

## PEER REPORTS CATALOG

- PEER 2022/04** McCallen D., Petrone F., Esmacilzadeh Seylabi, E., Pitarka A., Abrahamson N., Elfass S. (2022). The PEER International Pacific Rim Forum 2021: Regional-Scale Simulation of Earthquake Ground Motions and Infrastructure Response for Performance-Based Earthquake Engineering, *PEER Report No. 2022/04*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA
- PEER 2022/03** Aghagholizadeh M., Makris N. (2022). Moment Resisting Frames Coupled with Rocking Walls Subjected to Earthquakes, *PEER Report No. 2022/03*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA
- PEER 2022/02** Andrade J.A. (2022). Micro-Inspired Continuum Modeling Using Virtual Experiments, *PEER Report No. 2022/02*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2022/01** Zhou J., Kunnath S.K. (2022). Capacity Limit States for Nonductile Bridge Columns, *PEER Report No. 2022/02*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/11** Mosalam K., Kasalanati A. (2021). PEER Annual Report 2020-2021, *PEER Report No. 2021/11*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/10** Chang M., Stanton J., Eberhard M. (2021). Seismic performance of column-to-drilled-shaft connections in reinforced concrete bridges, *PEER Report No. 2021/10*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/09** Silva-Lopez R.I., Baker J.W. (2021). Use of corridors for decision making in transportation networks in seismic regions, *PEER Report No. 2021/09*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/08** Amiri S.M.A., Moustafa M.A., Sanders D.H. (2021). Seismic design and detailing of bridge columns to account for ground-motion duration, *PEER Report No. 2021/07*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/07** Orang M.J., Motamed R. (2021). Shake table tests on a shallow foundation on liquefiable soils supported on helical piles, *PEER Report No. 2021/06*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/06** Terzic V., Villanueva P.K., Saldana D., Yoo D.Y. (2021). Novel framework for probabilistic evaluation of functional recovery of building systems, *PEER Report No. 2021/08*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/05** Soga K., Wu R., Zhao B., Wang C. (2021). City-scale multi-infrastructure network resilience simulation tool, *PEER Report No. 2021/05*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/04** Mauer B.W., Mertan G., Baird A.J. (2021). Toward multi-tier modeling of liquefaction impacts on transportation infrastructure, *PEER Report No. 2021/04*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/03** Hutabarat D., Bray J.D. (2021). Effective stress analysis of liquefaction sites and evaluation of sediment ejecta potential, *PEER Report No. 2021/03*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/02** Chen C., Arduino P. (2021). Implementation, verification, and validation of the PM4Sand Model in OpenSees, *PEER Report No. 2021/02*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2021/01** Eslami M., Mosalam K.M., Agrawal A., Kasalanati A. (2021) Fire-induced structural collapse on Pier 45 at Fisherman's Wharf, San Francisco, California, May 23, 2020, *PEER Report No. 2021/02*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/24** Reis E. (2020). Seismic performance of a single-family wood-frame houses: comparing analytical and industry catastrophe models, *PEER Report No. 2020/24*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/23** Vail K., Lizundia B., Welch D.P., Reis E. (2020). Earthquake damage workshop, *PEER Report No. 2020/23*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/22** Welch D.P., Deierlein G.G. (2020). Technical background report for structural analysis and performance assessment, *PEER Report No. 2020/22*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2020/20** Cobeen K., Mahdavi V., Hutchinson T.C., Schiller B., Welch D., Kang G., Bozorgnia Y. (2020). Large-component seismic testing for existing and retrofitted single-family wood-frame dwellings, *PEER Report No. 2020/20*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/19** Schiller B., Hutchinson T.C., Cobeen K. (2020d). Cripple wall small-component test program: Comparisons, *PEER Report No. 2020/19*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.

- PEER 2020/18** Schiller B., Hutchinson T.C., Cobeen K. (2020c). Cripple wall small-component test program: Wet specimens II, *PEER Report No. 2020/18*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2020/15** Zareian F., Lanning J. (2020). Development of testing protocol for cripple wall components, *PEER Report No. 2020/15*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/14** Mazzoni S., Gregor N., Al Atik L., Bozorgnia Y., Welch D.P., Deierlein G.G. (2020). Probabilistic seismic hazard analysis and selecting and scaling of ground motion records, *PEER Report No. 2020/14*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/13** Reis E. (2020). Development of index buildings, *PEER Report No. 2020/13*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/12** Reis E., Bozorgnia Y., Burton H., Cobeen K., Deierlein G.D., Hutchinson T., Kang G.S., Lizundia B., Mazzoni S., Rabinovici S., Schiller B., Welch D.P., Zareian F. (2020). Project technical summary, *PEER Report No. 2020/12*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/11** Wu Y., Günay S., Mosalam K.M. (2020). Hybrid simulations for the seismic evaluation of resilient bridge systems, *PEER Report No. 2020/12*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/10** Nema A., Restrepo J.I. (2020). Low seismic damage columns for accelerated bridge construction, *PEER Report No. 2020/10*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2020/08** Mosalam K.M., Kasalanati A. (2020). PEER activities report 2018–2020, *PEER Report No. 2020/08*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/07** Gregor N., Addo K., Al Atik L., Boore D.M., Bozorgnia Y., Campbell K.W., Choi B.S.-J., Gülerce Z., Hassani B., Kishida T., Kuehn N., Midorikawa S., Mazzoni S., Parker G.A., Si H., Stewart J.P., Youngs R.R. (2020). Comparison of NGA-Sub ground-motion models, *PEER Report No. 2020/07*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2020/05** Abrahamson N.A., Bhasin S. (2020). Conditional ground-motion model for peak ground velocity for active crustal regions, *PEER Report No. 2020/05*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2020/04** Kuehn N., Bozorgnia Y., Campbell, K.W., Gregor N. (2020). Partially non-ergodic ground-motion model for subduction regions using the NGA-Subduction database, *PEER Report No. 2020/04*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2019/08** Mojidra R., Ryan K.L. (2019). Influence of vertical ground motion on bridges isolated with spherical sliding bearings, *PEER Report No. 2019/08*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2018/05** Kottke A., Abrahamson N.A., Boore D.M., Bozorgnia Y., Goulet C., Hollenback J., Kishida T., Der Kiureghian A., Ktenidou O., Kuehn N., Rathje E.M., Silva W.J., Thompson E., Wang X. (2018). Selection of random vibration procedures for the NGA-East project, *PEER Report No. 2018/05*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2017/12** Simpson B.G., Mahin S.A., Lai J.-W. (2017). Experimental investigation of the behavior of vintage and retrofit concentrically braced steel frames under cyclic loading, *PEER Report No. 2017/12*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2017/11** Shao B., Schellenberg A.H., Schoettler M.J., Mahin S.A. (2017). Preliminary studies on the dynamic response of a seismically isolated Prototype Gen-IV Sodium-Cooled Fast Reactor (PGSFR), *PEER Report No. 2017/11*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2017/06** Hamburger R., Moehle J.P. (Eds.), Baker J., Bray J. Crouse C.B., Deierlein G.G., Hooper J., Lew M., Maffei J., Mahin S.A., Malley J., Naeim F., Stewart J.P., Wallace J. (2017). Guidelines for performance-based seismic design of tall buildings, Version 2.02. TBI Working Group, *PEER Report No. 2017/06*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2017/05** Hashash Y.M.A., Harmon J.A., Ilhan O., Parker G.A., Stewart J.P. (2017). Recommendations for ergodic nonlinear site amplification in Central and Eastern North America, *PEER Report No. 2017/05*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2016/10** Ling X., Mosalam K.M. (2016). Performance-based robust nonlinear seismic analysis with application to reinforced concrete bridge systems, *PEER Report No. 2016/10*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2016/08** Cimellaro G.P., Zamani-Noori A., Kamouh O., Terzic V., Mahin S.A. (2016). Resilience of critical structures, infrastructure, and communities, *PEER Report No. 2016/08*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
- PEER 2016/07** Drazin P., Govindjee S. (2016). Hybrid simulation theory for a classical nonlinear dynamical system, *PEER Report No. 2016/07*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2015/13** Guerrini G., Restrepo J.I., Vervelidis A., Massari M. (2015). Self-centering precast concrete dual-steel-shell columns for accelerated bridge construction: seismic performance, analysis, and design, *PEER Report No. 2015/13*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2015/10** Moustafa M.A., Mosalam K.M. (2015). Structural behavior of column-bent cap beam-box girder systems in reinforced concrete bridges subjected to gravity and seismic loads. Part II: Hybrid simulation and post-test analysis, *PEER Report No. 2015/10*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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- PEER 2014/13** Kang G.D., Mahin S.A. (Eds) (2014). PEER preliminary notes and observations on the August 24, 2014, South Napa earthquake *PEER Report No. 2014/13*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.

- PEER 2014/12** Campbell K.W., Hashash Y.M.A., Kim B., Kottke A.R., Rathje E.M., Silva W.J., Stewart J.P. (2014). Reference-rock site conditions for Central and Eastern North America: Part II – Attenuation ( $\kappa$ ) definition *PEER Report No. 2014/12*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA.
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