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Steel Structure, Structural Dynamics, Earthquake Resistance Design

期刊論文 (Journal Papers)

- 1. 林冠泓、莊明介、蔡克銓, 、林瑞良, 2021, 「國家地震工程研究中心十三層增建大樓耐震性能分析」, 結構工程, 第36卷, 第4期, 第51-84頁。
- 2. Matsui R, Koizumi K, Lin PC, Iwanaga M, Wu AC, Takeuchi T, Tsai KC, 2021, "Strength and plastic rotation capacity of I-shaped beams with grid-purlin system subjected to cyclic loading," Journal of Structural Engineering, Vol. 147, Issue 7, 04021103.
- 3. 陳雋、林昱成、吳安傑、陳律安、蔡克銓,2021,「長跨桁架圍東式挫屈東制支撐之研究」, 結構工程,第36卷,第2期,第5-50頁。
- 4. 歐易佳、陳力維、蔡青宜、吳安傑、蔡克銓,2020,「利用虛擬側力與破壞機制探討挫屈 束制支撐面外穩定性及案例評估分析」,結構工程,第35卷,第1期,第78-105頁。
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- 6. Roeder CW, Sen AD, Asada H, Ibarra SM, Lehman DE, Berman JW, Tsai KC, Tsai CY, Wu AC, Wang KJ, Liu R, 2020, "Inelastic behavior and seismic design of multistory chevron-braced frames with yielding beams," Journal of Constructional Steel Research, 167: 105817.
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- 8. Lin JL, Kek MK, Tsai, KC (2019), "Stiffness configuration of strongbacks to mitigate inter-story drift concentration in buildings", *Engineering Structures*, 199, 109615.
- 9. Chen LW, Tsai KC, Tsai CY, Wu AC (2019), "Evaluating out-of-plane stability for welded BRBs considering flexural restrainer and gusset rotations", *J. of Constructional Steel Research*, 159(8):161-175.
- 10. Lin JL, Tsaur CC, Tsai KC (2019), "Two-degree-of-freedom modal response history analysis of buildings with specific vertical irregularities", *Engineering Structures*, 184: 505-523.
- 11. 楊依璇、黃彤、李昭賢、蔡青宜、蔡克銓(2019)「雙向鋼板剪力牆邊界梁柱耐震設計與分析研究」,結構工程,第34卷,第1期,第5-26頁。
- 12. 張舉虹、蔡克銓 (2019)「含鋼板阻尼器構架最佳化設計」,結構工程,第34卷,第1期,第27-56頁。

- 13. Lin, JL, Dai, JY, Tsai, KC (2019), "Optimization approach to uniformly distributed peak interstory drifts along building heights", ASCE, *Journal of Structural Engineering*, 145 (5), 04019032.
- 14. Wang, KJ, Chuang, MC, Tsai, KC, Li, CH, Chin, PY, Chueh, SY (2018), "Hybrid testing with model updating on steel panel damper substructures using a multi-axial testing system", *Earthquake Engng Struct. Dyn.*, 2019;48:347–365.https://doi.org/10.1002/eqe.3139.
- 15. Li, CH, Tsai, KC, Su, L, Lin, PC, Lin, TH (2018), "Experimental investigations on seismic behavior and design of bottom vertical boundary elements in multi-story steel plate shear walls", *Earthquake Engng Struct. Dyn.*, DOI: 10.1002/eqe.3106, 47(14): 2777-2801.
- 16. Tsai, CY, Tsai, KC, Chen, LW, Wu, AC (2018), "Seismic performance analysis of BRBs and gussets in a full-scale 2-story BRB-RCF Specimen," *Earthquake Engng Struct. Dyn.*, 47(12): 2366-2389.
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- 19. 郭銘桂、林瑞良、蔡克銓 (2018)「強脊結構系統之耐震行為研究」,結構工程,第33卷,第4期,第5-28頁。
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- 22. 曹智嘉、林瑞良、蔡克銓,2017,「立面不規則建築受震反應簡化分析方法」,結構工程,第32卷,第4期,第88-109頁。
- 23. Li, CH, Tsai, KC, Hwang, HY, Tsai, CY (2017), "Cyclic Tests of Steel Plate Shear Walls Using Box-shape Vertical Boundary Elements With or Without Infill Concrete", *Earthquake Engng Struct. Dyn.*, 46(14): 2537-2564, DOI: 10.1002/eqe.2917.
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- 25. Wu, AC, Tsai, KC, Yang, HH, Huang, JL, Li, CH, Wang, KJ, Khoo, HH (2017), "Hybrid experimental performance of a full-scale two-story buckling restrained braced RC frame", *Earthquake Engng Struct. Dyn.*, 46(8): 1223–1244, DOI: 10.1002/eqe.2853.
- 26. 許仲翔、李昭賢、金步遠、蔡克銓,2017,「含鋼板阻尼器構架耐震設計與分析」,結構工程,第32卷,第2期,第5-34頁。

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- 2. Wu AC, Ou IC, Chen LW, Tsai KC, 2020, "Experimental study on BRB stability with flexural-

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- 3. Chuang MC, Wang KJ, Tsai KC (2020) "Online Model Updating Technologies for Advancing Hybrid Simulations of a Steel Panel Damper Substructure", *Proceedings* of the 8th International Conference on Advances in Experimental Structural Engineering, Chrischurch, New Zealand.
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- 5. Tsai KC (2019) "Researches on BRBs and BRBFs", *Proceedings* of SHAKE International Conference, Smart TecHnologies & Advanced Knowledge in Earthquake Engineering, Nov. 14-16, Manila Philippines.
- 6. Takeuchi T, Matsui R, Koizumi K, Lin PC, Iwanaga M, Wu AC, Tsai KC (2019) "Lateral Buckling Performance Test of Roof Beam Braced with Grid-purlin System", *Proceeding* of The Pacific Structural Steel Conference, Nov. 16-18, Tokyo, Japan.
- 7. Chen C and Tsai KC (2019) "Global Stability of BRBs using Truss Restrainer", *Proceedings* of The 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, Daejeon, Korea.
- 8. Tsai KC, Chang CH (2019) "Optimization of Steel Panel Damper Design for Seismic Moment Frames", *Proceedings* of the International Conference on Sustainable Civil Engineering and Architecture 2019, Oct. 25-26, Ho Chi Minh City, Vietnam.
- 9. 蔡克銓(2019)「建築勘災及重建」, 921 地震二十週年回顧與省思研討會論文集, 2019 年 9月19-20日,中國土木水利工程學會,台北,台灣。
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- 11. Chuang MC, Wang KJ and Tsai KC (2019) "Online Model Updating for the Advanced Hybrid Simulations of a Steel Panel Damper Substructure", Proceedings, International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, September 15-19, Taipei, Taiwan.
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- 13. Matsui R, Koizumi K, Lin PC, Iwanaga M, Wu AC, Tsai KC, Takeuchi T. (2019) "Plastic Ductility Performance Of Grid-Purlin System Connected To Wide Flange Beam", Proceedings of International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, September 15-19.
- 14. Wang KJ, Chuang MC, Li CH, Tsai KC (2019) "A Distributed Computing Platform for Conventional Hybrid Simulation" Proceedings, 7th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, June 24-26, Creete, Greece.
- 15. Wang KJ, Chuang MC, Tsai KC, Li CH, Chin PY, Chueh SY (2019) "Advanced Hybrid Simulation with Model Updating of a Spatial Structure with Steel Panel Dampers" Proceedings, 16th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, July 1-6, St. Petersburg, Russian Federation.
- 16. Wu AC, Tsai KC and Chen LW (2019) "Experimental Study on Out-of-plane Stability of Buckling-restrained Braces", Proceedings of 16th World Conference on Seismic Isolation, Energy

- Dissipation and Active Vibration Control of Structures St. Petersburg, Russian Federation, July 1-6
- 17. Tsai, KC, Li, CH, Tsai, CY, Wu, CC, Lin, KC, Jhuang, SJ (2018), "Electro-Slag Weld Fractures in Seismic Steel Beam-To-Box Column Moment Connections", Proceedings, 9th Ninth International Conference on Advances in Steel Structures (ICASS'2018), December 5-7, 2018, Hong Kong, China.
- 18. Tsai, CY, Ibarra S, Wu, AC, Wang, KJ, Sen, A, Berman, J, Lehman, D, Roeder, C, Tsai, KC (2018), "Seismic Testing of a 3-story Special Concentrically Braced Frame with Yielding Beams", Proceedings, The Thirty-First KKHTCNN Symposium on Civil Engineering, November 22-24, 2018, Kyoto, Japan.
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- 20. Chuang, MC, Wang, KJ, Tsai, KC (2018), "Advanced Hybrid Simulations with Online Model Updating on a Steel Panel Damper Substructure", Proceedings, 7th Asia Conference on Earthquake Engineering, November 22-25, 2018, Bangkok, Thailand.
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- 29. Hsu, SC, Zhong, YJ, Chen, PC, Tsai, KC (2017), "Semi-Active Control of a Base-Isolated Raised Floor System Subjected to Earthquakes Part2: Real-time Hybrid Simulation", Proceedings, The Thirtieth KKHTCNN Symposium on Civil Engineering, November 2-4, 2017, Taipei, Taiwan.
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