

Spotlight on Structures

Research Journal of The Institution of Structural Engineers

In this section we shine a spotlight on papers recently published in *Structures* – the Research Journal of The Institution of Structural Engineers.

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Articles in press

The following articles have recently been made available online:

Seismic Fragility Assessment of Asymmetric Structures Supported on TCFP Bearings Subjected to Near-field Earthquakes

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<https://doi.org/10.1016/j.istruc.2017.11.004>

Sustainability of Cold-formed Steel Portal Frames in Developing Countries in the Context of Life Cycle Assessment and Life Cycle Costs

Ross P.D. Johnston^{a,b}, Teresa McGrath^b, Sree Nanukuttan^b, James B.P. Lim^c, Marios Soutsos^b, Mei Chee Chiang^d, Rehan Masood^e and Mohammad Afjalur Rahman^c

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<https://doi.org/10.1016/j.istruc.2017.11.003>

Out-of-plane Strength of Existing Two-way Spanning Solid and Cavity Unreinforced Masonry Walls

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<https://doi.org/10.1016/j.istruc.2017.11.002>

Shake Table Testing of Concentrically Braced Steel Structures with Realistic Connection Details Subjected to Earthquakes

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<https://doi.org/10.1016/j.istruc.2017.12.003>

Modal Mass of Floors Supported by Beams

László P. Kollár and Zsuzsa B. Pap, Dept of Structural Engineering, Budapest University of Technology and Economics, Budapest, Hungary

<https://doi.org/10.1016/j.istruc.2017.12.002>

Effects of Size and Shape on Elastic Constants of Graphene Sheet

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<https://doi.org/10.1016/j.istruc.2017.12.005>

Confinement Effect of Geo-grid and Conventional Shear Reinforcement Bars Subjected to Corrosion

Hakan Yalciner, Atila Kumbasaroglu, Ibrahim Ertuc and Ahmet İhsan Turan, Department of Civil Engineering, Erzincan University, Turkey

<https://doi.org/10.1016/j.istruc.2017.12.004>

Approximations of elastic lateral displacement profiles for walls with openings

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<https://doi.org/10.1016/j.istruc.2017.12.007>

An Investigation of the Effect of Semi-rigid Connections on Sudden Column Removal in Steel Frames

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<https://doi.org/10.1016/j.istruc.2017.12.001>

Effects in Conventional Nonlinear Static Analysis: Evaluation of Control Node Position

Giuseppina Uva, Francesco Porco, Andrea Fiore and Sergio Ruggieri, DICATECH, Politechnical University of Bari, Italy

<https://doi.org/10.1016/j.istruc.2017.12.006>

Design and Experimental Validation of a Re-centring Viscous Dissipater

Farzin G. Golzar, Geoffrey W. Rodgers and J. Geoffrey Chase, Department of Mechanical Engineering, University of Canterbury, Christchurch, New Zealand

<https://doi.org/10.1016/j.istruc.2017.12.008>