

## 一、基本資料

林瑞良 (Jui-Liang Lin)

國家地震工程研究中心研究員

e-mail: [jllin@narlabs.org.tw](mailto:jllin@narlabs.org.tw)

Tel: 66300934

## 二、教育背景

美國史丹福大學土木與環境工程系訪問學者 (2006/7 至 2007/7)

國立台灣大學土木工程研究所結構組博士 (2002/9 至 2007/7)

國立台灣大學土木工程研究所結構組碩士 (1989/9 至 1991/7)

國立成功大學土木工程系學士 (1985/9 至 1989/7)

## 三、現職及相關工作經歷

國家地震工程研究中心建物組組長 (2021/2 迄今)

國家地震工程研究中心研究員 (2013/1 迄今)

國家地震工程研究中心副研究員 (2007/8 至 2012/12)

台灣士敏工程企業公司土建專員 (1997/6 至 2002/6)

林同棧工程顧問公司結構工程師 (1993/7 至 1997/5)

中華民國陸軍預官少尉 (1991/7 至 1993/6)

## 四、專長

結構動力學、耐震分析與設計、結構實驗

## 五、證照

結構技師 (1994 迄今)

## 六、專業團體會員

中華民國結構工程學會

台灣省結構技師公會

美國地震工程學會 Earthquake Engineering Research Institute (EERI)

## 七、著作、專利與榮譽

已發表三十二篇傑出 SCI 期刊論文(三十一篇為第一作者)、一本專業書籍、四篇書籍專章、十六本技術報告與四十七篇研討會論文 (2007 迄今)

科技部(國科會)專題研究計畫主持人 (2010, 2012, 2013, 2016, 2017, 2019, 2021)

國科會補助國內舉辦國際學術研討會(第八屆亞洲地震工程研討會)計畫主持人 (2022)

榮獲第六屆國家實驗研究院傑出科技貢獻獎(學術研究類) (2012)

榮獲國家地震工程研究中心年度研發獎 (2007, 2008, 2009, 2010)

中華民國發明專利三件 (2012, 2013, 2019)

中華民國新型專利兩件 (2010, 2011)

中華人民共和國新型專利一件 (2010)

獲邀至義大利米蘭理工大學進行專題報告 (2011)

榮登第 29、30、31、32 及 33 屆 Marquis Who's Who in the World 名人錄 (2012—2016)

榮登第 12 屆 Marquis Who's Who in Science and Engineering 名人錄 (2016)

## 附件

### 期刊論文

1. **Lin, J.L.**, Chuang, M.C. (2023), “Simplified nonlinear modeling for estimating the seismic response of buildings”, *Engineering Structures*, 279, 115590. 【SCI】
2. 林昱成、莊明介、林冠泓、鄧彬斌、蔡克銓、蔡青宜、吳安傑、**林瑞良**，2022，「國家地震工程研究中心新建與既有樓板接合分析與設計」，結構工程（已接受）。
3. **Lin, J.L.**, Yu, G.J., Chuang, M.C., Lin, G.H., Weng, Y.T., Hwang, S.J., Tsai, K.C. (2022), “Post-earthquake system identification and response estimation of an elastic compound building using a simplified numerical model”, *Earthquake Engineering and Structural Dynamics*, 51(13): 3154–3170. 【SCI】
4. **Lin, J.L.** (2022), “Power responses of a building subjected to pulse-like ground motions”, *Earthquake Engineering and Structural Dynamics*, 51(2): 457–472. 【SCI】
5. **Lin, J.L.**, Chen, W.H., Hsiao, F.P., Weng, Y.T., Shen, W.C., Weng, P.W., Chao, S.H., Chung, L.L. and Hwang S.J. (2021), “Effects of hysteretic models on the seismic evaluation of a collapsed irregular building from bidirectional near-fault ground motions on a shake table”, *Engineering Structures*, 247, 113087. 【SCI】
6. **Lin, J.L.**, Chow, T.K., Li, C.H., and Yeh, Y.K. (2021), “A comparative study of seismic performance of steel framed buildings with varied plan-asymmetric properties”, *Journal of Earthquake and Tsunami*, 15(4), 2150016. 【SCI】
7. 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，36 卷第 4 期，pp. 51-84。
8. **Lin, J.L.**, Kuo, C.H., Chang, Y.W., Chao, S.H., Li, Y.A., Shen, W.C., Yu, C.H., Yang, C.Y., Lin, F.R., Hung, H.H., Chen, C.C., Su, C.K., Hsu, S.Y., Lu, C.C., Chung, L.L., and Hwang, S.J. (2020), “Reconnaissance and learning after the February 6, 2018, earthquake in Hualien, Taiwan”, *Bulletin of Earthquake Engineering*, 18(10): 4725–4754. 【SCI】
9. **Lin, J.L.**, Chen, W.H., Hsiao, F.P., Weng, Y.T., Shen, W.C., Weng, P.W., Li, Y.A. and Chao, S.H. (2020), “Simulation and analysis of a vertically irregular building subjected to near-fault ground motions”, *Earthquake Spectra*, 36(3): 1485–1516. 【SCI】
10. **Lin, J.L.**, Kek, M.K. and Tsai, K.C. (2019), “Stiffness configuration of strongbacks to mitigate inter-story drift concentration in buildings”, *Engineering Structures*, 199, 109615. 【SCI】
11. **Lin, J.L.**, Dai, J.Y. and Tsai, K.C. (2019), “Optimization approach to uniformly distributed peak inter-story drifts along building heights”, ASCE, *Journal of Structural Engineering*, 145 (5), 04019032. 【SCI】

12. **Lin, J.L.**, Tsaur, C.C. and Tsai, K.C. (2019), “Two-degree-of-freedom modal response history analysis of buildings with specific vertical irregularities”, *Engineering Structures*, 184: 505-523. **【SCI】**
13. **Lin, J.L.** (2019), “Approximate quantification of higher-mode effects on seismic demands of buildings”, *International Journal of Structural Stability and Dynamics*, 19 (3), 1950023. **【SCI】**
14. 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*, 33 卷第 4 期, pp. 5-28。
15. **Lin, J.L.** (2018), “Seismic effectiveness of top-story mass dampers for inelastic two-way asymmetric-plan buildings”, *Engineering Structures*, 161: 118-133. **【SCI】**
16. 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*, 32 卷第 4 期, pp. 88-109。
17. **Lin, J.L.** (2017), “Top-story mass dampers for seismic control of the first triplet of vibration modes of two-way asymmetric-plan buildings”, *Journal of Vibration and Control*, 23 (18): 2962-2976. **【SCI】**
18. **Lin, J.L.**, Wang, W.C. and Tsai, K.C. (2016), “Suitability of using the torsional amplification factor to amplify accidental torsion”, *Engineering Structures*, 127: 1-17. **【SCI】**
19. **Lin, J.L.**, Liu, T.H. and Tsai, K.C. (2015), “Real-valued modal response history analysis for asymmetric-plan buildings with nonlinear viscous dampers”, *Soil Dynamics and Earthquake Engineering*, 77: 97-110. **【SCI】**
20. **Lin, J.L.**, Wang, W.C. and Tsai, K.C. (2015), “Evaluating the reliability of using the deflection amplification factor to estimate design displacements with accidental torsion effects”, *Earthquakes and Structures*, 8 (2): 443-462. **【SCI】**
21. **Lin, J.L.**, Bui, M.T. and Tsai, K.C. (2014), “An energy-based approach to the generalized optimal locations of viscous dampers in two-way asymmetrical buildings”, *Earthquake Spectra*, 30 (2): 867-889. **【SCI】**
22. **Lin, J.L.**, Tsai, K.C. and Chuang, M.C. (2013), “Effective oscillators for the seismic analysis of inelastic one-way asymmetric-plan buildings”, *Engineering Structures*, 52: 38-52. **【SCI】**
23. **Lin, J.L.** and Tsai, K.C. (2013), “Application of supplemental damping characteristics to response spectrum analyses of non-proportionally damped multi-story asymmetric-plan buildings”, *Earthquake Spectra*, 29 (1): 207-232. **【SCI】**
24. **Lin, J.L.**, Tsai, K.C. and Chuang, M.C. (2012), “Understanding the trends in torsional effects in asymmetric-plan buildings”, *Bulletin of Earthquake Engineering*, 10: 955-965. **【SCI】**
25. **Lin, J.L.**, Tsai, K.C. and Yang, W.C. (2012), “Inelastic Responses of Two-Way

Asymmetric-Plan Structures under Bi-Directional Ground Excitations- PART I: Modal Parameters”, *Earthquake Spectra*, 28 (1): 105-139. 【SCI】

26. **Lin, J.L.**, Yang, W.C. and Tsai, K.C. (2012), “Inelastic Responses of Two-Way Asymmetric-Plan Structures under Bi-Directional Ground Excitations-PART II: Response Spectra”, *Earthquake Spectra*, 28 (1): 141-157. 【SCI】
27. 林瑞良、蔡克銓 (2012), “平面不對稱結構遲滯能評估與具非比例阻尼不對稱結構受震反應分析”, 國科會工程科技通訊, 128 期, pp. 268-271。
28. **Lin, J.L.** and Tsai, K.C. (2011), “Estimation of the seismic energy demands of two-way asymmetric-plan building systems”, *Bulletin of Earthquake Engineering*, 9 (2): 603-621. 【SCI】
29. **Lin, J.L.**, Tsai, K.C. and Yu, Y.J. (2011), “Bi-directional coupled tuned mass dampers for the seismic response control of two-way asymmetric-plan buildings”, *Earthquake Engineering and Structural Dynamics*, 40 (6): 675-690. 【SCI】
30. **Lin, J.L.**, Tsai, K.C. and Yu, Y.J. (2010), “Coupled tuned mass dampers for the seismic control of asymmetric-plan buildings”, *Earthquake Spectra*, 26 (3): 749-778. 【SCI】
31. Yu, Y.J., Tsai, K.C., Weng, Y.T., Lin, B.Z. and **Lin, J.L.** (2010), “Analytical studies of a full-scale steel building shaken to collapse”, *Engineering Structures*, 32:3418-3430. 【SCI】
32. **Lin, J.L.** and Tsai, K.C. (2009), “Modal parameters for the analysis of inelastic asymmetric-plan structures”, *Earthquake Spectra*, 25 (4): 821-849. 【SCI】
33. **Lin, J.L.**, Tsai, K.C. and Miranda, E. (2009), “Seismic history analysis of asymmetric buildings with soil-structure interaction”, ASCE, *Journal of Structural Engineering*, 135 (2):101-112. 【SCI】
34. **Lin, J.L.** and Tsai, K.C. (2008), “Seismic analysis of non-proportionally damped two-way asymmetric elastic buildings under bi-directional seismic ground motions”, *Journal of Earthquake Engineering*, 12 (07): 1139-1156. 【SCI】
35. **Lin, J.L.** and Tsai, K.C. (2008), “Seismic analysis of two-way asymmetric building systems under bi-directional seismic ground motions”, *Earthquake Engineering and Structural Dynamics*, 37: 305-328. 【SCI】
36. **Lin, J.L.** and Tsai, K.C. (2007), “Simplified seismic analysis of one-way asymmetric elastic systems with supplemental damping”, *Earthquake Engineering and Structural Dynamics*, 36: 783-800. 【SCI】
37. **Lin, J.L.** and Tsai, K.C. (2007), “Simplified seismic analysis of asymmetric building systems”, *Earthquake Engineering and Structural Dynamics*, 36: 459-479. 【SCI】