

Section B:
Bibliography of Publications

Bibliography of Year 9 Publications

The publications listed in this section resulted from MCEER-sponsored research for project year 9. The list is arranged by MCEER thrust area, and further grouped by journal articles, workshop and conference proceedings, and books, book chapters and technical reports. There are 135 citations provided in this listing.

Research Program – Organized by Thrust Areas

Overarching Center-wide Cross Program Research Activities

Workshop and Conference Proceedings

Bruneau M. and Reinhorn, A.M., Overview of the Resilience Concept, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1621.

Bruneau, M., Seismic Risk - Why It Should Be Considered and Impediments to Implementation - An Earthquake Center Perspective, ASCE 2005 Structures Congress, New York, New York, April 2005.

Bruneau, M., Enhancing the Resilience of Communities against Extreme Events from an Earthquake Engineering Perspective, IABSE Symposium on Structures and Extreme Events, Lisbon, Portugal, September 2005, on CD-ROM.

Cimellaro G.P., Reinhorn A.M. and Bruneau M., Quantification of Seismic Resilience, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1094.

Rose, A., Tracing Infrastructure Interdependence through Economic Interdependence, Center for Advanced Engineering Workshop on Interdependent Infrastructure, Christchurch, New Zealand, 2005.

Books, Book Chapters and Technical Reports

Applied Technology Council, (Rose, A. contributing author), Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities, Report to U.S. Congress on behalf of the National Institute of Building Sciences, Redwood City, California, 2005.

National Research Council (Rose, A. contributing author), Seismic Monitoring--Improved Decision-Making: Assessing the Value of Reduced Uncertainty, Washington, DC, National Academy Press, 2006, ISBN: 0-309-09695-2, 196 p.

Seismic Evaluation and Retrofit of Lifeline Systems

Journal Articles

Meis, R., Maragakis, M. and Siddharthan, R., Dynamic Axial Stiffness of Typical Restrained and Unrestrained Underground Pipelines, Journal of Testing and Evaluation, Vol. 33, No. 6, November 2005, Paper No. JTE12540.

O'Rourke, T.D., Bonneau, A., Pease, J., Shi, P. and Wang, Y., Liquefaction Ground Failures in San Francisco, Earthquake Spectra, Special 1906 San Francisco Earthquake Volume, Vol. 22, No. S2, EERI, Oakland, CA, April 2006, pp. S91-S112.

Scawthorn, C., O'Rourke, T.D. and Blackburn, F., The San Francisco Earthquake and Fire of 1906-Enduring Lessons for Fire Protection and Water Safety, Earthquake Spectra, Special 1906 San Francisco Earthquake Volume, Vol. 22, No. S2, EERI, Oakland, CA, April 2006, pp. S125-S158.

Workshop and Conference Proceedings

Banerjee, S. and Shinozuka, M., Seismic Evaluation of Bridges using Capacity Spectrum Method, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Dong, X., Shinozuka, M., Cheng, T.C. and Jin, X., Seismic Performance Analysis for the LADWP Power System, 2005 IEEE/PES Transmission and Distribution Conference & Exhibition: Asia and Pacific, Dalian, China, August 14-18, 2005.

Guikema, S. D., Xu, N., Davidson, R., Nozick, L. K. and Çağnan, Z., Optimization of Crews in Post-earthquake Power Restoration, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Lee, J.J., Fukuda, Y. and Shinozuka, M., Real Time Displacement Measurement of a Flexible Bridge Using Digital Image Processing Techniques, Second ANCRiSST Workshop on Advanced Smart Materials and Smart Structures Technology, Gyeong-ju, Korea, July 21-24, 2005.

Lee, S. and Davidson, R., Review of Forest, Compartment, Wildland-Urban Interface Fire Research and Their Relation to Fire Following Earthquake Models, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Mason, J.A., O'Rourke, T.D. and Jones, S., Seismic Strengthening of Large Diameter Steel Waterline with Advanced Composites, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

O'Rourke, T.D. and Turner, J.E., Earthquake Soil-Pipeline Interaction in Partially Saturated Sand, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

O'Rourke, T.D., Turner, J.E., Jeon, S-S., Stewart, H.E., Wang, Y. and Shi, P., Soil-Structure Interaction Under Extreme Loading Conditions, Buchanan Lecture, Texas A&M University, College Station, Texas, November 2005, 28 pp.

Park, C., Chou, P.H. and Shinozuka, M., DuraNet: Multimodal Sensor Network for Real-Time Structural Health Monitoring, Second ANCRiSST Workshop on Advanced Smart Materials and Smart Structures Technology, Gyeong-ju, Korea, July 21-24, 2005.

Park, C., Xie, Q., Chou, P.H. and Shinozuka, M., DuraNode: Wireless Networked Sensor for Structural Health Monitoring, Fourth IEEE Conference on Sensors, October 31-November 3, 2005.

Shi, P., O'Rourke, T.D. and Wang, Y., Simulation of Earthquake Water Supply Performance, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Shinozuka, M. and Dong, X., Damage Detection and Localization for Water Delivery Systems, Fifth International Workshop on Structural Health Monitoring, Stanford University, Stanford, California, September 12-14, 2005, pp. 1267-1273.

Shinozuka, M. and Dong, X., Monitoring and Management of Water Supply Systems, Fourth KISTEC International Seminar on Safety of Infrastructures, Gyeongbuk, Korea, July 22, 2005.

Wang, Y., O'Rourke, T.D. and Shi, P., Seismic Wave Effects on the Longitudinal Forces and Pullout of Underground Lifelines, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Zhou, Y. and Shinozuka, M., Development of Probabilistic Scenario Earthquakes for Seismic Risk Analysis of Spatially Distributed Systems, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Books, Book Chapters and Technical Reports

Murota, N., Feng, M.Q. and Liu, G.Y., MCEER Technical Report: Experimental and Analytical Studies of Base Isolation Systems for Seismic Protection of Power Transformers, MCEER-05-0008, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 244 p.

Rose, A., Analyzing Terrorist Threats to the Economy: A Computable General Equilibrium Approach, Economic Impacts of Terrorist Attacks, P. Gordon, J. Moore and H. Richardson (eds.), Edward Elgar, Cheltenham, UK, 2005, pp. 196-217.

Seismic Retrofit of Acute Care Facilities

Journal Articles

Ahn, I.-S., Chen, S.S. and Dargush, G.F., Dynamic Ratcheting in Numerical Analyses of Simple Plasticity Models, Journal of Engineering Mechanics, Vol. 132, No. 4, ASCE, 2006, pp. 411-421.

Aref, A.J., Kitane, Y. and Lee, G.C., Analysis of Hybrid FRP-Concrete Multi-cell Bridge Superstructure, Journal of Composite Structures, Vol. 69, 2005, pp. 346-359.

Berman, J.W. and Bruneau, M., Supplemental System Retrofit Considerations for Braced Steel Bridge Piers, International Journal of Earthquake Engineering and Structural Dynamics - Special Issue on Transportation Structures, Vol. 34, No.4-5, 2005, pp. 497-517.

Bruneau, M., Engelhardt, M., Filiatrault, A., Goel, S.C., Itani, A., Hajjar, J., Leon, R., Ricles, J., Stojadinovic, B. and Uang, C.M., Review of Selected Recent Research on US Seismic Design and Retrofit Strategies for Steel Structures, Journal of Progress in Structural Engineering and Materials, Vol. 7, 2005, pp. 103-114.

Celik, O., Berman, J. and Bruneau, M., Cyclic Testing of Braces Laterally Restrained by Steel Studs, Journal of Structural Engineering, Vol. 131, No. 7, ASCE, 2005, pp. 1114-1124.

Dargush, G.F. and Sant, R.S., Evolutionary Aseismic Design and Retrofit of Structures with Passive Energy Dissipation, Earthquake Engineering and Structural Dynamics, Vol. 34, 2005, pp. 1601-1626.

Lee, K. and Bruneau, M., Energy Dissipation Demand of Compression Members in Concentrically Braced Frames, *International Journal of Steel & Composite Structures*, Vol. 5, No. 5, 2005, pp. 345-358.

Liu, W., Tong, M. and Lee, G.C., Optimization Methodology for Damper Configuration based on Building Performance Indices, *Journal of Structural Engineering*, Vol. 131, No. 11, ASCE, 2005, pp. 1746-1756.

Liu, W.-C., Liang, Z. and Lee, G.C., Low-Cycle Bending Fatigue of Steel Bars Under Random Excitation, Part I: Behavior, *Journal of Structural Engineering*, Vol. 131, No. 6, ASCE, 2005, pp. 913-918.

Liu, W.-C., Liang, Z. and Lee, G.C., Low-Cycle Bending Fatigue of Steel Bars Under Random Excitation, Part II: Design Considerations, *Journal of Structural Engineering*, Vol. 131, No. 6, ASCE, 2005, pp. 919-923.

Paquette, J. and Bruneau, M., Pseudo-dynamic Testing of Unreinforced Masonry Building with Flexible Diaphragm and Comparison with Existing Procedures, *Journal of Building and Construction Materials (Special Issue)*, Vol. 20, No.4, 2006, pp. 220-228.

Roussis, P.C. and Constantinou, M.C., Experimental and Analytical Studies of Structures Seismically Isolated with an Uplift-Restraining Friction Pendulum System, *Earthquake Engineering and Structural Dynamics*, Vol. 35, No. 5, April 2006, pp. 595-611.

Roussis, P.C. and Constantinou, M.C., Uplift-Restraining Friction Pendulum Seismic Isolation System, *Earthquake Engineering and Structural Dynamics*, Vol. 35, No. 5, April 2006, pp. 577-593.

Warn, G. and Whittaker, A.S., Property Modification Factors for Seismically Isolated Bridges, *Journal of Bridge Engineering*, Vol. 11, No. 3, ASCE, 2006, pp. 371-377.

Xu, X., Singh, T. and Dargush, G.F., Cubic Control for Phase I Smart Base Isolated Benchmark Building with Emphasis on Nonstructural Performance, *Journal of Structural Control and Health Monitoring*, Vol. 13, No. 2-3, 2006, pp. 758-774.

Workshop and Conference Proceedings

Alesch, D.J., Toward a Comprehensive Theory of Disaster Recovery, Conference on Urban Disaster Reduction, Kobe, Japan, January 18-20, 2005.

Alesch, D.J. and Holly, J.N., Tight Coupling, Open Systems, and Losses From Extreme Events, US-Japan Earthquake Engineering Conference, Awaji Island, Japan, January 2005.

Berman, J.W. and Bruneau, M., Considering Overturning In Braced Steel Bridge Pier Retrofit, 2005 New York City Bridge Conference, New York, New York, September, on CD-ROM.

Berman, J.W. and Bruneau, M., Finite Element Parametric Study of Self-Bracing Hybrid Rectangular Links for Eccentrically Braced Frames, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Bruneau, M., Seismic Design and Retrofit of Steel Structures, First Canadian Conference on Effective Design of Structures, Hamilton, Canada, July 2005.

Bruneau, M., Berman, J., and Vian, D., Steel Plate Shear Walls - From Research to Codification, ASCE 2005 Structures Congress, New York, New York, April 2005.

Bruneau, M., Berman, J., Lopez Garcia, D. and Vian, D., Steel Plate Shear Wall Buildings: Design Requirements and Research, North American Steel Construction Conference, Montreal, Canada, April 2005.

Buckle, I. and Lee, G.C., Improving the Resilience of Highway Systems to Major Earthquakes, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Cimellaro, G.P. and Kafali, C., Fragility Based Life Cycle Loss Estimation for Critical Facilities, CC2005: Tenth International Conference on Civil and Structural Engineering Computing, Rome, Italy, August 30 -September 2, 2005.

Cimellaro, G.P., Reinhorn, A.M. and Bruneau, M., Seismic Resilience of a Health Care Facility, 2005 Annual Meeting, Asian-Pacific Network of Centers for Earthquake Engineering Research, Jeju, South Korea, November 10-13, 2005.

Corbin, R., Goodwin, E., Maragakis, E. and Itani, A., Experimental Comparison of the Seismic Response of Various Hospital Piping Systems, 2005 Annual Meeting, Asian-Pacific Network of Centers for Earthquake Engineering Research, Jeju, South Korea, November 10-13, 2005.

Dargush, G.F. and Hu, Y., Evolutionary Methodologies for Aseismic Decision Support, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper NCEE-1132.

Dogrueel, S., Dargush, G.F. and Green, M.L., Evolutionary Aseismic Design and Retrofit of Buildings, International Conference on Computing & Decision Making Civil Building Engineering, Montreal, Canada, June 2006, Paper 539.

Filiatrault, A., Aref A, Bruneau, M., Constantinou M.C., Lee G.C., Mosqueda G, Reinhorn, A.M. and Whittaker, A.S., MCEER's Research on the Seismic Response Modification of Structural and Non-Structural Systems and Components in Hospitals, ATC-Japan Workshop, 2005.

Filiatrault, A., Bruneau, M., Alesch, D., Constantinou, M., Dargush, G., Grigoriu, M., Lee, G., Maragakis, E., Mosqueda, G., Petak, W., Reinhorn, A. and von Winterfeldt, D, Enhancing the Resilience of Acute Care Facilities: An Overview of MCEER Research, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Grigoriu, M., Sample Properties of the State of Dynamic Systems under Gaussian and Poisson White Noise, ICOSSAR 2005: The Ninth International Conference on Structural Safety and Reliability, Rome, Italy, June 19-22, 2005.

Grigoriu, M., Equations for the Density and the Characteristic Functions of the State of Dynamic Systems with Gaussian, Poisson and Lévy White Noise, ICOSSAR 2005: The Ninth International Conference on Structural Safety and Reliability, Rome, Italy, June 19-22, 2005.

Hu, Y. and Dargush, G.F., Evolutionary Methodologies for Aseismic Decision Support within Health Care Facilities and Networks, International Conference on Computing & Decision Making Civil Building Engineering, Montreal, Canada, June 2006, Paper 538.

Huang, Y.-N., Whittaker, A.S. and Constantinou, M.C., Seismic Demands on Secondary Systems in Conventional and Isolated Nuclear Power Plants, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Huang, Y.-N., Whittaker, A.S., Constantinou, M.C. and Malushte, S., Seismic Protection of Secondary Systems in Nuclear Power Plant Facilities, Transactions, 18th International Conference on Structural Mechanics in Reactor Technology (SMiRT 18-K10-7), Beijing, China, August 2005.

Jacobson, A. and Grigoriu, M., Fragility Analysis of Water Supply Systems, ICOSSAR 2005: The Ninth International Conference on Structural Safety and Reliability, Rome, Italy, June 19-22, 2005.

Kafali, C. and Grigoriu, M., A Probabilistic Model for Optimal Maintenance Strategy for Deteriorating Systems using Reliability Constraints, ICCCB-E-XI: The Eleventh International Conference on Computing in Civil and Building Engineering, Montreal, Canada, June 14-16, 2006.

Kafali, C. and Grigoriu, M., Rehabilitation Decision Analysis, ICOSSAR 2005: The Ninth International Conference on Structural Safety and Reliability, Rome, Italy, June 19-22, 2005.

Kafali, C. and Grigoriu, M., Rehabilitation Decision Analysis Toolbox, SEAOC 2005: Structural Engineers Association of California, San Diego, California, September 28 - October 1, 2005.

Kafali, C., Mo, E. and Grigoriu, M., Seismic Fragility of Linear Systems Subjected to Non-Gaussian Ground Acceleration Processes, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Kong D, Schiff A, Reinhorn A.M. and Filiatrault A.R., Seismic Performance of Porcelain Station Post Insulators, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1616.

Lee, G.C. and Liang, Z., Constant Acceleration of Superstructures: A Concept of Seismic Isolation, 37th Joint UJNR Panel Meeting on Wind and Seismic Effects, Osaka, Japan, May 15-18, 2005.

Lee, G.C., Tong, M. and Wang, H., Seismic Retrofit of Non-ductile Reinforced Concrete Hospital Buildings in the Eastern US, 2005 Annual Meeting, Asian-Pacific Network of Centers for Earthquake Engineering Research, Jeju, South Korea, November 10-13, 2005.

Liang, Z. and Lee, G.C., Force Controlled Testing of Bi-linear Structures, First International Conference on Advanced in Experimental Structural Engineering (AESE 2005), Nagoya, Japan, July 19-21, 2005.

Lopez-Garcia, D., and Bruneau, M., Seismic Behavior of Intermediate Beams in Steel Plate Shear Walls, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Malushte, S. and Whittaker, A S., Survey of Past Base Isolation Applications in Nuclear Power Plants and Challenges to Industry/Regulatory Acceptance, Transactions, 18th International Conference on Structural Mechanics in Reactor Technology (SMiRT 18-K10-7), Beijing, China, August 2005.

Maragakis, E., Corbin, R., Goodwin, E. and Itani, A, Experimental Evaluation of the Seismic Performance of Welded and Threaded Hospital Piping Systems, Sixth European Conference on Structural Dynamics, Paris, France, September 4-7, 2005.

- Mosqueda, G., Retamales, R., Filiatrault, A.R. and Reinhorn, A.M., Seismic Behavior of Nonstructural Partition Walls Subjected to Full-scale Floor Motions, 2005 Annual Meeting, Asian-Pacific Network of Centers for Earthquake Engineering Research, Jeju, South Korea, November 10-13, 2005.
- Mosqueda, G., Retamales, R., Filiatrault, A.R. and Reinhorn, A.M., Experimental Seismic Fragility of Nonstructural Components using Full-scale Floor Excitations, ASCE 2006 Structures Congress, St. Louis, Missouri, May 21-22, 2006.
- Mosqueda, G., Retamales, R., Filiatrault, A.R. and Reinhorn, A.M., Experimental Study on the Seismic Behavior of Nonstructural Components Subjected to Full-Scale Floor Motions, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.
- Pollino, M. and Bruneau, M., Controlled Rocking Approach for the Seismic Resistance of Structures, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.
- Reinhorn A.M., Kusumastuti, D.K., and Rutenberg A., Seismic Response of Irregular Frame Structures near Collapse: Experimental and Analytical Investigation, Fourth European Workshop on Irregular Structures, Thessaloniki, Greece, August 27-28, 2005.
- Reinhorn A.M., Kusumastuti, D.K., and Rutenberg A., Seismic Behavior of a Two-Tower Setback Structure: Experimental & Analytical Study, First European Conference on Earthquake Engineering and Seismology (1st ECEES), Geneva, Switzerland, September 3-8, 2006.
- Reinhorn A.M., Viti, S. and Cimellaro, G.P, Retrofit of Structures: Strength Reduction with Damping Enhancement, 37th Joint UJNR Panel Meeting on Wind and Seismic Effects, Tsukuba, Japan, May 16-21 2005.
- Roh, H.S. and Reinhorn, A.M., Nonlinear Behavior of Rocking Beam-columns with Confined Ends, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1627.
- Roh, H.S. and Reinhorn, A.M., Weakening and Damping Structure Using Rocking Columns and Energy Dissipating Devices, MCEER Annual Meeting, Sacramento, California, February 25-26, 2005.
- Schachter, M and Reinhorn A.M., On the Importance of 3D Analysis for Zipper Frames Structures, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1621.
- Shao, X., Reinhorn A.M. and Sivaselvan, M., Real Time Dynamic Hybrid Testing Using Force-Based Substructuring, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper 1108.
- Tong, M. and Qi, J., Building Evacuation for Hazard Events, 2005 US-PRC Protocol Workshop, Chongqing, China, November 13-15, 2005.
- Vargas, R. and Bruneau, M., Seismic Design of Multi-Story Buildings with Metallic Structural Fuses, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Wanitkorkul, A., Halldorsson, B., Papageorgiou, A. and Filiatrault, A., Application of the Specific Barrier Model to the Seismic Fragility Assessment of Critical Facilities, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Xu, X., Dargush, G.F. and Singh, T., Cubic Control Nonlinear Structural Control with Emphasis on Nonstructural Performance, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006, Paper NCEE-0664.

Books, Book Chapters and Technical Reports

Alesch, D.J., Arendt, L.A. and Petak, W.J., MCEER Technical Report: Seismic Safety in California Hospitals: Assessing an Attempt to Accelerate the Replacement or Seismic Retrofit of Older Hospital Facilities, MCEER-05-0006, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 104 p.

Astrella, M. and Whittaker, A.S., MCEER Technical Report: The Performance Based Design Paradigm, MCEER-05-0011, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 158 p.

Badillo, H., Whittaker, A.S., Reinhorn, A.M. and Cimmarello, G.P., MCEER Technical Report: Seismic Fragility of Suspended Ceiling Systems, MCEER-06-0001, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2006, 252 p.

Chu, S.Y., Soong, T.T. and Reinhorn, A.M., Book: Active, Hybrid, Semi-Active Structural Control - A Design and Implementation Handbook, ISBN-13 978-0-470-01352-6, John Wiley and Sons, 2005.

Gulec, K., Whittaker, A.S. and Reinhorn, A.M., CSEE Technical Report: Seismic Qualification of Suspended Ceiling Systems, Part 8, UB CSEE/SEESL-2005-6, Department of Civil, Structural, and Environmental Engineering, University at Buffalo, July 2005.

Gulec, K., Whittaker, A.S. and Reinhorn, A.M., CSEE Technical Report: Seismic Qualification of Suspended Ceiling Systems and Ceiling System/Sprinkler Assemblies, Part 9, UB CSEE/SEESL-2006-2, Department of Civil, Structural, and Environmental Engineering, University at Buffalo, March 2006.

Kesner, K. and Billington, S., MCEER Technical Report: Development of Seismic Strengthening and Retrofit Strategies for Critical Facilities Using Engineered Cementitious Composite Materials, MCEER-05-0007, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 228 p.

Kusumastuti, D., Reinhorn, A.M. and Rutenberg, A., MCEER Technical Report: A Versatile Experimentation Model for Study of Structures Near Collapse Applied to Seismic Evaluation of Irregular Structures, MCEER-05-0002, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 280 p.

Reinhorn, A. M., et al., Report: IDARC2D Version 6.0 - A Computer Program for the Inelastic Damage Analysis of Reinforced Concrete Buildings, July, 2005, <http://civil.eng.buffalo.edu/idarc2d50>.

Tsopelas, P., Roussis, P. Constantinou, M., Buchanan, R. and Reinhorn, A.M., MCEER Technical Report: 3D-BASIS-ME-MB: Computer Program for Nonlinear Dynamic Analysis of Seismically Isolated Structures, MCEER-05-0009, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 210 p.

Vian, D. and Bruneau, M., MCEER Technical Report: Steel Plate Shear Walls for Seismic Design and Retrofit of Building Structures, MCEER-05-0010, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 360 p.

von Winterfeldt, D., A Risk and Decision Analysis Framework to Protect New Orleans Against Another Katrina, On Risk and Disasters, R. J. Daniels, D.F. Kette, and H. Kunreuther (eds.), Pittsburg, PA: University of Pennsylvania Press, 2006, pp. 35-49.

von Winterfeldt, D. and Chen, W., Report: Seismic Rehabilitation of Tuck Under Apartment Buildings: A Decision Analysis Framework, School of Policy, Planning, and Development, University of Southern California, 2005.

Wanitkorkul, A. and Filiatrault, A., MCEER Technical Report: Simulation of Strong Ground Motions for Seismic Fragility Evaluation of Nonstructural Components in Hospitals, MCEER-05-0005, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 170 p.

Emergency Response and Recovery

Journal Articles

Adams, B.J., Mansouri, B. and Huyck, C.K., Streamlining Post-Earthquake Data Collection and Damage Assessment in Bam, Using VIEWS, Earthquake Spectra Special Edition on the Bam Earthquake, Vol. 21, No. S1, EERI: San Francisco, December 2005, pp. S213-S218.

Eguchi, R.T. and Mansouri, B., Use of Remote Sensing Technologies for Building Damage Assessment After the 2003 Bam, Iran, Earthquake - Preface to Remote Sensing Papers, Earthquake Spectra Special Edition on the Bam Earthquake, Vol. 21, No. S1, EERI, San Francisco, December 2005, pp. S207-S212.

Gusella, L., Adams, B.J., Bitelli, G., Huyck, C.K. and Mognol, A., Object Oriented Image Understanding and Post-Earthquake Damage Assessment for Bam, Iran, Earthquake Spectra Special Edition on the Bam Earthquake, Vol. 21, No. S1, EERI, San Francisco, December 2005, pp. S225-S238.

Huyck, C.K., Adams, B.J., Cho, S. and Eguchi, R.T., Towards Rapid City-Wide Damage Mapping Using Neighborhood Edge Dissimilarities in Very High Resolution Optical Satellite Imagery - Application to the December 26, 2003 Bam, Iran Earthquake, Earthquake Spectra Special Edition on the Bam Earthquake, Vol. 21, No. S1, EERI, San Francisco, December 2005, pp. S255-S266.

Mansouri, B., Shinozuka, M., Huyck, C.K. and Houshmand, B., Earthquake-Induced Change Detection in Bam, Iran, by Complex Analysis Using Envisat ASAR Data, Earthquake Spectra Special Edition on the Bam Earthquake, Vol. 21, No. S1, EERI, San Francisco, December 2005, pp. S275-S284.

Workshop and Conference Proceedings

Adams, B.J., Wabnitz, C., Ghosh, S., Alder, J., Chuenpagdee, R., Chang, S.E., Berke, P. and Rees, W., Application of Landsat 5 and High-Resolution Optical Satellite Imagery to Investigate Urban Tsunami Damage, Third International Workshop on Remote Sensing for Post-Disaster Response, Chiba, Japan, September 12-13, 2005, on CD-ROM.

Chang, S.E. and Coelho, S., Performance Objectives for Seismic Mitigation of Utility Lifelines, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Chung, H., Huyck, C.K., Cho, S., Mio, M.Z, Eguchi, R.T., Shinozuka, M. and Mehrotra, S., A Centralized Web-Based Loss Estimation and Transportation Simulation Platform for Disaster Response, ICOSSAR 2005: The Ninth International Conference on Structural Safety and Reliability, Rome, Italy, June 19-22, 2005.

Chung, H., Park, C., Xie, Q., Chou, P.H. and Shinozuka, M., DuraNode: Wireless Network Sensor for Structural Safety Monitoring, SPIE Nondestructive Detection and Measurement for Homeland Security III Conference, Vol. 5769, San Diego, California, March 7-9, 2005.

Chung, H-C., Sarabandi, P. and Adams, B., Sensing for Building Inventory Updates in Disaster Management, Smart Structures and Materials and NDE for Health Monitoring and Diagnostics Conference, San Diego, California, February 26 - March 2, 2006.

Eguchi, R.T., Adams, B.J., and Huyck, C.K., Post-Disaster Bridge Damage Assessment Using Remotely-Sensed Images, Caltrans Bridge Research Conference 2005, Sacramento, California, October 31-November 1, 2005.

Eguchi, R.T., Huyck, C.K., and Adams, B.J., An Urban Damage Scale Based on Satellite and Airborne Imagery, Third International Workshop on Remote Sensing for Post-Disaster Response, Chiba, Japan, September 12-13, 2005, on CD-ROM.

Gusella, L., Huyck, C.K., Adams, B.J., Cho, S. and Chung, H., Damage Assessment with Very-High Resolution Optical Imagery Following the December 26, 2003, Bam, Iran Earthquake, Third International Workshop on Remote Sensing for Post-Disaster Response, Chiba, Japan, September 12-13, 2005, on CD-ROM.

Lembo, A.J., IMS Strategies for Natural Disasters: An Example from the Indian Ocean Tsunami, 13th Annual GIS/SIG Meeting, Rochester, New York, April 2005.

Lembo, A.J., IMS Strategies for Natural Disasters: An Example from the Indian Ocean Tsunami and Hurricane Katrina, 2005 New York State Conference on Geographic Information Systems, Rochester, New York, 2005.

Lembo, A.J., Bonneau, A. and O'Rourke, T.D., Integrative Technologies in Support of GIS-Based Post-Earthquake Response, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Mansouri, B. and Shinozuka, M., SAR Image Calibration by Urban Texture: Application to the BAM Earthquake using Envisat Satellite ASAR Data, Third International Workshop on Remote Sensing for Post-Disaster Response, Chiba, Japan, September 12-13, 2005, on CD-ROM.

Sarabandi, P., Adams, B.J., Kiremidjian, A.S. and Eguchi, R.T., Infrastructure Inventory Compilation Using Single High Resolution Satellite Images, Third International Workshop on Remote Sensing for Post-Disaster Response, Chiba, Japan, September 12-13, 2005, on CD-ROM.

Womble, J.A., Adams, B.J. and Mehta, K., Damage Surveys Using High-Resolution Satellite Images, Tenth America's Conference on Wind Engineering, Baton Rouge, Louisiana, June 2005.

Books, Book Chapters and Technical Reports

Adams, B. (compiler), Proceedings of the International Workshop Series on Remote Sensing, MCEER-05-SP03, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, on CD-ROM.

Adams, B.J. and Huyck, C.K., The Emerging Role of Remote Sensing Technology in Emergency Management, Infrastructure Risk Management Processes: Natural, Accidental, and Deliberate Hazards, In Taylor, C. and VanMarcke, E., ASCE: Reston, 2005.

Chiroiu, L., Adams, B.J. and Saito, K., Advanced Techniques for Modeling, Response and Recovery, Assessing and Managing Earthquake Risk, In Oliveira, C.S., Roca, A and Goula, X, Kluwer: London, 2005.

Mitigation of Infrastructure Against Multi-Hazard Extreme Events

Journal Articles

Sternberg, E. and Lee, G.C., Meeting the Challenge of Facility Protection for Homeland Security, Journal of Homeland Security and Emergency Management, Vol. 3, No.1, February 2006, Article 11.

Workshop and Conference Proceedings

Bruneau, M., Lopez-Garcia, D. and Fujikura, S., Multihazard-Resistant Highway Bridge Bent, ASCE 2006 Structures Congress, St. Louis, Missouri, May 21-22, 2006.

Liu, S. C. and Lee, G.C, Multi-hazard Mitigation: A New Frontier in Earthquake Engineering, ISSS'2005, Nanjing, China, November 20-22, 2005.

Books, Book Chapters and Technical Reports

Arendt, L. and Hess, D., MCEER Report: Engineering and Organizational Issues Before, During and After Hurricane Katrina, Hospital Decision Making in the Wake of Katrina: The Case of New Orleans, MCEER-06-SP01, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, January 2006, 84 p.

Womble, J.A., Ghosh, S., Friedland, C.J. and Adams, B.J., MCEER Report: Engineering and Organizational Issues Before, During and After Hurricane Katrina, Advanced Damage Detection: Integrating Remote-Sensing Images with VIEWS, MCEER-06-SP02, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, March 2006.

Education

Journal Articles

Agrawal, A.K. and Xu, Z., Ground Motion Pulse-based Active control of a Linear Base-isolated Benchmark Building, Journal of Structural Control and Health Monitoring, Vol. 13, No. 203, March-June 2006, pp. 792-808.

Gao Y., Yang, G., Spencer Jr., B.F. and Lee, G.C., Java-Powered Virtual Laboratories for Earthquake Engineering Education, Journal Computer Applications in Engineering Education., Vol. 13, No. 3, 2005, pp. 200-212.

Xu, Z., Agrawal, A.K. and Yang, J., Semi-active and Passive Control of the Phase I Linear Base-Isolated Benchmark Building Model, Journal of Structural Control and Health Monitoring, Vol. 13, No. 2-3, March-June 2006, pp. 626-648.

Workshop and Conference Proceedings

Berman, J.W. and Pollino, M, The MCEER Student Leadership Council and Earthquake Engineering Education Activities, Eighth National Conference on Earthquake Engineering (8NCEE), San Francisco, California, April 18-21, 2006.

Books, Book Chapters and Technical Reports

Kraemer, P., Nelson, L. and Menke, S. (compilers), Proceedings of the 2004 Earthquake Engineering Symposium for Young Researchers, MCEER-05-SP02, Multidisciplinary Center for Earthquake Engineering Research, University at Buffalo, 2005, 300 p.