Based on PEER Funded Research

PEER’s mission is to develop, validate, and disseminate performance-based engineering technologies for buildings and infrastructure networks subjected to earthquakes and other natural hazards, with the goal of achieving economic and community resilience.

Presentations & Posters

Hong Kie Thio

John Wallace
C. Motter, J. Wallace. “Cyclic Testing of Reinforced Concrete Structural Walls with Ordinary Boundary Element Detailing”


J. Wallace, S. Kim, C. Segura. “Shear Design of RC Structural Walls”


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S. Mahin, Y. Bozorgnia, G. Kang, E. Miranda, A. Whittaker. “Vitelmo V. Bertero - A Researcher, Educator and Mentor of The Highest Caliber”

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I. Williams, C. Arieta, C.P. Ostertag. “Experimental Response of a Hyfrc Boundary Element Under Pure Compression”

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**Norman Abrahamson**
B. Shao, S. Mahin, N. Abrahamson. “Understanding and Design of Seismically Isolated Structure Using Hardening of Bearing”

**C. A. Artea, N. Abrahamson.** “Conditional Scenario Spectra Methodology to Grade Ground Motion Modification Procedures” (POSTER)

**M. Stirling, F. D. Pasqua, C. Madugo, N. Abrahamson.** “Precarious Rock & Design Ground Motions from Research to Industry Application”

**O. Ktenidou, N. Abrahamson, W. Silva, R. Darragh.** “Estimation of Kappa (κ) For Rock Sites in The NGA-East Database and Implications on Design Motions”

**S. Mazzoni, N. Abrahamson.** “Evaluation of Ground-Motion Selection & Modification Methods Using Inelastic-Response Hazard Curves” (POSTER)


**Domniki Asimaki**

**Jack Baker**

**A. Gupta, J. Baker.** “Sensitivity of Induced Seismicity Risk to Source Characterization, Ground Motion Prediction, and Exposure”

**G. Cremen, A. Gupta, J. W. Baker.** “Evaluation of Ground Motion Intensities from Induced Earthquakes Using ‘Did You Feel It?’ Data?”

**Andre Barbosa**
H. Yu, A. Levine, T. Van Oss, M. Mohamed, B. Moaveni, A. Barbosa, A. Stavridis. “System Identification and Modeling of an 18-Story Building in Nepal Using Post-Earthquake Ambient Vibration Data”

**L. Miranda, A. Barbosa, J. Serra, L. Caldeira.** “Parameter Sensitivity Analysis of The Manzari-Dafalias Model for Modelling the Cyclic Response of a Sand”


**Tracy Becker**
A. Crowder, T. Becker. “Increased Substructure Flexibility on Column-Top Isolation Systems”

**Y. Bao, T. Becker, H. Hamaguchi.** “Failure of Double Friction Pendulum Bearing Under Pulse Excitations”

**Jeffrey Berman**
A. Sen, C. Roeder, J. Berman, D. Lehman, K. Tsai, C. Li, A. Wu. “Seismic Performance of Chevron Braced Frames with Yielding Beams” (POSTER)

**N. Marafi, J. Berman, M. Eberhard.** “New Intensity Measure That Accounts for The Effects of Spectra Acceleration, Duration, And Spectral Shape”

**Yoosuf Bozorgnia**
M. De Bortoli, F. Zareian, Y. Bozorgnia. “Magnitude and Distance Scaling of Engineering Demand Parameters of Moment-Resisting Frame Structures”

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**Scott Brandenberg**

**S. Brandenberg, J. Stewart.** “Development of NGA-Subduction Database”

**Shakhzod Takhirov**

**Jose Restrepo**
J. Conte, T. Hutchinson, G. Mosqueda, E. Luco, J. Restrepo, B. Shing, L. Van Den Elide. “Natural Hazard Engineering Research Infrastructure at UC San Diego Large High Performance Outdoor Shake Table Facility”

**Charles Roeder**
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**Luis Rojas**

**Andreas Schellenberg**
S. You, A. Schellenberg. “Test Rehearsal Methods for Quasi Static and Real-Time Hybrid Simulations”

**Matthew Schoettler**
G. Guerini, J. Restrepo, M. Schoettler. “Self-Centering, Low-Damage Precast Composite Steel-Concrete Columns for Accelerate Bridge Construction I Seismic Regions: Shake-Table Tests a Numerical Modeling”

**Benshun Shao**
A. Schellenberg, B. Shao, S. Mahin. “Development of A Large-Scale 6df Hybrid Shake Table and Application to Testing Response Modification Devices for Tall Buildings”

**Nicholas Sitar**
B. Shao, S. Mahin. “Understanding and Design of Seismically Isolated Structure Using Hardening of Bearing”

**Barbara Simpson**
B. Schellenberg. “Test Rehearsal Methods for Quasi Static and Real-Time Hybrid Simulations”

**Jonathan Stewart**

**S. Brandenberg, J. Stewart, G. Mylonakis.** “Seismic Earth Pressure Exerted on Rigid Walls by Vertically Heterogeneous Soil Using Winkler Method”

**S. J. Brandenberg, E. Agapaki, G. Mylonakis, J. P. Stewart.** “Seismic Earth Pressures Exerted on Rigid Walls by Vertically Heterogeneous Soil Using Winkler Method”

**S. Takhirov, E. Fujisaki, L. Kempner, M. Riley.** “Development of Multilevel Seismic Responses of Base Isolated Tall Building Using Triple Friction Pendulum Bearing”

**S. Takhirov, N. Sitar.** “Influence of The Depth of Embedment on Seismic Earth Pressures on Basement Walls”

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**H. Thio, Y. Wei, G. Chock.** “Development of Offshore Probabilistic Tsunami Exceedance Amplitudes for ASCE 7-16”

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Shakhdor Takhirov
S. Takhirov, A. Gilani, B. Quigley, L. Myagkova. “Assessment of Seismic Vulnerability of Historic Buildings Based on Their Current Condition Captured by Laser Scans and Retrofit Strategies” (POSTER)

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B. Terranova, S. Epackachi, A. Whittaker. “Effect of Out-Of-Plane Loading on In-Plane Response of SC Wall Piers”
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