

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:

Self-Centering Capacity of a Structural Frame Composed of Steel-Jacketed Concrete Columns and Steel Beams

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<https://doi.org/10.1016/j.istruc.2017.06.004>

Determination of Loading Scenarios on Buildings Due to Column Damage

Carles Colomer Segura^a, Lotfi Hamra^b, Marina D'Antimob, Jean-François Demonceau^b and Markus Feldmann^a

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<https://doi.org/10.1016/j.istruc.2017.06.005>

Structural Behavior of Recycled Aggregate Concrete Beam-Column Connection in Presence of Micro Concrete at Joint Region

C. Marthong, A.S. Sangma, S.A. Choudhury, R.N. Pyrbot, S.L. Tron, L. Mawroh and G.S. Bharti, Civil Engineering Department, National Institute of Technology Meghalaya, Shillong, India

<https://doi.org/10.1016/j.istruc.2017.07.001>

Comparative Response Assessment of Steel Frames With Different Bracing Systems Under Seismic Effect

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<https://doi.org/10.1016/j.istruc.2017.06.006>

Residual stiffness and strength of shear connectors in steel-concrete composite beams after being subjected to a pull-out pre-damaging: An experimental investigation

Piseth Heng^{a,b}, Mihai Bud^a, Hugues Somja^a, Mohammed Hjjaj^a and Jean-Marc Battini^b

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<https://doi.org/10.1016/j.istruc.2017.05.003>

Component-Based Model Versus Stress-Resultant Plasticity Modelling of Bolted End-Plate Connection: Numerical Implementation

Anas Alhasawi, Samy Guezouli and Maël Couchaux, INSA de Rennes, LGCGM/Structural Engineering Research Group, Rennes, France

<https://doi.org/10.1016/j.istruc.2017.05.004>

Moment-Curvature-Thrust Relationships for Beam-Columns

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<https://doi.org/10.1016/j.istruc.2017.05.005>

Reliability Based Design of RC Beams With Recycled Aggregate and Steel Fibres

Won-Hee Kang^a, Rakul Bharatwaj Ramesh^a, Olivia Mirza^b, Sepani Senaratne^b, Vivian Tam^b

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<https://doi.org/10.1016/j.istruc.2017.05.002>

Cyclic behavior of hexagonal castellated beams in steel moment-resisting frames with post-tensioned connections

Hassan Abedi Sarvestani, Faculty of Water and Environmental Engineering, Shahid Beheshti University, Tehranpars, Tehran, Iran

<https://doi.org/10.1016/j.istruc.2017.05.001>

Experimental study on the behaviour of masonry pavilion vaults on spreading supports

M. Rossi, C. Calvo Barentin, T. Van Mele and P. Block, Institute of Technology in Architecture, ETH Zurich, Zurich, Switzerland

<https://doi.org/10.1016/j.istruc.2017.04.008>

A Review on Bond and Anchorage of Confined High-strength Concrete

Muhd Fauzy Sulaiman, Chau-Khun Ma, Nazirah Mohd Apani, Abdullah Zawawi Awang, Shaiful Amri Mansur and Wahid Omar, Department of structure and materials, Faculty of Civil Engineering, Universiti Teknologi, Malaysia

<https://doi.org/10.1016/j.istruc.2017.04.004>

Prestressing in Coventry Cathedral

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