water*, Volume 10, Issue 12, 1734. (SCI) https://doi.org/10.3390/w10121734

13.Lee KT, Ho JY, Kao HM, Lin GF*, Yang TH, 2019.01, Using ensemble precipitation forecasts and a rainfall-runoff model for hourly reservoir inflow forecasting during typhoon periods, *Journal of Hydro-environment Research*, Vol. 22, pp. 29-37 (SCI) https://doi.org/10.1016/j.jher.2018.05.002

14.Wang HW, Lin GF, Tfwala SS, Hong JH, 2019.04, Filtering continuous river surface velocity radar data, Water, Volume 11, Issue 4, 764. (SCI) https://doi.org/10.3390/w11040764

15.Wang JH, Lin GF*, Chang MJ, Huang IH, Chen YR, 2019.09, Real-time water-level forecasting using dilated causal convolutional neural networks, *Water Resources Management*, Vol. 33, Issue 11, pp. 3759–3780. (SCI) https://doi.org/10.1007/s11269-019-02342-4

16.Lee FZ, Lai JS, Tang YC, Chang MJ, Chen PA, Lin GF, 2019.12, Turbidity Current Plunge Mechanism Analysis and Simulation System Application, *Taiwan Water Conservancy*, Vol. 67, No. 4, pp. 1-15. (EI)

17.Chang MJ, Lin GF*, Lee FZ, Chen PA, Lai JS 2019.12. A real-time forecasting model for turbidity current arrival time in a reservoir. *Hydrological Sciences Journal*, DOI: 10.1080/02626667.2020.1714628 (SCI) https://doi.org/10.1080/02626667.2020.1714628

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1. 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)
2. 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)
3. 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)
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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)
10. 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)

11. 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.
12. 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)
13. 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.
14. 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)
15. 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.
16. 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)
17. 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.
18. 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)
19. Lin GF, 2017.11.23, The short-term real-time rainfall and flood forecasting, The Second International Forum on Green Development and Engineering Innovation, Tianjin, China. (Keynote Lecture)
20. 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)

21. 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.
22. 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.
23. 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.
24. 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.
25. Liao HY, Chang MJ, Lee FZ, Lai JS, Lin GF, 2019.04, Suspended sediment concentration forecasting using integrated artificial intelligence and reservoir desilting operation, The 3rd International Workshop on Sediment Bypass Tunnels (IWSBT 2019), Taipei, Taiwan.
26. Lin GF, 2019.07.26, Real time forecasting of turbidity current arrival time in reservoirs, The Fourth International Conference on Computational Science and Engineering (ICCSE-4), Ho Chi Minh City, Vietnam. (Invited Lecture)
27. Shih KC, Chang MJ, Chen PA, Lin GF, 2019.08, Comparison of machine learning methodologies for hourly reservoir inflow forecasting, The 16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2019), Singapore.
28. Chou CY, Chang MJ, Huang IH, Lin GF, 2019.08, Real-time correction of ensemble numerical weather predictions using machine learning, The 16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2019), Singapore.
29. Lin, GF, 2019.09.04, Assessment of flood hazard zoning for disaster mitigation, Proceedings of Korea International Water Week 2019, TIP Platform: New Strategies on Urban Flood Management under Climate Change, Daegu, Korea, pp. 1-26. (Invited Lecture)
30. Wu CW, Chang MJ, Pi LC, Hsu CC, Tsai CM, Chou NF, Lin GF, 2019.09, Preliminary study of reservoir operation strategy of flood control for rainfall forecasting uncertainty, Proceedings of the 24th Hydraulic Engineering Conference, Taipei, pp. 44-52. (in Chinese)
31. Shih KC, Lin GF, Chang MJ, Huang IH, 2019.09, Reservoir inflow forecasting for Shihmen reservoir using deep learning techniques. Proceedings of the 24th Hydraulic Engineering Conference, Taipei, pp. 298-306.

32. Lin GF, 2019.11, Effects of groundwater recharge on saline water intrusion in coastal areas, The symposium on the prospects of irrigation enterprise, Taipei. (in Chinese)

技術報告及其他

1.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.

2.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－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. MOST 104-2625-M-002-021-

3.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.

4.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－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.

5.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.

6.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－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. MOST 105-2625-M-002-011-MY2

7.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(I), 農委會研究計畫報告, 國立台灣大學土木工程學系.

8.林國峰, 2019.08 劇烈天氣引致都市與鄰近地區複合型災害之情境模擬與災害管理-子計畫: 結合系集定量降雨資訊及降雨逕流模式於劇烈天氣之入庫流量預報(I), 科技部研究計畫報告, 國立台灣大學土木工程學系. MOST 107-2625-M-002-019

9.林國峰, 2019.08, 重現跨日關係和日夜循環的空間–時間降尺度方法於氣候變遷衝擊之研究, 科技部研究計畫報告, 國立台灣大學土木工程學系. MOST 107-2221-E-002-030

10.林國峰, 2019.12, 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(II), 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

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期刊論文(Journal Papers)

(A) 期刊論文

1. 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)
2. 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)
3. 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.
4. H.C. Ho, S.W. Lin, H.Y. Lee, C.C. Huang* (2019) "Evaluation of a Multi-Objective Genetic Algorithm for Low Impact Development in an Overcrowded City", Water 2019, 11(10), 2010.

(C) Other Publication

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1. 李鴻源，2019，「台灣必須面對的真相」，時報出版，224 頁，台灣。(ISBN：9789571379388)

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Porous Media Flow, Fluid Mechanics, Waves In Fluid

(A) Published or Accepted Journal Papers

1. 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]
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(G) Patent

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2. 魏士超、劉格非、黃亦敏、方耀民、尹孝元、黃效禹、林建良 (2018)，「愛玉子溪土石流之地動訊號特性與警戒方法之探討」，**中華水土保持學報**，49(2)，77-88。
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4. Hsu, Y.-C., Liu, K.-F., Shu, H.-M. (2019): Combining TRIGRS and DEBRIS-2D Models for A Debris Flow Simulation from Rainfall Infiltration Induced Shallow Landslides: A Case Validation of Daniao Tribe, **Water** doi:10.3390/w11050890 (SCI, IF=2.56, ci=78)
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1. **Liu, K.F. Li, H.C. 2017, 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)**
2. 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.
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11. 劉格非, 2019 “流域土砂運移監測”。災害感知新技術國際學術研討會，北京。
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2. Choi, J.H., Chae, B.G., Liu, K.F., & Wu, Y.-H. (2016). Numerical analysis of debris flow hazards from case study. Landslides and Engineered Slopes. Experience, Theory and Practice, 2, 649-656
3. Liu, K.F., and Wu, Y.H., 2016 “Debris-2D Tutorial,” In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 108-117.
4. 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
5. Wu, Y.-H., Liu, K.F., Chen, Y.C., Chiu, Y.J., & Shih, S.S. (2018). TXT-tool 3.886-1.2: Simulation of mass movement in a large-scale watershed. In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools, 2, 251-262.
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7. Liu K.F.*, Kuo T.I., Wei S.C.(2020) Debris flow detection using a video camera. In (Sassa K. et al. ed) Understanding and Reducing Landslide Disaster Risk, 2, 305-413

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Experimental and Computational Fluid Mechanics, River Hydraulics

A.期刊論文 (Journal Papers)

1. Chen, T.-Y. K.; Capart, H. (2020) Kinematic wave solutions for dam-break floods in non-uniform valleys. Journal of Hydrology 582, art. no. 124381 (SCI)

2. Hung, C.-Y.; Aussillous, P.; Capart, H. (2018) Granular surface avalanching induced by drainage from a narrow silo. Journal of Fluid Mechanics 856, 444-469 (SCI)

3. Ni, W.-J.; Capart, H. (2018) Stresses and Drag in Turbulent Bed Load From Refractive Index-Matched Experiments. Geophysical Research Letters 45(14), 7000-7009 (SCI)

4. Ke, W.T.; Chen, Y.W.; Hsu, H.C.; Toigo, K.; Weng, W.C.; Capart, H. (2016) Influence of Sediment Consolidation on Hydrosuction Performance. Journal of Hydraulic Engineering 142(10), art. no. 04016037 (SCI)

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

期刊論文 Refereed Journal Publications (* denoting corresponding author)

1. Huang, C.-H., Tsai, C.W.*, Mousavi, S.M. (2020). "Quantification of Probabilistic Concentrations for Mixed-Size Sediment Particles in Open Channel Flow" *Stochastic Environmental Research and Risk* Assessment, https://doi.org/10.1007/s00477-020-01886-x **(IF=2.721, RANK=21/124, STATISTICS&PROBABILITY, SCI)**
2. Huang, C-H., Tsai, C.W.*, and Wu, K.-T. (2020). "Estimation of Near-Bed Sediment Concentrations in Turbulent Flow Beyond Normality" *Chaos, Solitons, & Fractals*, 139, 11pp. **(IF=3.046, RANK=2/55, PHYSICS, MATHEMTICAL, SCI)**
3. Tsai, C.W.*, Y.-R. Hsiao., Lin, M.L., and Hsu, Y.W. (2020). "Characterization of PM2.5 air pollution and its relationship with Hydro-Meteorological in Taiwan" *Environment International*, Vol., 139. https://doi.org/10.1016/j.envint.2020.105669. **(IF=8.925, RANK=18/265, ENVIRONMENTRAL SCIENCES, SCI)**
4. Hester, E.*, Lin, A. and Tsai, C. (2020). "Effect of Floodplain Restoration on Removal of Nitrate and Pharmaceuticals: Anaerobic and Photolytic Processes" *Environmental Science and Technology*, 54, 6, 3278–3287. **(IF=8.543, RANK=15/265, ENVIRONMENTRAL SCIENCES, SCI)**
5. Zhu, G, Chou, M.C.* and Tsai, C.W. (2020) **"**Lessons Learned from the COVID-19 Pandemic Exposing the Shortcomings of Current Supply Chain Operations: A Long-Term Prescriptive Offering**"** *Sustainability,* 12, 5858. **(IF=2.801, RANK= 53/123, ENVIRONMENTAL STUDIES, SCI)**

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9. Tsai, C.W.*, Yeh, J.J. and Huang, C-H. (2019). “Development of Probabilistic Inundation Mapping for Dam Failure Induced Floods” *Stochastic Environmental Research and Risk Assessment*. 33: 91. https://doi.org/10.1007/s00477-018-1636-8 **(IF=2.721, RANK=21/124, STATISTICS&PROBABILITY, SCI)**
10. Tsai, C.W.*, Yeh, T.-G., and Y.-R. Hsiao (2018). “Evaluation of Hydrologic and Meteorological Impacts on Dengue Fever Incidences in Southern Taiwan using Time-Frequency Method” *Ecological Informatics*. http://10.1016/j.ecoinf.2018.05.002, Volume 46, 166-178 **(IF=2.759, RANK=66/168, ECOLOGY, SCI)**
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1. Hester, E.T.*, D.T. Scott, D.L. Azinheira, K.E. Brooks, M. Calfe, C. Guth, B. Hammond, A.Y. Lin, and C.W. Tsai. 2020. Can stream and river restoration solve the excess nitrogen problem? River Flow 2020, Delft, Netherlands. July 8, 2020.
2. Tsai, C. W.*, Wu, K-T, and Huang, C-H. (2020). ”Beyond Normality: Estimation of Near-Bed Sediment Concentrations Accounting for Asymmetric Distribution and Spatial Influence of Turbulence Coherent Structures” 2020 JpGU-AGU Joint Meeting, Abstract C000762, May 24-28, 2020, Chiba, Japan.
3. Tsai, C.W.* and Wu, K.-T. (2020). “Beyond Normality: Estimation of Near-Bed Sediment Concentrations Accounting for Asymmetric Distribution and Spatial Influence of Turbulence Coherent Structures” EGU General Assembly, May 4-8, 2020, Abstract EGU2020-21416, Vienna, Austria.
4. Tsai, C.W.* and Huang, C.H. (2020). “Improved Point Estimates of Probabilistic Moments for Non-Gaussian Multivariate Environmental Modeling and Uncertainty Analysis” the AMS 100th American Meteorological Society Annual Meeting, January 12-16, 2020, Boston, M.A., Abstract ID: 370283

5. Tsai, C.W.* and Huang, S.H. (2019) “On the Memory Effect of Sediment Particles in Turbulence Structures” In: AGU Fall Meeting; 2019 December 9-13; San Francisco, CA. Abstract ID: 511955.
6. Lin, M.L., and Tsai, C.W.* (2019) “Evolution of Air Temperature and Multiscale Characterization of Greenhouse Gases in Taiwan based on Multi-dimensional Ensemble Empirical Mode Decomposition and Noise-assisted Multivariate Empirical Mode Decomposition”. In: AGU Fall Meeting; 2019 December 9-13; San Francisco, CA. Abstract ID: 541291.
7. Wu, K.T., and Tsai, C. W.* (2019) “Improvement of Suspended Sediment Transport Analysis Considering the Spatial Influence of Turbulence Ejection”. In: AGU Fall Meeting; 2019 December 9-13; San Francisco, CA. Abstract ID: 540456.
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10. Hung, S. Y. & Tsai, C. W.* (2019) “Stochastic Sediment Transport In Time Persistent Flow Events”, The Thirty-Eighth IAHR World Congress, September 1-6, 2019, Panama City, Panama
11. Tsai, C. and Hung, S.H.* (2019). “On the Memory Effect of Sediment Particle Movement in Turbulent Flows by A Random Time Interval Brownian Motion (RTIB) Model”, 41st Stochastic Processes Conference, July 8-12, Evanston, IL.
12. Hester, E.T.*, A.Y-C. Lin, and C.W. Tsai. 2019. Effect of floodplain restoration on removal of nitrate and pharmaceuticals: anaerobic and photolytic processes. World Environmental and Water Resources Congress (American Society of Civil Engineers, Environmental and Water Resources Institute), Pittsburgh, PA. April 22, 2019.
13. Tsai, C.* and Huang, S.H. (2019). “Development of A Stochastic Jump Diffusion particle Tracking Model for Sediment Transport”, Proceedings, 2019 World Water and Environmental Resources Congress, May 19-23, Pittsburg, PA.

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15. Ahammed, F.*, Hewa, G. A., Argue, J. R. & Tsai, C. W. (2019). ICSM – a new stormwater management strategy to support the structural growth of developing countries in Asia. Proceedings of the World Environmental and Water Resources Congress, The American Society of Civil Engineers, pp: 80 - 92.
16. Tsai, C.* and Hsiao, Y.-R. (2019). “Characterization of Air Quality and Hydro-Meteorological Factors based on Noise-assisted Empirical Mode Decomposition (NAMEMD) and Time-dependent Intrinsic Correlation (TDIC)”, EGU General Assembly, Abstract 2019-11791, Vienna, Austria.
17. Huang, C. H. and Tsai, C.* (2019). “Uncertainty Analysis for Geological Drilling Data and Development of Probabilistic Soil Liquefaction Potential Mapping”, EGU General Assembly, Abstract 2019-7559, Vienna, Austria.
18. Hung, S. Y. & Tsai, C. W.* (2018) “Stochastic Sediment Transport: Incorporation of Time-step Independent Resuspension Mechanism into Stochastic Diffusion Particle Tracking Model.”, The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan
19. S. M. Mousavi, and C. W. Tsai,* (2018).“Can a Stochastic ParticleTracking Model (PTM) Predict the Trajectory of a Fluid Particle in Water Waves?”, The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan, November 22-24.
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21. Tsai, C. W.* and Huang, C. H. (2018). “Assessment of Sediment Concentrations Accounting for Turbulence and Random Particle Alignment” 15th EGU General Assembly, Abstract 2018-16381, Vienna, Austria, April 9-13.
22. Hung, S. Y. and Tsai, C. W.* (2018). “Anomalous Diffusions of Suspended Sediment Transport by Two-particle Stochastic Diffusion Particle Tracking Model” 15th EGU General Assembly, Abstract 2018-8684, Vienna, Austria, April 9-13.

23. Tsai, C. W.*, Yeh, J. J. and Hung, S. Y. (2017), Development of Probabilistic Flood Inundation Mapping for Flooding Induced by Dam Failure, Abstract H31A-1490 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
24. Huang, S. S. and Tsai, C. W.* (2017), The Influence of Turbulent Coherent Structure on Suspended Sediment Transport, Abstract EP13B-1611 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
25. Kao, D. and Tsai, C. W.* (2017), Uncertainty quantification of water quality in Xindian Creek in Taiwan, Abstract H31H-1602 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
26. Hsiao, Y. R. and Tsai, C. W.* (2017), Multiscale Characterization of PM2.5 in Southern Taiwan based on Noise-assisted Multivariate Empirical Mode Decomposition and Time-dependent Intrinsic Correlation, Abstract A41D-2312 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
27. Hung, S. Y., Wu, T.-H. and Tsai, C.* (2017). “Normal and anomalous diffusion in suspended sediment particles in open channel flow”, Proceedings, 2017 World Water and Environmental Resources Congress, May 22-25, Sacramento, CA.
28. Huang, C.H., and Tsai, C.* (2017). “Estimation of near-bed sediment concentrations by the Lagevin equation using an improved statistical distribution of particle displacement” Proceedings, 2017 World Water and Environmental Resources Congress, May 22-25, Sacramento, CA.
29. Tsai, C. W.* and Yeh, T-G (2017). “Evaluation of Hydrologic and Meteorological Impacts on Dengue Fever Incidences in Southern Taiwan using Time- Frequency Method” 14th EGU General Assembly, Abstract 2017-19159, Vienna, Austria, April 24-28.
30. Huang, C.H. and Tsai, C.* (2016). “Modeling turbidity currents using the multiple-state discrete-time Markov chains.” Proc., The 12th International Conference on Hydro-science and Engineering, November 7-10, Tinan, Taiwan.
31. Hung, S.Y. and Tsai, C.* (2016). “Application of Batch Poisson process to random-sized batch arrivals of sediment particles.” Proc., The 12th International Conference on Hydro-science and Engineering, November 7-10, Tinan, Taiwan.
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the Finite difference methods (FDMs).” Proc., The 12th International Conference on Hydro-science and Engineering, November 7-10, Tinan, Taiwan.

33. Tsai, C.* and Hung, S. Y. (2016). “Evaluation of potential climate change effects on particle movement in surface water”, Proceedings, 2016 World Water and Environmental Resources Congress, May 17-21, West Palm Beach, FL.
34. Liu, C.H., and Tsai, C.* (2016). “Application of a Gambler’s ruin model to uncertainty assessment of reservoir sedimentation problems” Proceedings, 2016 World Water and Environmental Resources Congress, May 17-21, West Palm Beach, FL.

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期刊論文 Refereed Journal Publications

1.葉明生、張博雄、陳新淦、李天浩、于芃，2017，適用於台灣地區降雨預警之閃電躍升演算法探討，大氣科學第 45 期第 4 號，p349-373.

2.Cheng, A.R., T.H. Lee, H.I. Ku, Y.W. Chen, 2016, “Quality Control Program for Real-Time Hourly Temperature Observation in Taiwan”, Journal of Atmospheric and Oceanic Technology. Vol. 33, p953-976.

研討會論文 Conference Presentations)

1.吳秉澤、李天浩，2019，應用觀測系統實驗辨識移速場、雨胞和對流強度變化評估極短時外延定量推估降雨之研究，第 24 屆水利工程研討會論文。

2.林彥廷、李天浩，2019，斜板漫地流滯蓄水量－逕流量遲滯效應函數研究，第 24 屆水利工程研討會論文。

3.Matthias Diehl and Tim H. Lee, 2019, Stable modeling of transient flows in pipes, 第 24 屆水利工程研討會論文。

4.黃貫鈞、李天浩，2018，台北南區暴雨淹水調適策略與效益之研究，107 年天氣分析與預報研討會論文集。

5.李天浩、任文瑋、黃貫鈞，2017，模擬分析道路導排、減雨峰和蓄洪滂策略對減輕都市暴雨淹水的效益－以臺北市東區為例，106 年天氣分析與預報研討會論文集。

6.鄭哲榮、李天浩，2017，擴充 ABLER 法為分區聯合最佳化估計降水系統移速場，106 年天氣分析與預報研討會論文集。

7.陳怡彣、鄭安孺、于芃、李天浩、顧欣怡、黃于盈，2017，風速觀測資料品質檢覈技術之研究，106 年天氣分析與預報研討會論文集。

8.陳怡彣、鄭安孺、于芃、李天浩、顧欣怡、黃于盈，2017，風速觀測資料品質檢覈技術之研究，106 年天氣分析與預報研討會論文集。

9.劉承翰、李天浩、于芃、葉明生、張博雄、陳新淦、鄭安孺，2017，臺灣地區之閃電特徵與降雨相關性探討-以 0601 豪雨為例，106 年天氣分析與預報研討會論文集。

10.于芃、陳怡彣、李天浩、顧欣怡、黃于盈、鄭安孺，2016，地面氣壓場分析技術方法之研究，105 年天氣分析與預報研討會論文集。

11.鄭安孺、張博雄、陳新淦、李天浩、葉明生、陳怡彣、于芃、劉承翰，2016，臺灣地區閃電資料特徵與個案初步分析研究，105 年天氣分析與預報研討會論文集。

12.陳怡彣、顧欣怡、黃于盈、李天浩、鄭安孺、于芃，2016，利用普通克利金法內插雨量差值法修正雷達定量降雨估計推估地面雨量分析場之研究，105 年天氣分析與預報研討會論文集。

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Water resources economics and policy, Decision making process, Operational research approach, Stochastic Hydrology and its Use in Water Resources Systems, Hydroinformatics

A.期刊論文(Journal papers)

1. Su, H. T., You, G. J. Y., & Chu, C. C. (2020). Using two-dimensional modeling to evaluate strategies of sediment reduction and evacuation for Nanshi river under Guishan dam operations. *River Research and Applications, 36(10), 2063-2077.*
2. Huang, C. L., Hsu, N. S., Yao, C. H., & **You, G. J. Y**. (2020). Identification of hydrogeological evolution using hydrogeology-seismology analysis of groundwater head fluctuation related to the 1999 MW= 7.5 Chi-Chi earthquake. *Progress in Earth and Planetary Science*, 7(1), 1-28.
3. Wang, Y. H, Chu, C. C., **You, G. J. Y.*,** Gupta, H.Y & Chiu, P. H. (2020) Evaluating Uncertainty in Fluvial Geomorphic Response to Dam Removal. *Journal of Hydrologic* Engineering 25(6)
4. Wu, P. Y., You, **G. J. Y***., & Chan, M. H. (2020). Drought Analysis Framework based on Copula and Poisson Process with Nonstationarity. *Journal of Hydrology*, 125022.
5. Huang, C. L., Hsu, N. S., Hsu, F. J., **You, G. J. Y**., & Yao, C. H. (2020). Symmetrical Rank-Three Vectorized Loading Scores Quasi-Newton for Identification of Hydrogeological Parameters and Spatiotemporal Recharges. *Water*, 12(4), 995.
6. 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.
7. Wang, Y. H., Hsu, Y. C., You, G., Yen, C. L., & Wang, C. M. (2018). Flood Inundation Assessment Considering Hydrologic Conditions and Functionalities of Hydraulic Facilities. *Water*, *10*(12), 1879.
8. 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.

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1. **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.
2. 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.
3. 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).
4. **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）
5. **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）
6. **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.
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9. 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）。

10. 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.
11. **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.
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. **Shih, S.S.** * (2020, Apr). Spatial habitat suitability models of mangroves with *Kandelia obovata*. Forests, 11(4):477. (SCI, 17/67, Forestry). MOST 104-2621-M-002-022-MY2.
14. **Shih, S.S.** *, Wang, H.C. (2020, Jun). Flow Uniformity Metrics for Quantifying the Hydraulic Performance of Constructed Wetlands. *Ecological Engineering*, 155, 105492. (SCI, 43/165, Ecology). MOST 103-2621-M-002-020.
15. **Shih, S.S.**, Ding, T.S., Chen, C.P., Huang, S.C., Hsieh, H.L. (2020, Nov). Management recommendations based on physical forces driving land-covers and habitat preferences of polychaete and bird assemblages for a mangrove-vegetated estuary. *Wetlands*. (Accepted). (SCI, 89/159, Ecology). MOST 103-2621-M-002-020.

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1. 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.
2. **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.
3. 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.
4. **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.
5. 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，蔥蓀農場，南投市。科技部：104-2621-M-002-022-MY2。

6. **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。
7. **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。
8. **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.
9. **Shih, S.S.** (2018, Jun). Water Budget Investigation of a Mountain Lake for Preserving the Endemic Plant in Taiwan. AOGS 2018, Hawaii, USA.
10. 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。
11. 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。
12. 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。
13. 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。
14. 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。
15. 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。
16. **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.
17. 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.
18. 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.
19. Hsu, Y.W., **S.S. Shih** (2019, Jul). Hydrological investigation and water budget model development of a mountain wetland in northern Taiwan. AOGS2019, Singapore.
20. 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.
21. Wang, H.C., **S.S. Shih** (2019, Jul). Identification of dead zone in constructed wetlands for evaluating the related hydraulic performance. AOGS2019, Singapore.
22. **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。

23. **施上粟**、郭品含、吳諮育（2019 年 05 月）。裂隙岩層地下水流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。
24. Huang, Z.Z., **S.S. Shih** (2020, Sep). Tradeoffs Between Flood Protection and Ecological Conservation on Mangrove Restoration and Dyke Modification in Guandu Floodplain, Northern Taiwan. 2020 TWS Annual Meeting, Taipei City.

專書 (Monographs)

1. Wu YH., Liu KF., Chen YC., Chiu YJ., **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.

技術報告 (Technical reports)

1. **施上粟**，2016-2017，紅樹林生育地模式發展及海岸防護效益評估（2/2），行政院科技部委託研究。
2. **施上粟**，2016，景觀生態學應用於河川環境規劃之研究（2/3），經濟部水利署水利規劃試驗所委託研究。
3. **施上粟**，2016，淡水河水系河川情勢調查（2/3），經濟部水利署第十河川局委託研究。
4. **施上粟**，2016，105-106 年陽明山國家公園夢幻湖生態保護區水文調查計畫，陽明山國家公園管理處委託研究。
5. **施上粟**，2017-2018，城市防洪減災中產生之新興水資源供水規劃及河川生態基流量補注研究，行政院科技部委託研究。
6. **施上粟**，2017-2018，氣候變遷及河川海岸治理工程效應下之紅樹林反應及調適機制（1/3），行政院科技部委託研究。
7. **施上粟**，2017，景觀生態學應用於河川環境規劃之研究（3/3），經濟部水利署水利規劃試驗所委託研究。
8. **施上粟**，2017，淡水河水系河川情勢調查（3/3），經濟部水利署第十河川局委託研究。
9. **施上粟**，2017，106-107 年陽明山國家公園夢幻湖生態保護區水文調查計畫，陽明山國家公園管理處委託研究。
10. **施上粟**，2018-2019，氣候變遷及河川海岸治理工程效應下之紅樹林反應及調適機制（2/3），行政院科技部委託研究。
11. **施上粟**，2018，臺北防洪計畫（大漢溪、新店溪及二重疏洪道河段)清疏以維生態策略研擬，經濟部水利署第十河川局委託研究。
12. **施上粟**，2018，陽明山夢幻湖裂隙調查及示蹤劑試驗先期研究，陽明山國家公園管理處委託研究。
13. **施上粟**，2019-2020，氣候變遷及河川海岸治理工程效應下之紅樹林反應及調適機制（3/3），行政院科技部委託研究。

14. **施上粟**，2019，淡水河主流及其周邊河道減糙及疏濬策略研擬，經濟部水利署第十河川局委託研究。
15. **施上粟**，2019，夢幻湖生態保護區地下水觀測及湖水位管控策略研擬，陽明山國家公園管理處委託研究。

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Water Waves, Coastal Engineering, Coastal Hazards

期刊論文 (Journal Papers)

1. H.-E. Wang and I-C. Chan (2020, Sep). Numerical investigation of wave generation characteristics of bottom-tilting flume wavemaker. *Journal of Marine Science and Engineering*, 8(10), 769.
2. T.-Y. Yang and I-C. Chan (2020, Sep). Drag force modeling of surface wave dissipation by a vegetation field. *Water*, 12(9), 2513.
3. Y. Li, C. C. Mei and I-C. Chan (2019, Dec). Asymptotic analysis of dispersive tsunami from a slender fault. *Journal of Hydrodynamics*, 31, 1073 – 1084.

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.

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Open channel, Sediment transport, Hydrometric measurement

(A)期刊論文(Journal Papers)

1. Ho, H-C., Lin, Y-T., Muste, M. (2020) “Velocimetry Based on Self-Generated Surface Wave Patterns”, Water 12(9), 2342 (SCI, rank 31/94=33%)
2. Ho, H-C., Lin, S-W., Lee, H-Y., Huang, C-C. (2019) "Evaluation of Multi-Objective Genetic Algorithm for Low Impact Development in Overcrowded City", Water 11(10), 2010 (SCI, rank 31/94=33%)
3. Yang, K-H., Wei, S-B., Adilehou, W-M., Ho, H-C. (2019) "Fiber-reinforced internally unstable soil against suffusion failure", Construction and Building Materials 222, 458-473 (SCI, rank 11/134=8%)
4. Feng, Q., Ho, H-C., Man, T., Wen, J., Jie, Y., Fu, X. (2019) "Internal Stability Evaluation of Soils", Water 11 (7), 1439 (SCI, rank 31/94=33%)
5. Huang, C-C., Lin, W-C., Ho, H-C.*, Tan, Y-C. (2019) "Estimation of Reservoir Sediment Flux through Bottom Outlet with Combination of Numerical and Empirical Methods", Water 11 (7), 1353 (SCI, rank 31/94=33%), 本人為通訊作者
6. Huang, C-C., Fang, H-T., Ho, H-C., Jhong, B-C. (2019) "Interdisciplinary application of numerical and machine-learning-based models to predict half-hourly suspended sediment concentrations during typhoons", Journal of Hydrology 573, 661-675 (SCI, rank 6/94=6%)
7. Gu, Z., Ho, H-C., Wang, Z,. Lin, YT. (2018) "Laboratory Studies on Nearshore Density-Driven Exchange Flow over a Partly Vegetated Slope", Water 10 (8), 1073 (SCI, rank 31/94=33%)
8. Sun, ZL., Jiao, JG., Huang, SJ., Gao, YY., Ho, H-C., Xu, D. (2018) "Effects of Suspended Sediment on Salinity Measurements", IEEE Journal of Oceanic Engineering 43 (1), 56-65 (SCI, rank 24/134=18%)
9. Chiang, Y-M., Hao, RN., Ho, H-C., Chang, T-J., Xu, YP. (2017) "Evaluating the contribution of multi-model combination to streamflow hindcasting by empirical and

conceptual models", Hydrological Sciences Journal 62 (9), 1456-1468 (SCI, rank 36/90=39%)

10. He, Z., Zhao, L., Lin, T., Hu, P., Lv, Y., Ho, H-C., Lin, YT. (2017) "Hydrodynamics of gravity currents down a ramp in linearly stratified environments" Journal of Hydraulic Engineering 143 (3), 04016085 (SCI, rank 49/128=38%)
11. Kim, D., Ho, H-C. *, Baranya, S., Muste, M. (2016) "Qualitative and Quantitative Acoustic Mapping of Bedform Dynamics", Flow Measurement and Instrumentation, 50, 80-89 (SCI, rank 30/64=46%), 本人為通訊作者
12. Muste, M., Baranya, S., Tsubaki, R., Kim, D., Ho, H-C., Tsai, H., and Law, D. (2016) "Acoustic Mapping Velocimetry" Water Resources Research, (52)5, 4132-4150 (SCI, rank 2/22=7%)
13. Basnet, K., Constantinescu, G. *, Muste, M., Ho, H-C. (2016) “Close Range Photogrammetry for Tracking Drifted Snow Deposits” Cold Regions Science and Technology, 121, 141-153 (SCI, rank 33/134=24%)

(B)研討會論文(Conference Papers)

1. Wang, YD., and Ho, H-C. (2019) "Evaluation of Multi-Objective Genetic Algorithm for Low Impact Development in Planning Urban Area", International Conference on Smart Cities, Seoul, Korea
2. Wei, S., Ho, H-C., Lee, H-Y. (2019) "Optimization of Low Impact Development for Flood Mitigation in Highly Concentrated Region – Case Study for New Taipei City", International Conference on Smart Cities, Seoul, Korea
3. Tsai, Y-J., Ho, H-C., Lin, S-W., Lee, H-Y. (2019) "Optimization of LID practices on water quantity and quality for the overdeveloped city", EGU, Vienna, Austria
4. Chiu, and Ho, H-C. (2019) "Can Convolution Neural Network Improve the Discharge Measurement using Particle Image Velocimetry Method?", EGU, Vienna, Austria
5. Sung, C-Y., and Ho, H-C., (2019) "Estimation of Open Channel Surface Velocity with Faster Region-Convolutional Neural Networks", EGU, Vienna, Austria
6. Ho, H-C., and Chang, Y-M. (2018) "Comparison of several dynamic-feedback neural networks in synthetic and hydrological time-series", AOGS Annual Meeting, Honolulu, USA
7. Ho, H-C., Chang, T-J., Chang, Y-M., (2017) "Evaluation the Contribution of Multi-model Combination to Streamflow Hindcasting by Empirical and Conceptual Models", AOGS Annual Meeting, Singapore
8. Ho, H-C., and Chang, T-J. (2017) "Study on Morph- and Hydro-dynamics of Culverts", Sediment Bypass Tunnel Annual Meeting, Kyoto, Japan

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Public Transportation Planning and Operation, Active Mobility, Transit-Oriented Development, Sustainable Mobility Policy and Planning, Transportation Economics, Smart and Shared Mobility

期刊論文 (Journal Papers)

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。

研討會論文 (Conference Papers)

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 Yiung 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. 邱琮驊、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。

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(A) 期刊論文 (Journal Papers)

1. 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。
2. 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)
3. 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)
4. 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。
5. 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。
6. Chou, Chia-Pei, Hao-Jui Chu, and Ai-Chin Chen. Advanced runway groove identification. Measurement 152, 2020. (SCI)
7. 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. Volume 146, Issue 3 - September 2020. (SCI)
8. Chou, Chia-Pei, Hung-Hsuan Hsu, Ai-Chin Chen, Automatic Recognition of Worded and Diagrammatic Road Markings based on Laser Reflectance Information, ASCE's Journal of Transportation Engineering, Part B: Pavements. Volume 146, Issue 3 - September 2020. (SCI)
9. Chia-Pei Chou, Kin-Wai Leong, Ai-Chin Chen, and Yao-Xuan Lee, Road Marking Retroreflectivity Study via a Visual Algorithm, International Journal of Pavement Research and Technology, Volume 13, Issue 6, pp. 614-620, Nov. 2020. (EI)
10. Chia-Pei Chou, Po-Hsun Huang, and Ai-Chin Chen, Virtual Reality Application on Retroreflective Performance of the Road Marking, Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board of the National Academies, Washington, D.C. (under review)

(B) 研討會論文（Conference Papers）

（僅列舉國際重要會議或與本申請計畫相關者）

1. 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.
2. 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.

3. 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.
4. 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.
5. 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]
6. 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.
7. 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.
8. 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.
9. 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]
10. 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。
11. 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.
12. 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。
13. 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。
14. 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.
15. 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.
16. 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.
17. 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.
18. 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。

19. 黃柏勛、周家蓓、陳艾勳、李耀瑄，以 VR 虛擬實境探討標線反光性能標準，第十四屆鋪面材料再生及再利用學術研討會暨 2020 永續與創新基礎建設國際研討會，2020 年 10 月 22-23 日，台南市。
20. 李耀瑄、周家蓓、黃柏勛、陳艾勳、呂昀軒，雙效標線在不同交通環境之長期性能追蹤立，第十四屆鋪面材料再生及再利用學術研討會暨 2020 永續與創新基礎建設國際研討會，2020 年 10 月 22-23 日，台南市。
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(D) 專利及標準申請(Patents)

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C19 許添本,溫谷琳, 陳俊嘉。應用決策樹分析左轉穿越側撞風險影響因子。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-15

C20 許添本,溫谷琳, 林瑩潔。應用類神經網路探討交叉口左轉穿越側撞之肇事因子。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-21。

C21 許添本,溫谷琳, 張哲寧, 孔垂昌。機車直接左轉現況與改善設計分析。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP1-24。

C22 許添本,黃苡瑄。巷弄標線型人行道交通安全衝擊評估。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-15。

C23 許添本, 賴朝睿, 郭岱儒。交叉口行人設施服務水準模糊分級之研究。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-23。

C24 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。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-11。

C25 許添本、白佳樺、黃郁倫。機車騎乘之風險行為感知分析-台灣與印尼之比較。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-16。

C26 許添本、陳雅琳。高雄輕軌沿線交叉口安全評估分析。中華民國運輸學會 106 年學術論文研討會，2017 年 12 月 7~8 日，PP.1-24。

C27 許添本, 溫谷琳, 張哲寧。應用決策樹於開放第三車道行駛機車管制之研究。中華民國運輸學會 105 年學術論文研討會，2016 年 12 月 8~9, PP.234-251

C28 許添本, 溫谷琳, 張哲寧。應用完全貝氏法探討機車行駛第三車道肇事因子之研究。

中華民國運輸學會 105 年學術論文研討會，2016 年 12 月 8~9 日，PP.252-269。

C29 許添本, 溫谷琳, 郭于鴻, 蕭唯倫, 張開國, 孔垂昌, 黃明正。汽機車方向分流的右轉側撞防治試辦效果分析。中華民國運輸學會 105 年學術論文研討會，2016 年 12 月 8~9 日，PP.434-452。

C30 許添本, 吳元維。無號誌路口交通衝突情境之風險分析。中華民國運輸學會 105 年學術論文研討會，2016 年 12 月 8~9 日，PP.420-433

C31 許添本、蕭唯倫、李芊,汽機車右轉側撞車路整合防撞策略，中華民國運輸學會 105 年學術論文研討會，2016 年 12 月 8~9 日，PP.244-261。

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A. 期刊論文 (Journal Papers)

a. SCI/SSCI 期刊論文

1. **Chu, J. C.***, Chen, A. Y., and Shih, H.-H. (2020) Stochastic Programming Model for Integrating Bus Network Design and Dial-a-ride Scheduling, Transportation Letters, Published online: 30 Nov 2020 (SCI). MOST 108-2628-E-002-003-MY3. 本人為第一作者.
2. **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, 131, 247-266. (SCI). MOST 105-2628-E-002¬004-MY3. 本人為第一作者.
3. 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.
4. **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.
5. **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.
6. **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.

7. 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.
8. **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.
9. 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.
10. **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.

b.非屬 SCI/SSCI 之 EI 或 TSSCI 期刊論文

1. 陳韻如、**朱致遠***、Kanticha Korsesthakarn (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.

B. 研討會論文 (Conference Papers)

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.

b.國內會議論文

1. Shih, A.-L., Sung, Y.-W., and **Chu, J. C.**, Optimization and simulation of real-time holding and speed control strategies in a bus network, 2020 International Conference and Annual Meeting of Chinese Institute of Transportation, Tainan City, Taiwan, Dec. 3-4, 2020 (in Chinese).
2. 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).

3. 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).
4. 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).
5. 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.
6. 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.
7. 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.
8. 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.
9. **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.
10. 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.
11. **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

12. Wu, H.-Y., Korsesthakarn, 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.
13. 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).

C. 教科書 (Books)

陳惠國、邱裕鈞、朱致遠，交通工程(二版)，五南圖書出版有限公司，2017 年

陳柏華 副教授 Chen, Albert Y.

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Disaster and Emergency Transportation Planning, Image Sensing in Traffic Engineering Applications, Medical Response Operations

期刊論文(Journal Papers)

* denotes corresponding author, and # indicates student under my supervision.

1. Lin#, T.-H., Chen*, A. Y. and S.-H. Hsieh (2020) "Temporal Image Analytics for Abnormal Construction Activity Identification." Automation in Construction, Accepted (SCI).
2. Chen#, C.-H., Lee, Y.-C., and Chen*, A. Y. (2020) "A Building Information Model Enabled Multiple Traveling Salesman Problem for Building Interior Patrols." Advanced Engineering Informatics, Accepted (SCI).
3. Hsiao, C.-C., Sun, M.-C., Chen, A. Y., and Hsu*, Y.-T. (2020) "Location Problems for Shelter-in-place Deployment: a Case Study of Vertical Evacuation upon Dam-break Floods." International Journal of Disaster Risk Reduction, Accepted. (SCI)
4. Chu*, J. C., Chen, A. Y., and Shih, H.-H. (2020) "Stochastic Programming Model for Integrating Bus Network Design and Dial-a-ride Scheduling." Transportation Letters, Accepted (SCI/SSCI).
5. Chen*, A. Y., Chiu#, Y.-L., Hsieh#, M.-H., Lin#, P.-W., and Angah#, O. (2020) "Conflict Analytics through the Vehicle Safety Space in Mixed Traffic Flows using UAV Image Sequences." Transportation Research Part C: Emerging Technologies (Accepted) (SCI).
6. Angah#, O., and Chen*, A. Y. (2020) "Removal of Occluding Construction Workers in Job Site Image Data using U-Net Based Context Encoders." Automation in Construction, 119, 103332 (SCI).
7. Angah#, O., and Chen*, A. Y. (2020) "Tracking Multiple Construction Workers through Deep Learning and Gradient Based Methods with Re-matching Based on Multi-Object Tracking Accuracy." Automation in Construction, 119, 103308 (SCI).
8. 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*, 106, 102883 (SCI).
9. 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.
10. 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. (2018) "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).

11. 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).
12. 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 (SCI).
13. 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 (SCI).
14. 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 (SCI)
15. 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.

研討會論文(Conference Papers)

1. Qiu, W.-X. and Chen, A. Y. (2020) “Image Sensing-based Occupancy Estimation for Demand of Installation of Automated External Defibrillators,” The 24th Symposium on Construction Engineering and Management, Taipei, Taiwan August 5. (**Best Paper Award**.)
2. Qiu, W.-X., Chen, A. Y., and Hsieh, T.-Y. (2020) “Image Sensing-Based In-Building Human Demand Estimation for Installation of Automated External Defibrillators,” International Conference on Civil and Building Engineering Informatics (ICCBEI), Brazil, 2020.
3. 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.
4. 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
5. 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.
6. 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.
7. 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.
8. 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
9. 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

10. 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
11. 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
12. 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)**
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.

24. 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.
25. 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.

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(A) 期刊論文(Journal Papers) (*: 通訊作者)

a. SCI/SSCI 期刊論文

(1) Ni, Y.C., Lo, H.H., **Hsu, Y.T.***, Huang, H.J. (2020) "Exploring the effects of passive transit signal priority design on bus rapid transit operation: a microsimulation-based optimization approach." *Transportation Letters*, pp. 1–14.

(2) Miralinaghi, M., Seilabi, S.E., Chen, S., **Hsu, Y.T.**, Labi, S. (2020). "Optimizing the selection and scheduling of multi-class projects using a Stackelberg framework." *European Journal of Operational Research*, 286(2), pp. 508–522.

(3) Lee, W.Y., **Hsu, Y.T.***, Suen, C.S., Wu, M.H., Ni, Y.C. (2020). "Exploring intercity trip patterns of railway systems on national holidays using deep auto-encoder." *Transportation Research Record*.
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(4) 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.

(5) 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.

(6) 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.

(7) 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.

(8) **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.

(9) **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.

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(Conference Papers) (*: 通訊作者)

a. 國外會議論文

(1) Chou, C.Y., **Hsu, Y.T.*** "Study of societal resilience against natural disasters: perspectives of risk perception and prospect theory." 26th International Sustainable Development Research Society Conference (online @Budapest, Hungary, Jul. 2020).

(2) 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).

(3) 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. 2020).

(4) 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).

(5) 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).

(6) 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).

(7) Li, H.Y., **Hsu, Y.T.*** "Stochastic dynamic dispatch model for freeway incident response." 32nd KKHTCNN Symposium on Civil Engineering (Daejeon, Korea, Oct. 2019).

(8) 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).

(9) 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).

(10) 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).

(11) 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).

(12) 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).

(13) 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).

(14) 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).

(15) Chen, Y.J., **Hsu, Y.T.***, Miralinaghi, M. "Optimizing resilience of retorting disrupted interdependent infrastructure systems." 98th Transportation Research Board (Washington, DC, Jan. 2019).

(16) 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).

(17) 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).

(18) 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).

(19) 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).

(20) 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).

(21) 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).

(22) 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).

(23) 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).

(24) 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).

(25) 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).

(26) 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).

(27) 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).

(28) 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).

(29) 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).

(30) 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).

(31) 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).

(32) 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).

(33) 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).

(34) **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.

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) 技術報告

(1) 許聿廷、蕭鈞謙（2020）興建學生宿舍交通衝擊評估計畫，臺灣大學總務處。

(2) 蘇育民、陳介豪、許聿廷、鄭鈞耀、周琪雅（2020）探討道路交通標線之防滑特性，交通部運輸研究所/MOTC-IOT-109-SDB010。

(3) 水敬心、許聿廷、張瑞巖（2020）YouBike 2.0 於臺灣大學校總區試辦期間營運績效 評估與需求分析，臺灣大學總務處。

(4) 許聿廷、毛美能、倪英璨（2020）臺北都會區大眾捷運系統萬大－中和－樹林線（第二期）委託技術服務 DQ125 設計標：車站人流分析工作，中興工程顧問公司/0080B-06/ 108-S-A71。

(5) 廖俊雄、沈宗緯、許聿廷、謝宛彧、周琪雅（2019）中華郵政物流園區車流分析與動線規劃案，中華郵政。

(6) 許聿廷、李文宇（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-。

(7) 許聿廷、陳薇亘、楊璨凱、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。

(8) 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。

(9) 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。

(10) 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。

(11) 許聿廷、朱致遠、游景雲、陳柏華、卡艾瑋、陳譽仁、康家瑜 (2017) 潰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-。

(12) 許聿廷、戴至佑、楊璨凱、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。

(13) 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。

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Traffic engineering, Transportation economics, Infrastructure planning, Traffic assignment

期刊論文 (Journal Papers):

1. Shohei YASUDA, *Takamasa IRYO, Katsuya SAKAI; Network Aggregation Method using Vehicle Trajectory Data, JSTE Journal of Traffic Engineering, Vol. 6, A_310-A_316, 2020. (in Japanese)
2. *Katsuya SAKAI, Ronghui LIU, Takahiko KUSAKABE and Yasuo ASAKURA; Pareto-Improving Social Optimal Pricing Schemes Based on Tradable Bottleneck Permits for Managing Congestion at a Merging Section, *International Journal of Sustainable Transportation.*, Vol. 11, 737-748, 2017. (SCI)
3. *Katsuya SAKAI, Takahiko KUSAKABE and Yasuo ASAKURA; Effects of Tradable Bottleneck Permits and Pareto Improvement under Users' Heterogeneity in Schedule Flexibility and Toll Resistance; *Journal of Japan* Society *of Civil Engineers, Ser. D3 (Infrastructure Planning and Management)*, Vol.72, No.5, 2016. (in Japanese)

研討會論文（Conference Papers）

1. Pimonwat WANNAPONG and Katsuya SAKAI; Departure Time and Parking Choices Equilibrium Model with Macroscopic Fundamental Diagram, *The 10th Asian Conference in Regional Science (ACRS)*, Tsukuba (online) 2020. 10
2. Cheng-Chin HUANG and Katsuya SAKAI; Departure time choice equilibrium under second-best pricing with untolled substitutes: Expansion to general network with single-bottleneck routes, *The 10th Asian* Conference *in Regional Science (ACRS)*, Tsukuba (online), 2020.10
3. Katsuya SAKAI, Masayuki KUCHII, Takamasa IRYO; Analysis on Network Throughput Reduction with Travel Time Information Propagation Model of Tsunami Evacuation, *Proceedings of Infrastructure Planning*, Online, 2020.6 (in Japanese)
4. Takahiko KUSAKABE and ○Katsuya SAKAI; Fundamental performance features of one-way vehicle sharing system with self-driving vehicles as an urban transportation mode, *The 2019 Annual Conference of the International Transportation Economics Association (ITEA)*, Paris, 2019.6
5. ○Katsuya SAKAI, Yuta KOYAMA, Shohei YASUDA, Takamasa IRYO; Investigations of Electronic Toll Collection (ETC) 2.0 system -validation of map matching algorithm and analysis of spatial deviation in

observed data-, *ISTS&IWTDCS*, Matsuyama, 2018.8

6. ○Shohei YASUDA, Takamasa IRYO, Yuta KOYAMA, Katsuya SAKAI; Characteristics of ETC2.0 probe data compared to road traffic census data, *ISTS&IWTDCS*, Matsuyama, 2018.8
7. ○Katsuya SAKAI, Takahiko KUSAKABE; Departure time choice equilibrium model considering the utility change in the sightseeing spot, *Proceedings of Infrastructure Planning*, Tokyo, 2018.6 (in Japanese)
8. ○Shohei YASUDA, Katsuya SAKAI, Takamasa IRYO; Evaluation the Stability of Bottleneck Capacity in a Traffic Corridor Using Probe Vehicle Data, *Proceedings of Infrastructure Planning*, Tokyo, 2018.6 (in Japanese)
9. ○Kashin SUGISHITA, Katsuya SAKAI, Takamasa IRYO, Yasuo ASAKURA; Intentional Removals of Nodes and Links to Avoid Gridlock, *Proceedings of Infrastructure Planning*, Tokyo, 2018.6 (in Japanese)
10. ○Yuta KOYAMA, Katsuya SAKAI, Takamasa IRYO, Yasuo ASAKURA; Intentional Removals of Nodes and Links to Avoid Gridlock, *Proceedings of Infrastructure Planning*, Tokyo, 2018.6 (in Japanese)
11. ○Katsuya SAKAI, Takahiko KUSAKABE; Traffic congestion analysis model for sightseeing places with departure time choice equilibrium model, *31st Annual Conference of ARSC (Applied* Regional *Science Conference)*, Tokyo, 2017.11 (in Japanese)
12. ○Katsuya SAKAI, Takahiko KUSAKABE and Yasuo ASAKURA; Effects of Partial Implementation of Tradable Bottleneck Permits Scheme on Departure Time Choice Equilibrium, *6th International Symposium on Dynamic Traffic Assignment (DTA)*, Sydney, 2016.6

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Construction Estimating & Scheduling, Project Performance Evaluation

期刊論文(Refereed Papers)

A. SCI 之期刊論文

1. H. Ping Tserng, Meng-Hsueh Lee, Shang-Hsien Hsieh & Hsiang-Ling Liu, (2016) "The measurement factor of employee participation for Knowledge Management System in engineering consulting firms," Journal of Civil Engineering and Management, 22:2, 154-167.

B. 其他期刊論文

1. 林聰能、曾惠斌，"污水管推進施工障礙排除-以中利污水下水道工程第二期為例"，地下管道期刊，第 39 期，2018

研討會論文(Conference Papers)

1.Shiau-Jing Ho, Sheng-Lung Lin and Hui-Ping Tserng, “An Analysis Using Game Theory on the Investment Incentive of PPP Projects,” 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), Taipei, Taiwan, June 28-30, 2017.

2.Will Y. Lin, Pao H. Lin and H. Ping Tserng, “Automating the Generation of Indoor Space Topology for 3D Route Planning Using BIM and 3D-GIS Techniques,” 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), Taipei, Taiwan, June 28-30, 2017.

3.Yen-Ray Chen and H. Ping Tserng,” An Integrated Methodology for Construction BIM & ERP by using UML Tool,” 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), Taipei, Taiwan, June 28-30, 2017.

4.Yu-Chi Sung, Chia-Chuan Hsu, Chian-Kuo Chiu, Hui-Ping Tserng, and Kuo-Chun Chang, “Corrosion Hazard Map on Reinforcement of Reinforced Concrete Bridges in Taiwan,” The 16th International Conference on Computing in Civil and Building Engineering（ICCCBE）, Osaka, Japan, July 6 - 8, 2016.

5.Wei-Cheng Chen, Mei-Yuan Yang and Hui-Ping Tserng,(2016).Analysis of causes and countermeasures of fall accidents in construction industry, The Twenty-ninth KKHTCNN Symposium on Civil Engineering, Hong Kong, December 2016.

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法律經濟學

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期刊論文 (Journal Papers)

1. Pei-Yan Lin, Aswin Lim, Shu-ken Ho, and S. Ping Ho* (2018, Nov). Application of the Novel Composite Earth Retaining Structure Method to Urban Excavations:A Constructability Analysis. *Journal of the Chinese Institute of Engineers*, 41(7), 603-611. (SCI). MOST 103-2221-E-002-236-MY3.
2. 林培元, 張登貴, 何樹根, 徐明志, 荷世平*（2016年03月）。Case Study of Strategy and Technical Issues of Urban Renewal Utilizing Original Basement。**Sino-Geotechnics**, 147, 13-24。 (EI) 。科技部：103-2221-E-0023- 236-MY3。

研討會論文(Conference Papers)

1. Ho, S. P., Nguyen, V. H., and Hsu, W. C. (2019, Aug). Consumer Behaviors in Certified Green Buildings -An Empirical Study. 2019 Clute International Academic Conferences New York, New York City, USA. MOST 106-2221-E- 002-038-MY3. 本人為第一作者、通訊作者. Best Presentation Award.
2. Nguyen, V. H. and Ho, S. P. (2019, Jul). Consumer Behaviors on Certified Green Building-An Empirical Study of Vietnam.. The 23rd Symposium of Construction Engineering and Management, Taichun, Taiwan. MOST 106-2221-E-002-038- MY3. Outstanding Paper Award.
3. S. Ping Ho and Pei-Yan Lin (2018, Nov). Critical Success Factors of Value Engineering in Construction Industry: A Case Study of Japanese Company. The Thirty-First KKHTCNN Symposium on Civil Engineering, Kyoto, Japan. MOST 103-2221-E-002-236-MY3. 本人為第一作者、通訊作者.
4. S. Ping Ho*, Chungyang You, and Yaowen Hsu (2018, Apr). An Empirical Study of Sustainable

Development and Disclosure in Construction Industry. EGU General Assembly 2018, Vienna, Austria. MOST 106-2221-E-002-038-MY3. 本人為第一作者、通訊作者.

5. S. Ping Ho*, C. Yu, and Y. Hsu (2017, Apr). A Contingency View of the Strategies of Sustainable Development and Disclosure: Study of ENR's Top 10 Contractors. EGU General Assembly 2017, Vienna, Austria. MOST 103-2221-E-002-236-MY3. 本人為第一作者、通訊作者.
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• (3) Patents

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

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Sustainable Building Design, Building Simulation and Energy Modeling, Building Envelopes and Commercial facades, Indoor Environmental Conditions

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期刊論文 (Journal Papers)

期刊論文

1. Lin, J.J., and Golparvar-Fard, M. (under review). Fusing Deep Learning and Geometric Modeling for Computer Vision Driven Progress Monitoring on Construction Sites. Automation in Construction. 本人為第一作者、通訊作者.
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Hazard risk analysis, Community sustainability and resilience, Distributed simulation of community response to disasters, Agent-based modeling of human behavior in disasters

期刊論文 (Journal Papers) (corresponding author*)

[1] **Lin, S.-Y.**, Hung, H.H., Yang, J.P.*, and Yang, Y.B. (2017). Seismic Analysis of Twin Tunnels by a Finite/Infinite Element Approach. *International Journal of Geomechanics*, 17(9): 04017060. https://doi.org/10.1061/(ASCE)GM.1943-5622.0000940 (SCIE)

[2] **Lin, S.-Y**.*, Chuang, W.C., Xu, L., El-Tawil, S., Spence, S.M.J., Kamat, V.R., Menassa, C.C., and McCormick, J. (2019). Framework for Modeling Interdependent Effects in Natural Disasters: Application to Wind Engineering. *Journal of Structural Engineering*, 145(5): 04019025. https://doi.org/10.1061/(ASCE)ST.1943-541X.0002310 (SCIE)

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[4] **Lin, S.-Y**.*, El-Tawil, S., and Aguirre, B.E. (2020) Computational Simulation of Benefit Fraud and Community Resilience in the Wake of Disaster. *Natural Hazards Review*, 21(4): 04020039. https://doi.org/10.1061/(ASCE)NH.1527-6996.0000407 (SCIE, SSCI)

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[2] Abdelhady, A.U., **Lin, S.-Y.**, Xu, L., Sediek, O.A., Hlynka, A.W., El-Tawil, S., Spence, S.M.J.*, McCormick, J., Kamat, V.R., and Menassa, C.C. (2019). A Distributed Computing Platform for Community Resilience Estimation. *Proceeding of the 13th International* Conference *on Applications of Statistics and Probability in Civil Engineering, ICASP13, Seoul, South Korea, May 26-30, 2019.*

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[4] **Lin, S.-Y**.*, Hlynka, A.W., Xu, L., Lu, H., Sediek, O.A., El-Tawil, S., Kamat, V.R., Prakash A., Menassa, C.C., Spence, S. M. J., McCormick, J., and Aguirre, B. (2020). Simple Run-Time Infrastructure (SRTI): A Distributed Computational tool for Natural Hazards Simulation. *Proceeding of the 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan, September 13-18, 2020.*

[5] **Lin, S.-Y**.*, El-Tawil, S., and Aguirre, B.E. (2020). Effect of Benefit Fraud on Community Resilience in the Wake of Disaster. *Proceeding of the 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan, September 13-18, 2020.*

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BIM, Engineering Information and Knowledge Management, Computational Mechanics, Engineering Education

A. 期刊論文 (Journal Papers)

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7. 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]**

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(*) Corresponding author

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18. 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。
19. 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 與影像數貼技術”，*營建知訊*，第 424 期，第 57-62 頁。
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26. 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。

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30. 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。

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34. 郭仕璞、黃世璋、許書銘、鄭書恒、嚴世傑、柳儒錚、謝尚賢（2020），”BIM 輔助設計-捷運地下車站結構工程”，*中興工程季刊*，第 147 期，101-109（2020 年 4 月號-五十周年特刊）。

35. 張正憲、林承翰、洪晨瑋、賴建名、嚴世傑、柳儒錚、謝尚賢（2020），“BIM 輔助設計-捷運深開挖與潛盾隧道工程”，*中興工程季刊*，第 147 期，111-121（2020 年 4 月號-五十周年特刊）。

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38. 周敬淳、柳儒錚、謝尚賢、張國儀、郭韋良(2020)，”疫情時代的全球 BIM 線上發展交流-Agora BIM World 2020（上）”，*營建知訊*，第 451 期，第 68-76 頁。

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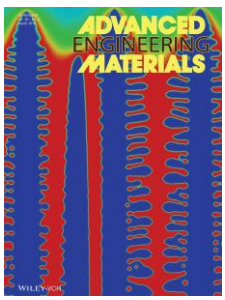

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32. C-S Chen, C-S Lee, Y-Y Chen, C-H Yu, Y-C Hsu (2016). "Dynamic Multiscale Method and Applications," 第40屆全國力學會議，新竹、台灣。**(invited forum talk)**
33. C-W Huang, C-H Yu, S-W Chang, C-S Chen (2016). "Rolling Resistance of Adhesive Nanoparticle: Molecular 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**)
34. 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)
35. 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.
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37. 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.
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39. 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.
40. 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.
41. C-S Chen (2016). "Bio-inspired materials modeling." *International Symposium on Computational Mechanics (ISCM)*, October 16-20, Hangzhou, China. **(plenary talk)**
42. 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.)**
43. 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.
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46. 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.
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2. C-H Yu, K-P Lin, and C-S Chen[#] (2019), "Nanoindentation 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.
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Remote Sensing in Hydrometeorology, Urban Stormwater Management, Fractals and Geostatistics, Multi-Scale Data Merging, Stochastic Rainfall Modelling and Forecasting

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1. Onof, C. and Wang, L.-P.: Modelling rainfall with a Bartlett–Lewis process: New developments, Hydrol. Earth Syst. Sci, 24, 2791-2815, 2020, https://doi.org/10.5194/hess-24-2791-2020. **SCI**
2. Ochoa-Rodriguez, S., Wang, L.-P., Willems, P. and Onof, C.: A review of radar-rain gauge data merging methods and their potential for urban hydrological applications, Water Resour. Res., 55 (8), 6356-6391, 2019, https://doi.org/10.1029/2018WR023332. **SCI**
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3. Wang, L.-P., Chen, Y., Muñoz, C. and Onof, C.: Characterising local rainfall cell patterns over Birmingham (UK) using 10+ years of high-resolution radar images, European Geosciences Union (EGU) General Assembly 2019, Vienna, Austria, April 2019.

4. Wang, L.-P. and Onof, C.: Reproducing extreme statistics of hourly and sub-hourly rainfall with Bartlett-Lewis models: tips and new developments, 11th International Workshop on Precipitation in Urban Areas (UrbanRain 18), Pontresina, Switzerland, December 2018.
5. Llabres, I. and Wang, L.-P.: Challenges in the transition from TRMM to IMERG precipitation products - An index-based insurance perspective, American Geophysics Union (AGU) Fall Meeting 2018, Washington DC, USA, December 2018.
6. Zulkafli, Z., Wang, L.-P., Mohd Zad, S.N. and Mutalib, R.: Improving satellite-based and ground radar-based estimations of subdaily rainfall for improved flood prediction, BHS National Symposium, London, UK, September 2018.
7. Verbeiren, B., Dagnachew Seyoum, S., Lubbad, I., Xin, T., ten Veldhuis, J. A. E., Onof, C., Wang, L.-P., Ochoa-Rodríguez, S., Veeckman, C., Boonen, M., See, L., Nalpas, D., O'Brien, B., Johnston, J. and Willems, P.: FloodCitiSense: Early Warning Service For Urban Pluvial Floods For And By Citizens and City Authorities, 11th International Conference on Urban Drainage Modelling, Palermo, Italy, September 2018.
8. Wang, L.-P., Onof, C., Orellana, B. and Kellagher, R.: On the calibration of point process models for preserving extreme rainfall statistics at hourly and sub-hourly timescales, European Geosciences Union (EGU) General Assembly 2018, Vienna, Austria, April 2018.
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11. Tian, X., ten Veldhuis, J. A. E., See, L., van de Giesen, N., Verbeiren, B. and Wang, L.-P.: Crowd-sourced data: how valuable and reliable are they for real-time urban flood monitoring and forecasting? European Geosciences Union (EGU) General Assembly 2018, Vienna, Austria, April 2018.
12. Wang, L.-P., Ochoa-Rodríguez, S., Onof, C. and ten Veldhuis, J. A. E.: Spatial rainfall downscaling based upon Local Singularity Analysis and Kriging, European Geosciences Union (EGU) General Assembly 2017, Vienna, Austria, April 2017.
13. Ochoa-Rodríguez, S., Wang, L.-P., Bailey, A., Willems, P. and Onof, C.: High resolution radar-rain gauge data merging for urban hydrology: current practice and beyond, European Geosciences Union (EGU) General Assembly 2017, Vienna, Austria, April 2017.
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(A) 期刊論文 (Journal Paper) (*: 通訊作者)

a. SCI/SSCI 期刊論文

(1) **Hsieh, I. Y. L.**, Pan, M.& Green, W. H.* (2020). Transition to electric vehicles in China: Implications for private motorization rate and battery market. Energy Policy, 144, 111654: 10.1016/j.enpol.2020.111654

(2) **Hsieh, I. Y. L.**, Nunes, A., Pan, M. S., & Green, W. H.* (2020). Recharging systems and business operations to improve the economics of electrified taxi fleets. Sustainable Cities and Society, 102119: 10.1016/j.scs.2020.102119

(3) **Hsieh, I. Y. L.**, Pan, M. S., Chiang, Y. M., & Green, W. H.* (2019). Learning only buys you so much: Practical limits on battery price reduction. Applied Energy, 239, 218-224: 10.1016/j.apenergy.2019.01.138

(4) **Hsieh, I. Y. L.**, Kishimoto, P. N., & Green, W. H.* (2018). Incorporating multiple uncertainties into projections of Chinese private car sales and stock. Transportation Research Record, 2672(47), 182-193: 10.1177/0361198118791361

b. 非屬SCI/SSCI之EI或TSSCI期刊論文

(1) **Hsieh, I. Y. L.** & Green, W. H.* (2020). Transition to electric vehicles in China: Implications for total cost of ownership and cost to society. SAE International Journal of Sustainable Transportation, Energy, Environment, & Policy 1(2):10.4271/13-01-02-0005.

(B) 研討會論文(Conference Paper) (*: 通訊作者)

a. 國外會議論文

(1) **Hsieh, I. Y. L.**, Nunes, A., Pan, M. S., & Green, W. H.* Recharging options to improve the economics of electrified fleet ecosystem: A case study of battery swapping deployment in the taxi industry. 99th Annual Meeting of the Transportation Research Board, Washington, DC, 2020.

(2) **Hsieh, I. Y. L.**, Pan, M. S., Chiang, Y. M., & Green, W. H.* Learning only buys you so much: Practical limits on battery price reduction. Materials Research Society (MRS) Fall Meeting, Boston, MA, 2019.

(3) **Hsieh, I. Y. L.**, & Green, W. H.* The future of electro mobility in China. 26th Intelligent Transportation Systems (ITS) World Congress, Singapore, 2019.

(4) **Hsieh, I. Y. L.**, & Green, W. H.* Shortage of raw materials could choke our electric car future. 6th International Association for Energy Economics (IAEE) Asian Conference, Wuhan, China, 2018.

(5) **Hsieh, I. Y. L.**, Kishimoto, P. N., & Green, W. H.* Incorporating multiple uncertainties into projections of Chinese private car sales and stock. 97th Annual Meeting of the Transportation Research Board, Washington, DC, 2018.

b. 國內會議論文

(1) **謝依芸***、張綜桁，車輛電動化轉型之展望與挑戰，第35屆中華運輸學會年會暨國際論文研討會，臺南，臺灣，2020 年。

(D) 技術報告

(1) MIT Energy Initiative (including **Hsieh, I. Y. L.**) (2019). Insights into Future Mobility. Cambridge, MA.

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1. 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. (SCI, EI)

2. 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. (SCI, EI) (MOST 103-2622-E-002-036-CC2、MOST 103-2221-E-002-128-MY2)

3. 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. (SCI, EI) (MOST 103-2221-E-002-128-MY2)

4. 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 . (Scopus) (MOST 103-2221-E-002-128-MY2)

5. 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. (SCI, EI)

6. 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: 10.1080/00396265.2015.1104091. (SCI) (MOST 103-2622-E-002-036-CC2、MOST 103-2221-E-002-128-MY2)

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8. 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. (SCI, EI)

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10. 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。(EI)

11. 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 58-63 頁。

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14. 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)

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16. 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)

17. 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。(EI)

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22. Chuang, T.Y., Han, J.Y., Jhan, D.J., and Yang, M.D. (2020) Geometric recognition of moving objects in monocular rotating imagery using faster R-CNN, *Remote Sens.*, 12(12): 1908, doi: 10.3390/rs12121908. (SCI, EI)

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24. 紀乃文、李雨澈、韓仁毓、謝尚賢（2020）基於攝影測量與建築資訊模型之半自動影像敷貼技術：以擴增實境方法輔助施工查驗，*中國土木水利工程學刊*（已接受刊登）。(EI)

25. 林彥廷、徐若堯、韓仁毓（2020）次足跡全波形空載光達技術於河床粗糙度分析，*中國土木水利工程學刊*，36(6): 541-548，doi: 110.6652/JoCICHE.202010_32(6). 0007。(EI)

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1. 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)

2. 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。

3. 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。

4. 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。

5. 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。

6. 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)

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8. 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)

9. 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。

10. 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。

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