

## 1. EDUCATION

Ph.D. (Structural Engineering)	University of California, Berkeley, CEE Department	Dec 2006
M.S. (Structural Engineering)	Tianjin University, China, CE Department	July 1999
B.S. (Structural Engineering)	Tianjin University, China, CE Department	July 1996
B.A. (English)	Tianjin University, China, CE Department	July 1996



## 2. ACADEMIC APPOINTMENTS

2013 –present	Professor, CE Department, Tianjin University
2007 – 2012	Assistant Professor, CEE Department, University of Tennessee, Knoxville,
2005 – 2007	Lecturer, CEE Department, University of Tennessee, Knoxville
1999 – 2005	Research Assistant, CEE Department, University of California, Berkeley
2001 – 2004	Teaching Assistant, CEE Department, University of California, Berkeley

## 3. NON-ACADEMIC POSITIONS

2005 (Spring)	Engineer, MSC Software Corporation, Redwood City, CA
2002 (Summer)	Design Engineer, Skidmore, Owings & Merrill LLP, San Francisco, CA

## 4. AWARDS, RECOGNITION, AND HONORS

- The Seventh Batch of the Thousand Talents Program of Tianjin (the first thousand youth talents), 2012
- New Century Excellent Talents by Education Ministry, 2013
- The Beiyang Young Scholars of Tianjin University, 2013
- Ralf E. Powe Junior Faculty Enhancement Award, Oakridge Associated Universities, 2008

## 5. MEMBERSHIP AND LEADERSHIP IN PROFESSIONAL SOCIETIES

- Tianjin Steel Structure Institute Council  
Council Member 2013 – present
- Structural Stability Research Council  
Vice Chair of Task Group on Bridges (TG4) 2010 – present
- American Iron and Steel Institute  
Steel Bridge Task Force 2007 – 2012
- Transportation Research Board  
Committee on Bridge Management (AHD35) 2009 – 2016  
Committee on Construction of Bridges and Structures (AFH40) 2010 – present  
Committee on Structure General Council 2012 – present  
Committee on Seismic Design and Performance of Bridges (AFF50) 2016 – present
- American Society of Civil Engineers  
Committee on Composite Construction 2008 – present  
Committee on Steel Bridges 2008 – present  
Committee on Performance of Structures 2016 – present
- American Institute of Steel Construction 2004 – present
- George E. Brown, Jr. Network for Earthquake Engineering Simulation 2006 – present
- Earthquake Engineering Research Institute 2008 – present

## 6. PUBLICATIONS

### Articles in Refereed Archival Journals

- Zhao Q\*, Sun J., Li Y., Li Z.(2016) "Nonlinear Cyclic Analyses of Corrugated Steel Plate Shear Walls" The Structural Design of Tall and Special Buildings, Accepted
- Zhong-Xian Li\*, Ying Gao, Qihong Zhao (2016) "A 3D flexure-shear fiber element for modeling the seismic behavior of reinforced concrete columns" Engineering Structures, June, volume 117, p372-383
- Zhao Q., Li N., Sun J.(2016) "Analysis on Lateral Behavior of Sinusoidally Corrugated Steel Plate Shear Walls" Journal of Tianjin University(Science and Technology), (S1):152-160. (in Chinese)
- Jijian Lian, Yan Zhang, Fang Liu, Qihong Zhao\*(2015)"Analysis of the ground vibration induced by high dam flood discharge using the cross wavelet transform method" Journal of Renewable and Sustainable Energy, Jul, 7(4),043146
- Han Q., Xu Y.\*, Lu Y., Xu J., Zhao Q. (2015)"Failure mechanism of steel arch trusses: Shaking table testing and FEM analysis" Engineering Structures, January, Volume 82, p186-198
- Han Q., Lu Y.\*, Zhao Q.(2015) "Evaluation for earthquake-resistant capability of un-landing steel arch" Advanced Steel Construction, Jun,11(2),211-222.
- Qiu J., Zhao Q.(2015)"Research and Application of stiffened steel plate shear walls" Building Structure, 16:52-62. (in Chinese)
- Sun J., Zhao Q.(2015)"Engineering application of steel plate shear walls" Building Structure, 16:63-70. (in Chinese)
- Li, Z., Lv, Y., Xu, L., Ding, Y, and Zhao, Q. (2013) "Experimental studies on nonlinear seismic control of a steel-concrete hybrid structure using MR dampers"Engineering Structures, April, v 49, p 248-263.
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- Hastings, J. S., Zhao Q.\*, and E. G. Burdette. (2012) "Closure to 'Steel Girder Stability during Bridge Erection: AASHTO LRFD Check on L/b Ratios'" J. of Bridge Engineering, ASCE, January, Volume 17, Issue 1, pp. 184-185.
- Liu X., Zhao Q., Liu H., Chen Z.\* (2011) "Innovations in Design and Construction of the New Stadiums and Gymnasiums for the 2008 Beijing Olympic Games", Journal of the International Association for Shell and Spatial Structures, Volume 52, pp. 39-53.
- Farahani R. V., Zhao Q.\*, and Burdette E. G. (2010) "Seismic Analysis of Integral Abutment Bridge in Tennessee, Including Soil-Structure Interaction", Transportation Research Record, Volume 2201, pp. 70-79 .
- Zhao Q.\*, Coffelt S., Zou T., Yu B., Burdette E. G., Hastings J. S. (2010) "Convenient Method for On-Site Check of Single Steel I-Girder Stability During Erection", Transportation Research Record, Volume. 2172, pp. 59-65.
- Yu B., Zhao Q.\*, Burdette E. G. (2010) "Simplified Erection Guidelines for Double I-Girder Systems During Bridge Construction", Transportation Research Record, Volume 2172, pp. 74-83.
- Zhao Q.\*, Yu B., Burdette E. G. (2010) "Effects of Cross-Frame on Stability of Double I-Girder System Under Erection", Transportation Research Record, Volume 2152, pp. 57-62.
- Hastings, J. S., Zhao Q.\*, and E. G. Burdette. (2010) "Steel Girder Stability during Bridge Erection: AASHTO LRFD Check on L/b Ratios". J. of Bridge Engineering, ASCE, November, Volume 15, Issue 6, pp. 759-762.
- Liu H., Zhao Q., Wang X., Zhou T., Wang D., Liu J., Chen Z.\* (2010) "Experimental and Analytical Studies on the Stability of Structural Steel Tube and Coupler Scaffolds without X-bracing", Engineering Structures, April , Volume 32, Issue 4, pp. 1003-1015
- Zhang X., Zhao Q., Wang S.\*, and Lara-Curzio E. (2010) "Characterizing Strength and Fracture of Wood Cell Wall through Uniaxial Micro-compression Test", Composites Part A – Applied Science and Manufacturing, Elsevier, May, Volume 41, Issue 5, pp. 632-638.
- Zhao Q.\*, Yu B., Burdette E. G., and Hastings J. S. (2009) "Monitoring Steel Girder Stability for a Safer Bridge Erection", J. of Performance of Constructed Facilities, ASCE, December, Volume 23, Issue 6, pp. 391-398.
- Zhao Q.\* and Astaneh-Asl, A. (2007) "Seismic Behavior of Steel Shear Wall Systems and Application of Smart Structures Technology," International J. of Steel Structures, KSSC, Vol.7 No.1 , pp. 61-68.
- Zhao Q.\* and Astaneh-Asl, A. (2007) "Seismic Behavior of Composite Shear Wall Systems and Application of Smart Structures Technology," International J. of Steel Structures, KSSC, Vol.7 No.1, pp. 69-76.
- Zhao Q. and Astaneh-Asl, A.\* (2004) "Cyclic Behavior of Traditional and Innovative Composite Shear Walls," J. of Structural Engineering, ASCE, February, Volume 130, Issue 2, pp. 271-284.

#### **Proceedings Articles**

- Zhao Q.\*, Li Y., Sun J.(2017) "Seismic Behavior of Corrugated Steel Plate Shear Walls", Proceedings of the Annual Stability Conference Structural Stability Research Council, March 21-24, 2017, San Antonio, Texas, USA.
- Zhao Q.\*, Qiu J., Li N.(2017) "Experimental studies on corrugated steel plate shear walls", Proceedings of the Annual Stability Conference Structural Stability Research Council, March 21-24, 2017, San Antonio, Texas, USA.
- Zhao Q.\*, Li Y.(2016) "Buckling and Instabilities of Sinusoidally Corrugated Steel Plate Shear Walls", 7th International Conference on Coupled Instabilities in Metal Structures, November 7-8, 2016, Baltimore, Maryland, USA.
- Zhao Q.\*, Li Y.(2016) "Lateral Resistance Capacity of Sinusoidally Corrugated Plate Shear Walls", 11th Pacific Structural Steel Conference, October 26-28, 2016, Shanghai, China.
- Zhao Q.\*, Qiu J., Sun J.(2016) "Seismic Performance of Channel Stiffened Steel Plate Shear Walls and Corrugated Steel Plate Shear Walls(CoSPSWs)", The 14th International Symposium on Structural Engineering, October 12-15, 2016, Beijing, China.
- Zhao Q.\*, Qiu J.(2016) "Nonlinear Analyses of Stiffened Steel Plate Shear Walls Considering Gravity Effects", Proceedings of the Annual Stability Conference Structural Stability Research Council, April 12-15, 2016, Orlando, Florida, USA.
- Zhao Q.\*, Wang H, Qi Z, et al. Ductility Performance and Failure Process of Integral Abutment Bridges in High Seismic Zone. Transportation Research Board Annual meeting, 2016.
- Zhao Q.\*, Wang H, Qi Z, et al. Parametric study on ductility performance of integral abutment bridges. Proceeding of the 14th International Symposium on Structural Engineering, 2016.
- Zhao Q.\*, Wang H, Qi Z, et al. Analyses on ductility performance of integral abutment bridges under seismic effects. Proceeding of the 1st International Symposium on Jointless & Sustainable Bridges, Fuzhou, China: Fuzhou University, 2016: 148-155.
- Zhao Q.\*, Li Y.(2015) "Behavior of Sinusoidally Corrugated Steel Plate Shear Walls", The 14th International Symposium on Structural Engineering, October 12-15, 2016, Beijing, China.
- Zhao Q.\*, Sun J., Li Y.(2015) "Shear Behavior of Corrugated Steel Plate Shear Walls", 8th Stressa International Conference Behavior of Steel Structures in Seismic Areas, July 1-3, 2015, Shanghai, China.
- Zhao Q.\*, Sun Junhao, Li Yanan.(2015) "Preliminary Analysis on the Seismic Behavior of Corrugated Steel Plate Shear Walls", 2015. International Symposium on Innovation and Sustainability of Structures in Civil Engineering, Beijing, China, July 26th, 2015
- Zhao Q.\*, Janney S., Li Z. Burdette E., Waller J.(2013) "Full-scale Surface Blast Test for steel Blast Cubicles", 2013 International Symposium on Innovation and Sustainability of Structures in Civil Engineering, Harbin, China, July 6th, 2013
- Zou T., Zhao Q.\* (2011) "Effects of stiffeners on steel panel and boundary elements of steel plate shear wall system", Proceedings, 2011 Annual Stability Conference, Structural Stability Research Council, In Connection with the AISC North American Steel Construction Conference, pp 204-215, Pittsburg, Pennsylvania, May 9-12.
- Zhao Q.\*, Yu B., Burdette E. G. (2011) "Simplified Erection Guidelines for Double I-Girder Systems during Bridge Construction", Proceedings, Structure Congress, pp 190-202, Las Vegas, Nevada, April 13-15.
- Zhao Q.\*, Farahani R. V., Burdette E. G. (2011) "Seismic Analysis of Integral Abutment Bridges including Soil-structure Interaction", Proceedings, Structure Congress, pp 289-303, Las Vegas, Nevada, April 13-15.
- Farahani R. V., Zhao Q.\*, and Burdette E. G. (2010) "Seismic Analysis of Integral Abutment Bridges including Soil-structure Interaction", Proceedings, TRB Seventh International Bridge Engineering Conference, San Antonio, Texas, December 1-3.

- Hastings J. S., Zhao Q.\*, Burdette E. G. (2010) "Checking Steel Girder Stability during Bridge Erection using Rules of Thumb and AASHTO LRFD Code", Proceedings, Structure Congress, Orlando, Florida, May 12-15.
- Zhao Q.\*, Yu B., Burdette E. G., Hastings J. S. (2010) "Simplified guidelines for checking single steel I-girder stability under erection through AASHTO LRFD and FEA", Proceedings, 19th Analysis and Computation Specialty Conference, pp 250-262, Orlando, Florida, May 12-15.
- Zhao Q.\*, Yu B., Burdette E. G., Hastings J. S. (2010) "A Convenient Method for On-site Check of Single Steel I-Girder Stability under Erection", Proceedings, 89th TRB Annual Conference, Washington DC, January 10-14.
- Zhao Q.\*, Yu B., Burdette E. G. (2010) "Investigation on Effects of Cross-frames to Stability of Double Girder System under erection", Proceedings, 89th TRB Annual Conference, Washington DC, January 10-14.
- Yu B., Zhao Q.\*, Burdette E. G., (2010) "Simplified Guideline for Double I-Girder Systems under Erection", Proceedings, 89th TRB Annual Conference, Washington DC, January 10-14.
- Zhao Q.\*, Yu B., Burdette E. G., Hastings J. S. (2009) "Monitoring Steel Girder Stability for Safer Bridge Erection", Proceedings, World Steel Bridge Symposium and Workshops, San Antonio, TX, November 17-20.
- Zhao Q.\* and Astaneh-Asl A. (2008) "Experimental and Analytical Studies of a Steel Plate Shear Wall System", Proceedings, Structures Congress, pp 314, Vancouver, Canada, April 23-26.
- Zhao Q.\* and Astaneh-Asl A. (2006) "Seismic Behavior of Steel and Composite Shear Wall Systems and Application of Smart Structures Technology", Proceedings, US-Korea Workshop on Smart Structures Technology for Steel Structure, Seoul, Korea, November, 2006.
- Zhao Q.\* and Astaneh-Asl A. (2006) "Cyclic Behavior of Steel and Composite Shear Walls", 100th Anniversary San Francisco Earthquake Conference, April 18-22, San Francisco, USA.
- Zhao Q., and Astaneh-Asl, A.\* (2004) "Cyclic Behavior of an Innovative Steel Plate Shear Wall System," 13th World Conference on Earthquake Engineering, August 1-6, Vancouver, Canada
- Zhao Q., and Astaneh-Asl, A.\* (2004) "Cyclic Behavior of Traditional and Innovative Composite Shear Walls", 13th World Conference on Earthquake Engineering, August 1-6, Vancouver, Canada.
- Astaneh-Asl A.\*, Heydari C. and Zhao Q., (2003) "Analysis of Car-Bomb Effects on Buildings using MSC-Dytran Software and Protective Measures", The MSC Software Virtual Product Development Conference, October 13-15, Dearborn, Michigan.
- Zhao, Q., and Astaneh-Asl, A.\*, (2003) "Cyclic Behavior of Steel and Composite Shear Wall Systems", 4th International Conference STESSA on Behavior of Steel Structures in Seismic Areas, pp 231-236, June 9-12, Naples, Italy.
- Zhao, Q., and Astaneh-Asl, A.\*, (2003) "Cyclic Behavior of Composite Shear Wall Systems", 2003 Annual Stability Conference, Structural Stability Research Council, In Connection with the AISC North American Steel Construction Conference, pp 639-658, April 2-5, Baltimore.
- Astaneh-Asl, A.\*, and Zhao, Q., (2002) "Cyclic Behavior of Steel Shear Wall Systems", 2002 Annual Stability Conference, Structural Stability Research Council, In Connection with the AISC North American Steel Construction Conference, pp 21-36, April 25-27, Seattle.
- Astaneh-Asl, A.\*, and Zhao Q., (2000) "Seismic Studies of an Innovative and Traditional Composite Shear Walls", Composites and Hybrid Structures, Univ. of Southern California, Volume 1 and 2, pp. 1009-1016. 6th ASCCS Conference on Composite and Hybrid Structures, March 22-24, 2000, Los Angeles.