Seismic Performance of Concrete Buildings
Liviu Crainc and Mihai Munteanu, Technical University of Civil Engineering, Bucharest, Romania
Vol. 9, January 2013: 246 x 174: 350pp
Hb: 978-0-415-63186-0: £95.00 $149.95
Examines essential aspects of the behaviour, analysis, design and detailing of different types of reinforced concrete structures (frames, walls) subjected to strong seismic activity. Presents fundamental aspects of reinforced concrete behaviour quantified through constitutive laws for monotonic and cyclic loading. Basic concepts of post-elastic analysis like plastic hinge, plastic length, fiber models, and stable and unstable hysteretic behaviour are defined and commented upon, and several case studies are provided.

Moving Loads – Dynamic Analysis and Identification Techniques
Siu-Soon Law, Hong Kong Polytechnic University, Kowloon, Hong Kong, and Xin-qun Zhu, University of Western Australia, Crawley, WA, Australia
Vol. 8, February 2011: 246 x 174: 332pp
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Treats the fundamentals of moving loads problems, with detailed descriptions of the dynamic behaviour under moving loads, moving load identification problems, specialized techniques, and simple methods for universal application, while carefully taking into account the accuracy of identification and computation.

Design Decisions under Uncertainty with Limited Information
Efstratios Nikolaidis, University of Toledo, Toledo, OH, USA, Zissimos P. Mourelatos, Oakland University, Rochester, MI, USA, and Vijitaswaha Pandey, University of Illinois at Urbana-Champaign, Champaign, IL, USA
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Illustrates practical design problem solving techniques in the aerospace and automotive engineering industries with a balanced approach explaining both the theoretical foundations of methods and their application to engineering design. Readers will learn a structured, risk-based approach for design under uncertainty when limited information is available, which tools are available and which to select and apply given a design decision problem.

Structural Identification and Damage Detection using Genetic Algorithms
Chan Ghee Koh and Michael John Perry, National University of Singapore, Singapore
Vol. 6, December 2009: 246 x 174: 164pp
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Damage Models and Algorithms for Assessment of Structures under Operating Conditions
Siu-Soon Law, Hong Kong Polytechnic University, Kowloon, Hong Kong, and Xin-qun Zhu, University of Western Australia, Crawley, WA, Australia
Vol. 5, September 2009: 246 x 174: 325pp
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Frontier Technologies for Infrastructures Engineering
Edited by Alfredo H.S. Ang, University of California, Irvine, CA, USA, and Shi-Shuenn Chen, National Taiwan University of Science and Technology, Taipei, Taiwan
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