

Curriculum Vitae of Dr. Feng Lin

Personal Information

Feng Lin, Male, born in Anhui Province



Contact Information

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Education and Experiences

2008.11~ Associate Professor
2005.9~2008.11 assistant Professor
2012.6~2012.8 English Training in UIUC
2001.6 ~2005.2 Ruhr-Universität Bochum Structural Engineering Doktor-Ingenieur
1998.9 ~2001.5 Hefei Industrial University Structural Engineering M.S.
1988.9 ~1993.6 Tongji University Civil Structure B.S.

Research Interests

Impact Dynamics of RC Structure
Design and Evaluation of Structural Collapse

Research Projects

- Disaster mitigation due to collapse of large scale cooling towers in nuclear power plants under strong earthquakes, granted by the Natural Science Foundation of China (NSFC) with Grant no. 51578399, Principal investigator, 2016-2019
- Reliability of key RC structures in nuclear power stations under loads and environmental factors, granted by the Ministry of Science and Technology with Grant no. 2012AA050903, Participant, 2012-2015
- sustainable utilization and comprehensive reconstruction technology for key historical buildings, granted by the Ministry of Science and Technology with Grant no. 2006BAJ03A07, Participant, 2007-2010
- numerical simulation for collapse of high-rise buildings under strong earthquakes, granted by the Natural Science Foundation of China (NSFC) with Grant no.90715004, Participant, 2008-2010
- The Project Sponsored by the Scientific Research Foundation for the Returned Overseas Chinese Scholars, granted by the State Education Ministry, Principal investigator, 2006-2008

Honors

Shanghai Pujiang Program, 2007-2009

Teachings

Structural Design of RC Buildings, 2009~current

Nonlinear Analysis of RC Structure, 2006~current

Experiment of RC Structure, 2006~2014

Publications

International Journal Papers

- [1] **Lin F**, Hua J Y, and Dong Y. Shear Transfer Mechanism of Concrete Strengthened with External CFRP Strips. *Journal of Composites for Construction*, 2016, [http://dx.doi.org/10.1061/\(ASCE\)CC.1943-5614.0000751](http://dx.doi.org/10.1061/(ASCE)CC.1943-5614.0000751)
- [2] **Lin F**, Yang X M, Li K Y, Gu X L and Li X. Failure of wall–slab joint in unreinforced masonry building. *Advances in Structural Engineering*, 2016, DOI: 10.1177/1369433216662775.
- [3] **Lin F** and Wu X B. Effect of sleeve length on deformation properties of grouted splices. *GRAĐEVINAR* (accepted)
- [4] Xiang-Lin Gu; Qian-Qian Yu; Yi Li; **Feng Lin**. Collapse Process Analysis of Reinforced Concrete Super-Large Cooling Towers Induced by Failure of Columns. *Journal of Performance of Constructed Facilities (ASCE)*, 2016 (accepted)
- [5] **Lin F**, Dong Y, Kuang X X, Lu L. High Strain Rate Behavior in Tension of Reinforcing Steels HPB235, HRB335, HRB400 and HRB500. *Materials*, 2016, 9(12), 1013.
- [6] **Lin F**, Zhong Q H, Zhang Z. Flexural behaviour of RC beams reinforced with compressive steel bars and two-piece enclosed stirrups. *Construction and Building Materials*, 2016, 126:55-65.
- [7] **Lin F**, Lu H X, Dong Y. Component model for shear transfer in reinforced concrete. *Magazine of Concrete Research*, 2016, 68(15): 755–767.
- [8] **Lin F**, Wu X B. Mechanical performance and stress-strain relationships for grouted splices under tensile and cyclic loadings. *International Journal of Concrete Structures and Materials*, 2016, 10 (4):435–450.
- [9] Yu Q Q, Gu X L, Li Y, **Lin F**. Collapse-resistant performance of super-large cooling towers subjected to seismic actions. *Engineering Structures*, 2016(108): 77-89.
- [10] **Lin F**, Ji H K, Gu X L, Li Y, Wang M R, Lin T. NPP planning based on analysis of ground vibration caused by collapse of large-scale cooling towers. *Nuclear Engineering and Design*, 2015, 295(12):27–39.
- [11] **Lin F**, Ji H K, Li Y N, Zuo Z X, Gu X L, Li Y. Prediction of Ground Motion due to the Collapse of a Large-Scale Cooling Tower under Strong Earthquakes. *Soil Dynamics and Earthquake Engineering*, 2014(65): 43-54.
- [12] Hong L, Gu X L, **Lin F**. Influence of Aggregate Surface Roughness on Mechanical Properties of Interface and Concrete. *Construction and Building Materials*, 2014(65): 338-349.
- [13] Li Y, **Lin F**, Gu X L, Lu X Q. Numerical Research of a Super-Large Cooling Tower Subjected to Accidental Loads. *Nuclear Engineering and Design*, 2014(269): 184-192.
- [14] Gu X L, Wang X L, Yin X J, **Lin F**, Hou J. Collapse Simulation of Reinforced Concrete Moment Frames Considering Impact Actions Among Blocks. *Engineering Structures*. 2014(65): 30-41.
- [15] Gu X L, Jia J Y, Wang Z L, Hong L, **Lin F**. Determination of Mechanical Parameters for Elements in

- Meso-Mechanical Models of Concrete. *Frontiers of Structural and Civil Engineering*, 2013, 7(4): 391-401
- [16] Gu X L, Hong L, Wang Z L, **Lin F**. A Modified Rigid-Body-Spring Concrete Model for Prediction of Initial Defects and Aggregates Distribution Effect on Behavior of Concrete. *Computational Materials Science*, 2013(77): 355-365.
- [17] Gu X L, Hong L, Wang Z L, **Lin F**. Experimental Study and Application of Mechanical Properties for the Interface between Cobblestone Aggregate and Mortar in Concrete. *Construction and Building Materials*, 2013(46):156-166.
- [18] **Lin F**, Li Y, Gu X L, Zhao X Y, Tang D S. Prediction of ground vibration due to the collapse of a 235 m high cooling tower under accidental loads. *Nuclear Engineering and Design*, 2013(258):89-101.
- [19] **Lin F**, Song X B, Gu X L, Peng B, Yang L P. Cracking analysis of massive concrete walls with cracking reduction techniques. *Construction and Building Materials*, 2012, 31:12-21.
- [20] **Lin F**, Hong L, Gu X L, Wang X L. Mechanical behaviour of cast in situ reinforced concrete slabs with control joints. *Construction and Building Materials*, 2012, 28(1):395-404.
- [21] Wang Z L, **Lin F**, Gu X L. Numerical Simulation of Failure Process of Concrete Under Compression Based on Mesoscopic Discrete Element Model. *Tsinghua Science and Technology*, 2008, 13(s1): 19-25.

Chinese Journal Papers

- [1] 刘敏, 陈兵, **林峰**, 闫辉峰, 顾祥林. 大型冷却塔倒塌致地面振动影响因素. *振动与冲击*, 2016, 35 (10): 126-132.
- [2] **林峰**, 唐海, 王立. 基于“损坏标识”的受爆结构安全性评估方法. *结构工程师*, 2015,31(5): 24-30.
- [3] **林峰**, 黎艳翔, 董羽. CFRP 加固钢筋混凝土直剪承载力试验. *建筑科学与工程学报*, 2015,32(06):43-49.
- [4] 华晶晶, 徐荣彬, **林峰**, 顾祥林. 核电厂区域防恐规划综述. *核安全*, 2014, 44(1): 14-19.
- [5] **林峰**, 孙文斌, 赵鹏飞. 内置型钢搭接柱转换结构试验研究与有限元分析. *建筑结构*, 2014, 44(15):45-50.
- [6] **林峰**, 欧智星, 卢海霞. 截面预裂的 RC 构件直剪与斜剪承载力比较. *建筑结构*, 44 (19): 75—80, 91.
- [7] **林峰**, 董羽, 顾祥林. 高强度建筑钢筋 HRB500 的动力本构模型. *建筑材料学报*, 2014, (4):592-597.
- [8] **林峰**, 张羽, 张智, 韦恒. 组合封闭式箍筋双筋混凝土梁受弯性能试验研究. *结构工程师*, 2014, 30(6): 139-144.
- [9] 王英, 顾祥林, **林峰**. 考虑压拱效应的钢筋混凝土双跨梁竖向承载力分析. *建筑结构学报*, 2013, 34(4): 32-42.
- [10] 卢海霞, **林峰**, 李彤煜. 高强钢筋和剪跨比对混凝土构件直剪性能的影响. *结构工程师*, 2013, 29(2): 146-152.
- [11] 吴小宝, **林峰**, 王涛. 龄期和钢筋种类对钢筋套筒灌浆连接受力性能影响的试验研究. *建筑结构*, 2013,43(14):77-82.
- [12] 蔡茂, 顾祥林, 华晶晶, **林峰**. 考虑剪切作用的钢筋混凝土柱地震反应分析. *建筑结构学报*, 2011, 32(11):97-108.
- [13] 王卓琳, 顾祥林, **林峰**. 水泥砂浆复合受力破坏准则的试验研究. *建筑材料学报*, 2011, 14(4): 437-442.
- [14] 顾祥林, 蔡茂, **林峰**. 地震作用下钢筋混凝土柱受力性能研究. *工程力学*, 2010, 27(11): 160-165,190.
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- [16] 王英, **林峰**, 顾祥林. 爆炸荷载作用下材料强度设计值的确定方法. *建筑结构学报*, 2010, 31(S2):220-225.
- [17] 张坚, 陈涛, **林峰**, 李华. 重庆大剧院型钢混凝土悬挑构件有限元数值分析. *工业建筑*, 2009 (增刊), 39(437):608-612.
- [18] 王英, **林峰**, 顾祥林. 结构抗连续倒塌设计方法评述. *结构工程师*, 2009, 25(5): 142-148.

- [19] 赵新源, **林峰**, 顾祥林, 王英. 局部爆炸作用下混凝土框架结构抗连续倒塌设计. 结构工程师, 2009, 25(6):12-18.
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- [22] **林峰**, Stangenberg F, 顾祥林. 考虑加载历史的约束混凝土动力本构模型. 同济大学学报(自然科学版), 2008, 36(4): 432-437.
- [23] 侯健, 顾祥林, **林峰**. 混凝土块体碰撞中的动能损耗. 同济大学学报(自然科学版), 2008, 36(7): 880-884.
- [24] **林峰**, 顾祥林. 我国与几种外国规范的冲切计算比较. 结构工程师, 2007, 23(2): 14-17,25.
- [25] 沈冯强,**林峰**.建筑结构动力分析有限元模型.合肥工业大学学报(自然科学版), 2002,24(1):64-70.

International Conference Papers

- [1] Jiang W M, **Lin F**. Numerical simulation on ground vibration caused by the demolition of a 200 m high chimney. Vibroengineering PROCEDIA, 6-7 Dec. 2016, Shanghai, pp.288-292.
- [2] **Feng Lin**, Hai Tang and Xianglin Gu. Security analysis of nuclear containment subjected to large-scale commercial aircraft crash. 6th international conference on PROTECTION OF STRUCTURES AGAINST HAZARDS,16-17 October 2014, Tianjin, China. 229-236.
- [3] Yi Li, Shikui Huang, Jiantao He, Xianglin Gu, Famin Shi and **Feng Lin**. Numerical Simulation on Collapse of A Super-Large Cooling Tower Caused by Local Failure of Pile Foundation[C]. 22nd International Conference on Structural Mechanics in Reactor Technology(SMiRT22), San Francisco, California, USA, August 18-23, 2013, Division III:962-971.
- [4] Hongkui Ji, Yinan Li, Su Pan, **Feng Lin**, Zhaoxia Zuo and Xianglin Gu. Numerical Simulation of Ground Vibration Caused by Collapse of A Super-Large Cooling Tower under Strong Earthquake[C]. 22nd International Conference on Structural Mechanics in Reactor Technology(SMiRT22), San Francisco, California, USA, August 18-23, 2013, Division V:1288—1296.
- [5] **Feng Lin** and Huifeng Yan. Factors affecting the ground vibration caused by dynamic compaction construction[C].10th International Conference on Shock & Impact Loads on Structures, Singapore, November 25-26, 2013:415-422.
- [6] **Feng Lin**, Hongkui Ji, Xianglin Gu and Yi Li.Prediction of ground vibration due to cooling tower collapse under strong earthquake[C].5th International Conference on Prevention of Structures against Hazard.15-16 Nov.2012,367-372.
- [7] **Lin F**, Xu R B, Zhao X Y and Gu X L. Ground vibration induced by collapse of 235m cooling tower [C]. 21st International Conference on Structural Mechanics in Reactor Technology (SMiRT 21), New Delhi, India, 2011, November 6-11:531-538.
- [8] Li Y, Lu X Q, **Lin F**, Gu X L. Numerical simulation analysis on collapse of a super large cooling tower subjected to accidental loads [C]. 21st International Conference on Structural Mechanics in Reactor Technology (SMiRT 21), New Delhi, India, 2011, November 6-11:349-357.
- [9] Liu L W, **Lin F**, Zhao X Y and Gu X L. Ground Vibration Generated by a Falling Weight [C]. 9th International Conference on Shock & Impact Loads on Structures, Fukuoka, Japan, 2011:473-480.
- [10] Wang Y, **Lin F**, Gu X L. Load and resistance factors for progressive collapse resistance design of reinforced concrete building structures[C]. Advanced Materials Research. 2011, 255-260:338-344.
- [11] **Lin F**, Song XB, Gu XL, Li C and Jin XY (2010). "Control Joints in Cast in-Situ Concrete Slabs and Its Application." Earth and Space 2010: Engineering, Science, Construction, and Operations in Challenging Environments ? 2010 ASCE.

- [12] **Lin F**, Wang Y, Gu X L and Zhao X Y. Progressive collapse Evaluation for historic building structures[C]. Advanced Materials Research, 2010, 133-134:1225-1232.
- [13] **Lin F**, Song X B, Gu X L, Li C and Jin X Y. Control Joints in Cast in-Situ Concrete Slabs and Its Application[C]. The 12th Biennial ASCE Aerospace Division International Conference Honolulu, Hawaii, U.S.A.. March 14-17, 2010:3496-3405.
- [14] Wang, Z L, Gu X L and **Lin F**. Experimental Study on Mechanical Performance of Interface between Mortar and Aggregate in Concrete[C]. The 12th Biennial ASCE Aerospace Division International Conference Honolulu, Hawaii, U.S.A.. March 14-17, 2010:3529-3536.
- [15] Xiaojing Yin, Xianglin Gu, **Feng Lin**, and Xinxin Kuang. Numerical Analysis of Blast Loads inside Buildings. [C]. Proceedings of the International Symposium on Computational Structural Engineering, Shanghai, China, June 22-24, 2009: 681-690.
- [16] Xinxin Kuang, Xianglin Gu, **Feng Lin** and Xiaojing Yin. Numerical Simulation for Response of Reinforced Concrete Slabs under Blast Loads. [C]. Proceedings of the International Symposium on Computational Structural Engineering, Shanghai, China, June 22-24, 2009: 691-698.
- [17] Xiaojing Yin, Xianglin Gu, **Feng Lin**, Qinghua Huang and Xinxin Kuang. NUMERICAL SIMULATION FOR COLLAPSE RESPONSES OF RC FRAME STRUCTURES UNDER BLAST LOADS [C]. Proceedings of the 8th International Conference on Shock & Impact Loads on Structures, Adelaide, Australia, December 2-4, 2009: 739-745.
- [18] Xiaojing Yin, **Feng Lin**, Xinxin Kuang and Xianglin Gu. RUPTURE CRITERIA OF REINFORCED CONCRETE WALLS AND COLUMNS SUBJECTED TO BLAST LOADS [C]. Proceedings of the 8th International Conference on Shock & Impact Loads on Structures, Adelaide, Australia, December 2-4, 2009: 747-753.
- [19] Chao Li, Xianglin Gu, **Feng Lin**, Lianping Yang and Hong Qu. Study on material property of young concrete and control of cracks in concrete slabs [C]. 1st International Conference on Microstructure Related Durability of Cementitious Composites, Nanjing, China, 13-15 October 2008:725-734.
- [20] **Feng Lin**, Jian Hou, Xianglin Gu, Study on the test system for face-to-face central impact between concrete blocks[C]. Proceedings of the Second International Symposium on Advances in Experimental Structural Engineering, Shanghai, China, 2007: 356-361.
- [21] **Lin F**, Gu X L, Hou J. Impact behavior of concrete block[C]. 25 Jahre in Forschung, Lehre und Praxis, Bochum, 2007: 163-170.
- [22] **Lin F**, Stangenberg F, Mark P. Reinforced concrete sections subjected to dynamic bending moments and normal forces. Sixth European Conference on Structural Dynamics. Paris, 4-7 September 2005. 1399-1404.
- [23] **Lin F**. Bond model for reinforced concrete subjected to impact loading. The Tenth International Conference on Civil, Structural and Environmental Engineering Computing. Rome, Italy, 30 August-2 September 2005. 411-412.
- [24] **Lin F**, Stangenberg F, Mark P. Materialmodell fuer extrem dynamisch beanspruchten Beton und Stahlbeton. Massivbau in ganzer Breite. Springer Verlage. Oktober 2004. 413-418.
- [25] **Lin F**. FEM Model for Dynamic Analysis of Structure-Foundation System with Transmitting Boundary. Entwicklung in Beton- und Faserbetonbau sowie in verwandten Gebieten. Herausgegeben von Dr.-Ing. Peter Mark. Ruhr-Universitaet Bochum, August 2003. 299-306.

Patents

- (1) 林峰, 张逢伯. 一种防结构连续倒塌的体外抗力可调钢绞线网装置. 发明专利, 申请号: 201510091431.8,

申请时间：2015年2月28日，专利号：待通知，授权公告日：2016年11月7日

- (2) 林峰，张逢伯. 一种利用钢棍抗拉防结构连续倒塌的体外钢绞线网装置，发明专利，申请号：201510091836.1，申请时间：2015年2月28日，专利号：待通知，授权公告日：2016年10月24日
- (3) 林峰，董羽. 一种提高钢筋混凝土构件直剪承载力的方法,发明专利，申请号:201410380171.1，申请时间:2014年8月5日. 专利号：待通知，授权公告日：2016年3月11日
- (4) 林峰，姜文明. 一种用于现场堆载试验的可折叠式水槽加载装置，实用新型，申请号：201520088313.7，申请时间:2015年2月9日. 专利号：ZL 2015 2 0088313. 7，授权公告日：2015年10月21日
- (5) 林峰，顾祥林，崔玮. 试件受扭试验系统. 发明，申请号：200910054344.X，申请时间:2009年7月3日. 专利号：ZL 2009 1 0054344.x，专利申请日：2009年07月03日，授权公告日：2011年11月16日