

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:

Article title	Authors	Available at:
Concentrated-plasticity modelling of circular concrete-filled steel tubular members under flexure	Yadong Jiang, António Silva, Luís Macedo, José Miguel Castro, Ricardo Monteiro and Tak-Ming Chan	https://doi.org/10.1016/j.istruc.2019.01.023
Finite element analysis of concrete filled lean duplex stainless steel columns	Dennis Lam, Jie Yang and Xianghe Dai	https://doi.org/10.1016/j.istruc.2019.01.024
Formulae for Calculating Elastic Local Buckling Stresses of Full Structural Cross-sections	Leroy Gardner, Andreas Fieber and Lorenzo Macorini	https://doi.org/10.1016/j.istruc.2018.11.003
Characterisation of Beam-to-column Steel-concrete Composite Joints Beyond Current Eurocode Provisions	Jean-François Démonceau and Adrian Ciutina	https://doi.org/10.1016/j.istruc.2019.01.014
Redistribution of Internal Torsional Moments Caused by Plastic Yielding of Structural Steel Members	Rebekka Winkler, Anna-Lena Bours, Adrian Walter and Markus Knobloch	https://doi.org/10.1016/j.istruc.2018.12.008
Structural Optimization of Cross-laminated Timber Panels in One-way Bending	Paul Mayencourt and Caitlin Mueller	https://doi.org/10.1016/j.istruc.2018.12.009
GBT Buckling Analysis of Cylindrical Panels Under Compression	Nuno Silvestre, António P.C. Duarte, João P. Martins and Luís Simões da Silva	https://doi.org/10.1016/j.istruc.2018.12.007
Sensitivity to local imperfections in inelastic thin-walled rectangular hollow section struts	Jiajia Shen and M. Ahmer Wadee	https://doi.org/10.1016/j.istruc.2018.12.006
Design and production of an arch built of precast stackable components	Lluís Enrique and Joseph Schwartz	https://doi.org/10.1016/j.istruc.2018.12.005
Structural design of a lattice composite cantilever	James Solly, Nikolas Früh, Saman Saffarian, Lotte Aldinger, Georgia Margariti and Jan Knippers	https://doi.org/10.1016/j.istruc.2018.11.019
Recent research advances of high strength steel welded hollow section joints	Xiaoyi Lan and Tak-Ming Chan	https://doi.org/10.1016/j.istruc.2018.11.015
Sharanam: Case Study of a 15 Meter Span Earthen Conical Vault	Lara K. Davis, Mahesh Varma and Satprem Maïni	https://doi.org/10.1016/j.istruc.2018.11.014
Resistance of Axially Loaded Hot-finished S460 and S690 Steel Square Hollow Stub Columns at Elevated Temperatures	Han Fang and Tak-Ming Chan	https://doi.org/10.1016/j.istruc.2018.11.011
Space Truss Masonry Walls With Robotic Mortar Extrusion	R. Duballet, O. Baverel and J. Dirrenberger	https://doi.org/10.1016/j.istruc.2018.11.003
Precast Slab Structures Made of Carbon Reinforced Concrete	Sebastian May, Oliver Steinbock, Harald Michler and Manfred Curbach	https://doi.org/10.1016/j.istruc.2018.11.005