

Contents

Research papers

- Fragility curves for toppling of railroad locomotives** 1623
Bruce F Maison
- Near-fault seismic risk assessment of simply supported bridges** 1645
Jian Zhong, Linwei Jiang, Yutao Pang and Wancheng Yuan
- Post-earthquake hospital functionality evaluation: The case of Kumamoto Earthquake 2016** 1670
Nebil Achour and Masakatsu Miyajima
- G-DIF: A geospatial data integration framework to rapidly estimate post-earthquake damage** 1695
Sabine Loos, David Lallemand, Jack Baker, Jamie McCaughey, Sang-Ho Yun, Nama Budhathoki, Feroz Khan and Ritika Singh
- An efficient Bayesian framework for updating PAGER loss estimates** 1719
Hae Young Noh, Kishor S Jaiswal, Davis Engler and David J Wald
- Post-earthquake cordons and their implications** 1743
Greg Underwood, Caroline Orchiston and Shakti R Shrestha
- The promise of implementing machine learning in earthquake engineering: A state-of-the-art review** 1769
Yazhou Xie, Majid Ebad Sichani, Jamie E Padgett and Reginald DesRoches
- The role of risk measures in making seismic upgrading decisions** 1802
Lukas Bodenmann, Panagiotis Galanis, Marco Broccardo and Božidar Stojadinović
- Performance of flexible frame building with horizontal and 3D seismic isolation when subjected to 3D ground shaking** 1823
Walaa Eltahawy and Keri L Ryan
- Seismic design loads of cylindrical liquid tanks with insufficient freeboard** 1844
Mohammad Ali Goudarzi, Mojtaba Moosapoor and Mohammad Reza Nikoomanesh
- Evaluating second-order effects in rigid wall-flexible roof diaphragm buildings** 1864
John Lawson and Maria Koliou
- Large-scale experimental investigation of a low-cost PVC ‘sand-wich’ (PVC-s) seismic isolation for developing countries** 1886
Anastasios Tsiavos, Anastasios Sextos, Andreas Stavridis, Matt Dietz, Luiza Dihoru and Nicholas A. Alexander
- Assessing the value of removing earthquake-hazard-related epistemic uncertainties, exemplified using average annual loss in California** 1912
Edward H Field, Kevin R Milner and Keith A Porter
- Fragility curve modifiers for reinforced concrete dual buildings, including nonlinear site effects and soil–structure interaction** 1930
Christos Petridis and Dimitris Pitilakis

| | |
|--|-------------|
| Intensity-based demand and capacity factor design: A visual format for safety checking | 1952 |
| <i>Fatemeh Jalayer, Hossein Ebrahimian and Andrea Miano</i> | |
| Multi-level conditional spectrum-based record selection for IDA | 1976 |
| <i>Mohsen Kohrangi, Dimitrios Vamvatsikos and Paolo Bazzurro</i> | |
| Magnitude thresholds and spatial footprints of damage from induced earthquakes | 1995 |
| <i>Bridger W Baird, Abbie B Liel and Robert E Chase</i> | |
| Household adjustment to seismicity in Oklahoma | 2019 |
| <i>Alex Greer, Hao-Che Wu and Haley Murphy</i> | |
| Seismic characterization of steel special moment frames subjected to megathrust earthquakes | 2033 |
| <i>Miguel Medalla, Diego Lopez-Garcia and Farzin Zareian</i> | |
| Damping modification factors for the design of seismic isolation systems in Peru | 2058 |
| <i>Victor I. Fernandez-Davila and Arnold R. Mendo</i> | |
| The effect of spectral shape on damping modification factors | 2086 |
| <i>Sebastián Miranda, Eduardo Miranda and Juan Carlos de la Llera</i> | |
| Correlation of spectral acceleration values of vertical and horizontal ground motion pairs | 2112 |
| <i>Mohsen Kohrangi, Athanasios N Papadopoulos, Paolo Bazzurro and Dimitrios Vamvatsikos</i> | |
| Ground motion prediction equation for crustal earthquakes in Taiwan | 2129 |
| <i>Van-Bang Phung, Chin Hsiung Loh, Shu Hsien Chao, Brian SJ Chiou and Bor-Shouh Huang</i> | |

Opinion Paper

| | |
|--|-------------|
| Incorporating societal expectations into seismic performance objectives in building codes | 2165 |
| <i>Alexa Tanner, Stephanie E Chang and Kenneth J Elwood</i> | |

Data Paper

| | |
|--|-------------|
| INSSEPT: An open-source relational database of seismic performance estimation to aid with early design of buildings | 2177 |
| <i>Mohsen Zaker Esteghamati, Jeonghyun Lee, Matthew Musetich and Madeleine M Flint</i> | |

*Cover Image: Figure 6, from article "G-DIF: A geospatial data integration framework to rapidly estimate postearthquake damage" by Sabine Loos, David Lallemand, Jack Baker, Jamie McCaughey, Sang-Ho Yun, Nama Budhathoki, Feroz Khan, and Ritika Singh