Xinzhong Chen, Dr. Eng. Curriculum Vita

President's Excellence in Research Professor
Department of Civil, Environmental and Construction Engineering
Texas Tech University, Lubbock, TX 79409-1023, USA
Phone: (806) 834-6794; Email: xinzhong.chen@ttu.edu

Education

- Dr. Eng., Civil Engineering, Kyoto University, Kyoto, Japan, 1995
- M.S., Civil Engineering, China Academy of Railway Sciences, Beijing, China, 1986
- B.S., Civil Engineering, Southwest Jiaotong University, Sichuan, China, 1983

Professional Experience

- September 2019 current, President's Excellence in Research Professor, Texas Tech University, TX
- <u>September 2015 current</u>, Professor, Department of Civil and Environmental Engineering, Texas Tech University, Lubbock, TX
- <u>September 2010 August 2015</u>, Associate Professor, Department of Civil and Environmental Engineering, Texas Tech University, Lubbock, TX
- <u>September 2004 August 2010</u>, Assistant Professor, Department of Civil and Environmental Engineering, Texas Tech University, Lubbock, TX
- May 1998 August 2004, Postdoctoral Research Associate, Department of Civil Engineering and Geological Sciences, University of Notre Dame, Notre Dame, IN
- April 1995 April 1998, Assistant Professor, Department of Civil Engineering, Kyoto University, Kyoto, Japan
- October 1991 March 1995, Research Assistant, Department of Civil Engineering, Kyoto University, Kyoto, Japan
- <u>September 1986 October 1991</u>, Research Engineer, Institute of Railway Engineering, China Academy of Railway Sciences, Beijing, China

Teaching Activities

Dynamics; Mechanics of Solids; Structural Analysis II; Advanced Mechanics of Solids; Advanced Structural Analysis I; Structural Dynamics I; Structural Dynamics II; Theory of Plates and Shells

Research Interests

Bridge and Building Aerodynamics, Wind Engineering; Cable-Supported Bridges and High-Rise Buildings; Fatigue and Extreme Loads and Responses of Large Wind Turbines; Structural Dynamics and Random Vibration; Structural Reliability and Performance-Based Structural Design; Full-Scale Measurements and Structural Health Monitoring; Codes and Standards

Professional Affiliation

- The American Society of Civil Engineers (ASCE);
- American Association for Wind Engineering (AAWE)

Honors, Awards and Recognitions

- <u>Listed in a ranking of the top 2% of the most cited scientists</u> in the world for their scientific careers in a study by Stanford University, 2020 (https://dx.doi.org/10.17632/btchxktzyw)
- President's Excellence in Research Professor, Texas Tech University, April 2019
- Barnie E. Rushing, Jr. Faculty Outstanding Researcher Award, Texas Tech University, March 2018

- The Jack E. Cermak Medal, awarded by the Structural Engineering Institute and The Engineering Mechanics Institute of ASCE in 2017, "For advancing the field of wind engineering through development of advanced modeling and analysis approaches for wind load effects on structures such as high-rise buildings, long-span bridges, and wind turbines." The medal was established to recognize the lifetime achievements of Jack E. Cermak, an expert in the field of wind engineering and industrial aerodynamics. It is awarded to researchers who have made numerous distinguished contributions in wind engineering and is considered one of the highest recognitions in the field.
- <u>The Ed and Linda Whitacre Faculty Fellowship</u>, in recognition of growth in research excellence, The Edward E. Whitacre Jr. College of Engineering, Texas Tech University, for academic year 2014-2017.
- Whitacre Engineering Research Award, in recognition of excellence in research, The Edward E. Whitacre Jr. College of Engineering, Texas Tech University, 2012.
- Outstanding Reviewer, Engineering Structures, May 2015
- Outstanding Reviewer, Journal of Wind Engineering and Industrial Aerodynamics, December 2014.
- <u>2010 ASCE Outstanding Reviewers</u>, Journal of Bridge Engineering, American Society of Civil Engineers (ASCE).
- Recognition for Excellence in Research and the ability to obtain external grant funding between \$250,000 \$500,000, College of Engineering, Texas Tech University, October 2008.
- Researcher of the Year, Department of Civil and Environmental Engineering, Texas Tech University, 2008-2009.
- Japanese Government (Menbusho) Scholarship (October 1991 April 1995).

Scientific Activities

- Editorial Board Member
 - Engineering Structures, 2017-;
 - Journal of Bridge Engineering, 2018-;
 - Wind and Structures, an International Journal, 2007-
 - Advances in Bridge Engineering, 2019-
- Committee Member
 - ASCE/SEI Wind Effects Committee/Structural Wind Engineering Committee, 10/01/2005-;
 - ASCE/EM Dynamics Committee, 09/02/2005 –
 - ASCE/SEI Tall Buildings Committee, 04/24/2006 –
- Regular Reviewer for International Journals including

Journal of Structural Engineering; Journal of Engineering Mechanics; Journal of Bridge Engineering; Journal of Wind Engineering and Industrial Aerodynamics; Journal of Sound and Vibration; Engineering Structures; Journal of Fluid and Structures; Wind and Structures.

Publications

 Peer-reviewed journal articles 	113	 Research reports (selected) 	20
 Peer-reviewed conference papers 	85	 Book chapter 	1
 Invited keynote lectures 	4		

Citation Report

Based on Scopus (08/2021)		Based on ISI Web of Science (08/2021)		
 Total articles in citation list Sum of times cited H-index	125 2,980 29	 Total articles in citation list Sum of times cited H-index	128 2,305 26	
Based on Google Scholar (08/2021)		Based on researchgate.net (08/2021)		
• Sum of times cited	3,800	• Total articles in citation list	129	

 Sum of times cited since 2016 	2,006	• RG Score	36.15
• H-index	33	 Sum of the times cited 	2,924
• i10-index	66	• h-index	29

Book Chapter:

Xinzhong Chen, Ahsan Kareem, Chapter 7, Coupled dynamic wind load effects on tall buildings with three-dimensional modes. <u>Tall Buildings: Design Advances for Construction</u>, pp149-180, J.W. Bull (Editor), Saxe-Coburg Publications, 2013, ISBN 978-1-874672-25-

Peer-Reviewed Journal Articles (Total number: 113) (Students Name are Annotated by "italics")

- Feng, C., <u>Chen, X.</u> (2021). "Inelastic response of base-isolated tall buildings under nonstationary winds: response history analysis and statistical linearization approach." <u>Journal of Engineering</u> <u>Mechanics</u>, 147(10):04021067.
- 2. <u>Wu, Y.</u>, Chen, X., Wang, Y. (2021). "Identification of linear and nonlinear flutter derivatives of bridge decks by unscented Kalman filter approach from free vibration or stochastic buffeting response." Journal of Wind Engineering and Industrial Aerodynamics, 214, 104650.
- 3. Wang, M., Li, X., <u>Chen, X.</u> (2020). "A simplified analysis framework for assessing overturning risk of high-speed trains over bridges under crosswind." <u>Vehicle System Dynamics</u>, 2020, 1845755.
- 4. Li, Y., Yan, J., <u>Chen, X.,</u> Li, Q., Li, Y. (2020). "Investigation of surface pressures on CAARC tall building concerning effects of turbulence." <u>Wind and Structures, an international journal</u>, 31(4), 1598-6225.
- 5. <u>Wu, Y.</u>, Chen, X., Wang, Y. (2020). "Identification of nonlinear aerodynamic damping of wind-excited structures by curve-fitting non-Gaussian response probability density function." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 206, 104311.
- 6. <u>Wang, Y.</u> and <u>Chen, X.</u> (2020). "Simulation of approaching boundary layer flow and wind loads on high-rise buildings by wall-modeled LES." <u>Journal of Wind Engineering and Industrial</u> Aerodynamics, 207, 104410.
- 7. Li, Z., Huang, G., <u>Chen, X.</u>, Zhou, Y., and Yang, Q. (2020). "Wind-resistant design and equivalent static wind load of base-isolated tall building: a Case study." <u>Engineering Structures</u>, 212,110533.
- 8. Wang, Y., <u>Chen, X.</u>, and Li, Y. (2020). "Nonlinear self-excited forces and aerodynamic damping associated with vortex-induced vibration and flutter of long span bridges." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 204, 104207.
- 9. <u>Wu, Y.</u>, and <u>Chen, X.</u> (2020). "Identification of nonlinear aerodynamic damping of crosswind-excited tall buildings using unscented Kalman filter technique." <u>Engineering Structures</u>, 220,110791.
- Tian, J., and <u>Chen, X.</u> (2020). "Evaluation of wind directionality on wind load effects and assessment of system reliability of wind-excited structures." <u>Journal of Wind Engineering and</u> Industrial Aerodynamics, 199, 104133.
- 11. Wang, M., <u>Chen, X.</u>, Li, X., Yan, N., and Wang, Y. (2020). "A frequency domain analysis framework for assessing overturning risk of high-speed trains under crosswind." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 202, 104196
- 12. Li, F., and <u>Chen, X.</u> (2020). "POD technique for modeling wind pressure field and equivalent static wind load." <u>Wind and Structures</u>, 30(6),559-579.
- 13. Yao, Z., Zhang, N., <u>Chen, X.,</u> Zhang, C., Xia, H., Li, X. (2020). "The effect of moving train on the aerodynamic performances of train-bridge system with a crosswind." <u>Engineering Applications of Computational Fluid Mechanics</u>, 14(1), 222-235.
- 14. Hao, W., <u>Chen, X.,</u> Yang, Q. (2020). "Extraction of nonlinear aerodynamic damping of crosswind excited tall buildings based on aeroelastic model tests." <u>Journal of Engineering Mechanics</u>, 146(3):04020006.

- 15. Wu, B., <u>Chen, X.,</u> Wang, Q., Liao, H., Dong, J. (2020). "Characterization of vibration amplitude of nonlinear bridge flutter from section model test to full bridge estimation." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 197, 104048.
- 16. <u>Liu, M., Chen, X., Yang, Q.</u> (2019)."Estimation of multiple limit state responses with various mean recurrence intervals considering directionality effects." <u>Journal of Wind Engineering and Industrial</u> Aerodynamics, 193, 1-13.
- 17. Yang, Q., <u>Chen, X.</u> and <u>Liu, M.</u> (2019). "Bias and sampling errors in estimation of extremes of non-Gaussian wind pressures by moment-based translation process models." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 186, 214-233
- 18. Chen, B., Cheng, H., Kong, H., Chen, X., Yang, Q. (2019). "Interference effect on wind loads of gable-roof buildings with different roof slopes." <u>Journal of Wind Engineering and Industrial</u> Aerodynamics, 189, 198-217.
- Feng, C., Chen, X. (2019). "Estimation of inelastic crosswind response of base-isolated tall buildings: Performance of statistical linearization approaches." <u>Journal of Structural Engineering</u>, ASCE, 145(12), 04019161.
- 20. <u>Feng, C., Chen, X.</u> (2019). "Evaluation and characterization of probabilistic alongwind and crosswind responses of base-isolated tall buildings." <u>Journal of Engineering Mechanics, ASCE</u>, 145(12), 04049097.
- 21. Wang, Y., Wang, B., Li, Y., Chen, X. (2019). "Flutter performance study of steel truss girder suspension bridge under large angles of attack." <u>Journal of Basic Science and Engineering</u>, 27(2), 384-390 (in Chinese).
- 22. Wang, D., Li, Z., and <u>Chen, X.</u> (2018). "Experimental study of wind loads and wind-induced vibration on large single column-supported two-plate billboard." <u>Journal of Harbin Institute of Technology</u>, 50(6), 31-39 (in Chinese).
- 23. Chen, B., Shang, L., Qin, M., <u>Chen, X.</u>, Yang, Q. (2018). "Wind interference effects of high-rise building on low-rise building with flat roof." <u>Journal of Wind Engineering and Industrial</u> Aerodynamics, 183, 88-113.
- 24. Li, Z., Wang, D., <u>Chen, X.</u>, Liang, S., Li, J. (2018). "Wind load effect of single-column-supported two-plate billboard structures." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 179, 70-79.
- 25. <u>Feng, C.</u>, and <u>Chen, X.</u> (2018). "Characterization of translating tornado-induced pressures and responses of a low-rise building frame based on measurement data." <u>Engineering Structures</u>, 174, 495-508.
- 26. <u>Feng. C.</u>, and <u>Chen, X.</u> (2018). "Estimation of nonstationary crosswind response of tall buildings with nonlinear aeroelastic effect." <u>Journal of Engineering Mechanics, ASCE</u>, 144(7), 04018053-1-16.
- 27. Yan, N., Chen, X., Li, Y. (2018). "Assessment of overturning risk of high-speed trains in strong crosswinds using spectral analysis approach." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 174, 103-118.
- 28. Peng, L., Huang, G., <u>Chen, X.,</u> Yang, Q. (2018). "Evolutionary spectra-based time-varying coherence function and application in structural response analysis to downburst winds." <u>Journal of Structural Engineering</u>, ASCE, 144(7), 0401878-1-16.
- 29. <u>Feng. C.</u>, and <u>Chen, X.</u> (2018). "Wind-induced inelastic responses of tall buildings with bilinear hysteretic restoring force characteristics by statistical linearization approach." <u>Engineering</u> Structures, 159, 141-154.
- 30. Chen, X. (2017). "Efficacy of Turkstra's combination rule for extremes of nonlinearly combined correlated wind load effects." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 170, 179-184.
- 31. Wang, D., <u>Chen, X.,</u> and Xu, K. (2017). "Analysis of buffeting response of hinged overhead transmission conductor to nonstationary winds." <u>Engineering Structures</u>, 147, 567-582.

- 32. Wang, D., <u>Chen, X.</u>, and Li, J. (2017). "Prediction of wind-induced buffeting response of overhead conductor: Comparison of linear and nonlinear analysis approaches." <u>Journal of Wind Engineering</u> and <u>Industrial Aerodynamics</u>, 167, 23-40.
- 33. Xu, J., Spencer, Jr., B.F., Lu, X., <u>Chen, X.</u>, and Lu, L. (2017). "Optimization of structures subject to stochastic dynamic loading." <u>Computer-Aided Civil and Infrastructure Engineering</u>, 32(8), 657-673.
- 34. <u>Feng, C.</u>, and <u>Chen, X.</u> (2017). "Crosswind responses of tall buildings with nonlinear aerodynamic damping and hysteretic restoring force character." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 167, 62-67. http://doi.org/10.1016/j.jweia.2017.04.012
- 35. Peng, L., Huang, G., <u>Chen, X.</u>, and Kareem, A. (2017). "Simulation of multivariate nonstationary random processes: A hybrid approach of stochastic wave and proper orthogonal decomposition." <u>Journal of Engineering Mechanics</u>, <u>ASCE</u>, 143(9), 04017064-1-16. DOI: http://dx.doi.org/10.1061/(ASCE)EM.1943-7889.0001273.
- 36. Liu, M., <u>Chen, X.</u>, and Yang, Q. (2017). "Estimation of peak factor of non-Gaussian wind pressures by improved moment-based Hermite model." <u>Journal of Engineering Mechanics</u>, <u>ASCE</u>, 143(7), 06017006-1-9.
- 37. Tang, H., Li, Y., <u>Chen, X.,</u> Shum, K.M. and Liao H.L. (2017). "Flutter performance of central-slotted plate at large angles of attack." <u>Wind and Structures</u>, an International Journal, 24(5), 447-464.
- 38. Li, Y., Tang, H., Lin, Q., and <u>Chen, X. (2017)</u>. "Vortex-induced vibration of suspenders in the wake of bridge tower by numerical simulation and wind tunnel test." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 164, 164-173.
- 39. Chen, B., Zhong, P., Cheng, W., <u>Chen, X.</u>, Yang, Q. (2017). Correlation and combination factors of wind forces on cylindrical roof structures. <u>International Journal of Structural Stability and Dynamics</u>, 17(9), 1750104 (23 pages).
- 40. <u>Zhang, X.</u>, and <u>Chen, X.</u> (2017). "Refined process upcrossing rate approach for estimating probabilistic wind load effects with consideration of directionality." <u>Journal of Structural Engineering, ASCE</u>, 143(1), doi:10.1061/(ASCE)ST.1943-541X.0001625, 04016148.
- 41. Zhang, J., <u>Chen, X.</u>, Liu, D., and Li, X. (2016). "Analysis of bridge response to barge collision: refined impact force models and some new insights." <u>Advances in Structural Engineering</u>, 19(8), 1224-1244. doi:10.1177/1369433216630367.
- 42. <u>Chen, X.</u> (2016). "Analytical predictions of extreme and fatigue responses of crosswind-excited structures with nonlinear aerodynamic damping." <u>Wind Engineers</u>, JAWE, 41(4), 321-325.
- 43. Wu, D., <u>Chen, X.</u>, and Yang, Q (2016). "Estimation of wind-induced extreme responses with various mean recurrence intervals considering model uncertainty due to limited data." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 158, 81-97.
- 44. Wang, D., <u>Chen, X.</u>, Li, J., Cheng, H. (2016). "Wind load characteristics of large billboard structures with two-plate and three-plate configurations." <u>Wind and Structures</u>, an International Journal, 22(6), 703-721.
- 45. Liu, M., <u>Chen, X.</u>, and Yang, Q. (2016). "Characteristics of dynamic pressures on a saddle type roof in various boundary layer flows." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 150, 1-14.
- 46. <u>Ding, J.</u> and <u>Chen, X.,</u> Zuo, D. and Hua, J. (2016). "Fatigue life assessment of traffic-signal-support structures from analytical approach and long-term vibration monitoring data." <u>Journal of Structural Engineering</u>, ASCE, 142(6), 04016017-1-12.
- 47. <u>Zhang, X.</u>, and <u>Chen, X.</u> (2016). "Influence of dependence of directional extreme wind speed on wind load effects with various mean recurrence intervals." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 148, 45-56.
- 48. Chen, X. (2016). "Estimation of wind load effects with various mean recurrence intervals with a closed-form formulation." International Journal of Structural Stability and Dynamics, 16, 1550060-1-14.

- 49. <u>Chen, X.</u> (2016). "Erratum for "Extreme value distribution and peak factor of crosswind response of flexible structures with nonlinear aeroelastic effect." <u>Journal of Structural Engineering, ASCE</u>, 142(9), 08216004-1.
- 50. <u>Ding. J.</u>. and <u>Chen, X.</u> (2016). "Moment-based translation model for hardening non-Gaussian response processes." <u>Journal of Engineering Mechanics, ASCE</u>, 142(2), 06015006-1-7.
- 51. <u>Zhang, X.</u>, and <u>Chen, X.</u> (2015). "Assessing probabilistic wind load effects via a multivariate extreme wind speed model: A unified framework to consider directionality and uncertainty." Journal of Wind Engineering and Industrial Aerodynamics, 147, 30-42.
- 52. <u>Ding. J.</u> and <u>Chen, X.</u> (2015). "Fatigue damage evaluation of broad-band Gaussian and non-Gaussian wind load effects by spectral methods." <u>Probabilistic Engineering Mechanics</u>, 41, 139-154.
- 53. <u>Chen, X.</u> (2015). "Revisiting combination rules for estimating extremes of linearly combined correlated wind load effects." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 141, 1-11.
- 54. <u>Chen, X.</u> (2015). "Analysis of multimode buffeting response of long span bridges to nonstationary winds with force parameters from stationary wind." <u>Journal of Structural Engineering, ASCE</u>, 141(4), 04014131-1-14.
- 55. <u>Gong. K.</u>, and <u>Chen, X.</u> (2015). "Improved modeling of equivalent static load on wind turbine towers." <u>Wind and Structures</u>, an International Journal, 20(5), 609-622.
- 56. <u>Gong. K., Ding. J.</u>, and <u>Chen, X.</u> (2014). "Estimation of long-term extreme response of operational and parked wind turbines: Validation and some new insights." <u>Engineering Structures</u>, 81, 135-147.
- 57. <u>Ding, J.</u> and <u>Chen, X.</u> (2014). "Assessment of methods for extreme value analysis of non-Gaussian wind effects with short-term time history samples." <u>Engineering Structures</u>, 80, 75-88.
- 58. <u>Gong. K.</u>, and <u>Chen, X.</u> (2014). "Estimation of extremes of combined two Gaussian and non-Gaussian random response processes." <u>International Journal of Structural Stability and Dynamics</u>, 14(3), 1350076-1-32.
- 59. <u>Gong. K.</u>, and <u>Chen, X.</u> (2014). "Influence of non-Gaussian wind characteristics on wind turbine extreme response." <u>Engineering Structures</u>, 59, 727-744.
- 60. Li, Y., Wang, D., Wu, C. and <u>Chen, X.</u> (2014). "Aerostatic and buffeting response characteristics of catwalk in a long-span suspension bridge", <u>Wind and Structures</u>, an International Journal, 19(6), 665-686.
- 61. <u>Chen, X.</u> (2014). "Extreme value distribution and peak factor of crosswind response of flexible structures with nonlinear aeroelastic effect." <u>Journal of Structural Engineering</u>, ASCE, 140(12), 04014091-1-18.
- 62. Wu, M., Li, Y., <u>Chen, X.</u>, Hu, P. (2014). "Wind spectrum and correlation characteristics relative to vehicles moving through cross wind field." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 133, 92-100.
- 63. <u>Chen, X.</u> (2014). "Estimation of crosswind fatigue of wind-excited structures with nonlinear aerodynamic damping." <u>Engineering Structures</u>, 74, 145-156.
- 64. <u>Chen, X.</u> (2014). "Estimation of extreme value distribution of crosswind response of wind-excited flexible structures based on extrapolation of crossing rate." <u>Engineering Structures</u>, 60, 177-188.
- 65. <u>Chen, X.</u>, Kwon, D-K, Kareem, A. (2014). "High frequency force balance technique for tall buildings: a critical review and some new insights." <u>Wind and Structures</u>, an International Journal, 18(4), 391-422.
- 66. <u>Ding, J., Gong, K.,</u> and <u>Chen, X.</u> (2013). "Comparison of statistical extrapolation methods for the evaluation of long-term extreme response of wind turbine." <u>Engineering Structures</u>, 57, 100-115.
- 67. <u>Ding, J.</u>, and <u>Chen, X.</u> (2013). "Assessing small failure probability by importance splitting method and its application to wind turbine extreme response prediction." <u>Engineering Structures</u>, 54,180-191.

- 68. <u>Chen, X. (2013)</u>. "Estimation of crosswind response of wind-excited tall buildings with nonlinear aerodynamic damping." <u>Engineering Structures</u>, 56, 766-778.
- 69. <u>Huang. G., Chen, X.</u>, Liao, H. and Li, M. (2013). "Prediction of tall building response to nonstationary winds based on multiple wind speed time history samples." <u>Wind and Structures</u>, an International Journal, 17(2), 227-244.
- 70. Li, Y., Wu, M., <u>Chen, X.</u>, Wang, T., and Liao, H. (2013). "Wind tunnel study on wake galloping of parallel cables in cable-stayed bridges and its suppression measures." <u>Wind and Structures</u>, an International Journal, 16(3), 249-261.
- 71. <u>Huang, G., Chen, X., Li, M., and Peng, L. (2013)</u>. "Extreme value of wind-excited response considering influence of bandwidth." <u>Journal of Modern Transportation</u>, 10 pages.
- 72. <u>Huang, G., Chen, X.</u>, and Brisbois, J. Z. (2013). "Earthquake resisting system optimization and pushover analysis in seismic design of approach spans of new South Park Bridge." <u>Practice</u> Periodical on Structural Design and Construction, ASCE, 18(4), 238-246.
- 73. Xu, F., <u>Chen, X.</u>, Cai, CS, Chen, A. (2012). "Determination of 18 flutter derivatives of bridge decks by an improved stochastic search algorithm." <u>Journal of Bridge Engineering, ASCE</u>, 17(4), 576-588.
- 74. Chen, X., and Kareem, A. (2011). "Discussion of "Cross correlations of modal responses of tall buildings in wind-induced lateral-torsional motion" by M. F. Huang, C. M. Chan, K. C. Kwok, and P. A. Hitchcock", Journal of Engineering Mechanics, ASCE, 137(2), 151-154.
- 75. Chen, X., and <u>Huang. G.</u> (2010). "Estimation of probabilistic extreme wind load effects: Combination of aerodynamic and wind climate data." <u>Journal of Engineering Mechanics, ASCE</u> 136(6), 1-14.
- 76. Kareem, A., and Chen, X. (2010). "Discussion on 'Equivalent static wind loads on long-span roof structures.' by Fu, J., Xie, Z. and Li. Q. S., Journal of Structural Engineering, ASCE, 134(7), 2008, 1115-1128." Journal of Structural Engineering, ASCE, 136(2), 231.
- 77. Li, B., Yang, QS, Tian, YJ, and <u>Chen, X.</u> (2010). "Characteristics of turbulent wind load of tapered super tall building." <u>Journal of Building Structures</u>, <u>ASCE</u>, 31(10), 8-16.
- 78. Chen, X., and Huang, G. (2009). "Evaluation of peak resultant response for wind-excited tall buildings." Engineering Structures, 31(4), 858-868.
- 79. <u>Huang, G.</u>, and <u>Chen, X.</u> (2009). "Wavelets-based estimation of multivariate evolutionary spectra and its application to nonstationary downburst winds." <u>Engineering Structures</u>, 31(4), 976-989.
- 80. <u>Chen, X.</u> (2008). "Analysis of alongwind tall building response to transient nonstationary winds." <u>Journal of Structural Engineering</u>, ASCE, 134(5), 782-791.
- 81. <u>Chen, X.</u>, and Kareem, A. (2008). "Identification of critical structural modes and flutter derivatives for predicting coupled bridge flutter." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 96(10-11), 1856-1870.
- 82. <u>Chen, X.</u>, and <u>Zhou, N.</u> (2007). "Equivalent static wind loads on low-rise buildings based on full-scale pressure measurements." <u>Engineering Structures</u>, 29(10), 2563-2575.
- 83. <u>Huang. G.</u>, and <u>Chen, X.</u> (2007). "Wind load effects and equivalent static wind loads of tall buildings based on synchronous pressure measurements." <u>Engineering Structures</u>, 29(10), 2641-2653.
- 84. <u>Chen, X. (2007)</u>. "Improved understanding of bimodal coupled bridge flutter based on closed-form solutions." <u>Journal of Structural Engineering, ASCE</u>, 133(1), 22-31.
- 85. <u>Chen, X.</u> (2006). "Analysis of long span bridge response to winds: building nexus between flutter and buffeting." Journal of Structural Engineering, ASCE, 132(12), 2006-2017.
- 86. <u>Chen, X.</u>, and Kareem, A. (2006). "Revisiting multimode coupled bridge flutter: some new insights." Journal of Engineering Mechanics, ASCE, 132(10), 1115-1123.
- 87. <u>Chen, X.</u>, and Kareem, A. (2006). "Closure to "Equivalent static wind loads on buildings: Mew model" by Xinzhong Chen and Ahsan Kareem." <u>Journal of Structural Engineering, ASCE</u>, 132(6), 1007-1008.

- 88. Chen, X., and Kareem, A. (2005). "Coupled dynamic analysis and equivalent static wind loads on buildings with 3-D modes." Journal of Structural Engineering, ASCE, 131(7), 1071-1082.
- 89. <u>Chen, X.</u>, and Kareem, A. (2005). "Dynamic wind effects on buildings with 3-D coupled modes: application of high frequency force balance measurements." <u>Journal of Engineering Mechanics</u>, ASCE, 131(11), 1115-1125.
- 90. Chen, X., and Kareem, A. (2005). "Validity of wind load distribution based on HFFB measurements." Journal of Structural Engineering, ASCE, 131(6), 984-987.
- 91. <u>Chen, X.</u>, and Kareem, A. (2005). "Proper orthogonal decomposition-based modeling, analysis and simulation of wind loads and their effects." <u>Journal of Engineering Mechanics, ASCE</u>, 131(4), 325-339.
- 92. <u>Chen, X.</u>, and Kareem, A. (2004). "Efficacy of the implied approximation in the identification of flutter derivatives." <u>Journal of Engineering Mechanic, ASCE</u>, 130(12), 2070-2074.
- 93. <u>Chen, X.</u>, and Kareem, A. (2004). "Equivalent static wind loads on buildings: a new model." <u>Journal of Structural Engineering, ASCE</u>, 130(10), 1425-1435.
- 94. <u>Chen, X.</u>, and Kareem, A. (2003). "New frontiers in aerodynamic tailoring of long span bridges: an advanced analysis framework." <u>Journal of Wind Engineering and Industrial Aerodynamics</u>, 91(12-15), 1511-1528.
- 95. <u>Chen, X.</u>, and Kareem, A. (2003). "Efficacy of tuned mass damper for bridge flutter control." <u>Journal of Structural Engineering, ASCE</u>, 129(10), 1291-1300.
- 96. Chen, X., and Kareem, A. (2003). "Aeroelastic analysis of bridges: turbulence effects and aerodynamic nonlinearity." Journal of Engineering Mechanics, ASCE, 129(8), 885-895.
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