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### **Ph.D., Univ. of Michigan, USA**

專長/ 災害風險分析、社區復原韌性與永續性分析、分佈式災害模擬、災害中  
個體行為模式及影響

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](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](https://doi.org/10.1061/(ASCE)ST.1943-541X.0002310) (SCIE)
3. **Lin, S.-Y.\*** and El-Tawil, S. (2020). Time-Dependent Resilience Assessment of Seismic Damage and Restoration of Interdependent Lifeline Systems. *Journal of Infrastructure Systems*, 26(1): 04019040. [https://doi.org/10.1061/\(ASCE\)IS.1943-555X.0000522](https://doi.org/10.1061/(ASCE)IS.1943-555X.0000522) (SCIE)
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](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000407) (SCIE, SSCI)
5. **Lin, S.-Y.\***, Hlynka, A.W., Xu, L., Lu, H., Sediek, O.A., El-Tawil, S., Kamat, V.R., McCormick, J., Menassa, C.C., Spence, S. M. J., Prakash A., and Aguirre, B. (2021). Simple Run-Time Infrastructure (SRTI): An Accessible Distributed Computing Platform for Interdisciplinary Simulation. *Journal of Computational Science*, 55: 101455. <https://doi.org/10.1016/j.jocs.2021.101455> (SCIE)
6. Xu, L., **Lin, S.-Y.**, Hlynka, A.W., Lu, H., Kamat, V.R.\*, Menassa, C.C., El-Tawil, S., Prakash A., Spence, S.M.J., and McCormick, J. (2021). Distributed Simulation Platforms and Data Passing Tools for Natural Hazards Engineering: Reviews, Limitations, and Recommendations. *International Journal of Disaster Risk Science*, 12: 617–634. <https://doi.org/10.1007/s13753-021-00361-7> (SCIE)

### 研討會論文 (Conference Papers)

1. **Lin, S.-Y.\***, Xu, L., Chuang, W.C., El-Tawil, S., Spence, S.M.J., Kamat, V.R., Menassa, C.C., and McCormick, J. (2018). Modeling Interactions in Community Resilience. *Proceeding of the Structures Congress 2018, Fort Worth, Texas, United States, April 19-21, 2018*.
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.*

3. **Lin, S.-Y\***. and El-Tawil, S. (2019). Time-Dependent Computation of Multiscale Interdependencies between Lifeline Systems Subjected to Seismic Events. *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019.*
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.*
6. Chu, Y.C., **Lin, S.-Y.**, Yang, C.T. and Tsao, Y.Z. (2021) Risk Assessment of Seismic-Induced Debris on Rescue Routes in Taipei City. *The 25th Symposium on Construction Engineering and Management, SCEM2021, Taipei, Taiwan, July 16, 2021.* (Best Paper Award)
7. Wang, C.H. and **Lin, S.-Y.** (2021) Life cycle cost analysis of seismic retrofit for privately owned buildings: a case study of Taipei City. *The 25th Symposium on Construction Engineering and Management, SCEM2021, Taipei, Taiwan, July 16, 2021.* (Outstanding Paper Award)