Spotlight on Structures

Research Journal of The Institution of Structural Engineers

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

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The following articles 'in press' have recently been made available online:

An evaluation of EC2 rules for design of compression lap joints
John Cairns, EGIS, Heriot-Watt University, Edinburgh, UK
http://dx.doi.org/10.1016/j.istruc.2015.07.004

Soil–structure interaction analysis of a FPS-isolated structure using finite element model
A. Krishnamoorthy[a] and S. Anita[b]
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[b] Department of Civil Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur District, Kerala, India
http://dx.doi.org/10.1016/j.istruc.2015.08.003

Concrete filled elliptical steel tubular members with large diameter-to-thickness ratio subjected to bending
Kojiro Uenaka[a] and Hisao Tsunokake[b]
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http://dx.doi.org/10.1016/j.istruc.2015.08.004

Probabilistic Seismic Assessment of RC Bridges: Part I — Uncertainty Models
Ricardo Monteiro[a,b], Raimundo Delgado[b] and Rui Pinho[c]
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http://dx.doi.org/10.1016/j.istruc.2015.08.002

Probabilistic Seismic Assessment of RC Bridges: Part II — Nonlinear Demand Prediction
Ricardo Monteiro[a,b], Raimundo Delgado[b] and Rui Pinho[c]
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http://dx.doi.org/10.1016/j.istruc.2015.08.001

Advanced materials for concrete-filled tubular columns and connections
Ana Espinos, Manuel L. Romero, Antonio Hospitaler, Ana M. Pascual and Vicente Albero, Instituto de Ciencia y Tecnología del Hormigón (ICITECH), Universitat Politècnica de València, Valencia, Spain
http://dx.doi.org/10.1016/j.istruc.2015.08.006

Interactively induced localization in thin-walled I-section struts buckling about the strong axis
Elizabeth L. Liu and M. Ahmer Wadee, Department of Civil and Environmental Engineering, Imperial College London, London, UK
http://dx.doi.org/10.1016/j.istruc.2015.08.007

Numerical investigation on I-beam to CHS-column connections equipped with NiTi shape memory alloy and steel tendons under cyclic loads
Wei Wang[a,b], Tak-Ming Chan[c] and Hongliang Shao[b]
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http://dx.doi.org/10.1016/j.istruc.2015.08.005

Compressive behaviour and design of prestressed steel elements
Jonathan Gosaye[a], Leroy Gardner[a], M. Ahmer Wadee[a] and Murray E. Ellen[b]
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http://dx.doi.org/10.1016/j.istruc.2015.09.001