

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:

Finite Element Study of the Effect of Interfacial Gaps on the in-Plane Behaviour of Masonry Infills Bounded by Steel Frames

Xi Chen and Yi Liu, Dept. of Civil and Resource Engineering, Dalhousie Univ., Halifax, Canada
<http://dx.doi.org/10.1016/j.istruc.2016.11.001>

Shear characteristics of Lean Duplex Stainless Steel (LDSS) rectangular hollow beams

J.K Sonu and Konjengbam Darunkumar Singh, Department of Civil Engineering, Indian Institute of Technology Guwahati, India
<http://dx.doi.org/10.1016/j.istruc.2016.11.002>

Full Plastic Resistance of Tubes Under Bending and Axial Force: Exact Treatment and Approximations

J. Michael Rotter and Adam J. Sadowski, Department of Civil & Environmental Engineering, Imperial College London, UK
<http://dx.doi.org/10.1016/j.istruc.2016.11.004>

Progressive Collapse Analysis of Concrete-filled Steel Tubular Column to Steel Beam Connections Using Multi-scale Model

Wenda Wang, Huawei Li and Jingxuan Wang, The Key Laboratory of Disaster Prevention and Mitigation in Civil Engineering of Gansu Province, Lanzhou University of Technology, Lanzhou, Gansu Province, China
<http://dx.doi.org/10.1016/j.istruc.2016.10.004>

Numerical Modelling of Composite Floor Slabs Subject to Large Deflections

M.M. Florides and K.A. Cashell, Department of Mechanical, Aerospace and Civil Engineering, Brunel University, London, UK

<http://dx.doi.org/10.1016/j.istruc.2016.10.003>

Seismic Behavior of Blind Bolted CFST Frames with Semi-rigid Connections

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<http://dx.doi.org/10.1016/j.istruc.2016.10.001>

A New Codified Design Theory of Second-order Direct Analysis for Steel and Composite Structures – From Research to Practice

Siu-Lai Chan, Yao-Peng Liu and Si-Wei Liu, Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China
<http://dx.doi.org/10.1016/j.istruc.2016.10.002>

Simplified Model of Soil-Structure Interaction for Seismically Isolated Containment Buildings in Nuclear Power Plant

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<http://dx.doi.org/10.1016/j.istruc.2016.09.014>

Structural Behaviour of Stud Shear Connections with Solid and Composite Slabs Under Co-Existing Shear and Tension Forces

M.H. Shen and K.F. Chung, Department of Civil and Environmental Engineering, the Hong Kong

Polytechnic University, Hong Kong, SAR, China
<http://dx.doi.org/10.1016/j.istruc.2016.09.011>

A Ductility-Centred Analytical Model for Axially Restrained Double-span Steel Beam Systems Subjected to Sudden Column Loss

Haoran Fu, Jinfan Zhang, Jianqun Jiang and Zhenyu Wang, College of Civil Engineering and Architecture, Zhejiang University, Hangzhou, Zhejiang, China
<http://dx.doi.org/10.1016/j.istruc.2016.09.013>

On the seismic response of buildings in aggregate: Analysis of a typical masonry building from Azores

Camila Fagundes^a, Rita Bento^a and Serena Cattar^b
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<http://dx.doi.org/10.1016/j.istruc.2016.09.010>

Experimental study on seismic performance of new RCS connection

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<http://dx.doi.org/10.1016/j.istruc.2016.09.006>

AND FINALLY...

Answers to January's question.

- 1) C
- 2) C
- 3) A