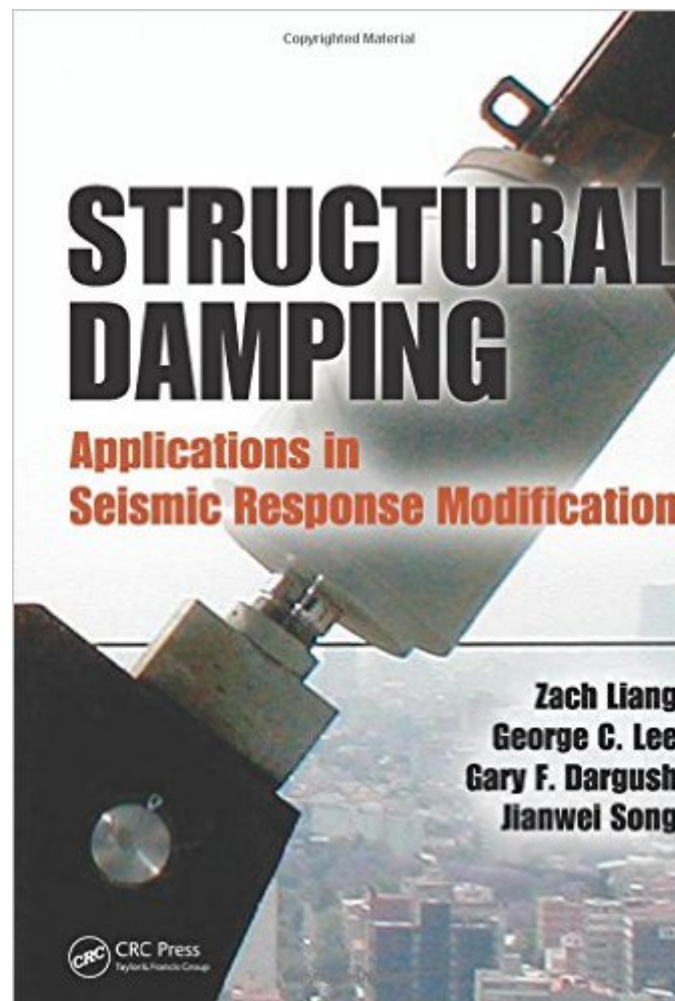


The book was found

Structural Damping: Applications In Seismic Response Modification (Advances In Earthquake Engineering)



Synopsis

Rapid advances have been made during the past few decades in earthquake response modification technologies for structures, most notably in base isolation and energy dissipation systems. Many practical applications of various dampers can be found worldwide and, in the United States, damper design has been included in building codes. The current design process is simple and useful for adding supplemental damping up to a reasonable level—but it is not as useful with higher levels of damping. Taking a different approach, *Structural Damping: Applications in Seismic Response Modification* considers the dynamic responses of structures with added damping devices as systems governed by the combined effect of the static stiffness, period, and damping—or "dynamic stiffness" of the structure-device system. This formulation supplies additional information for higher-level supplemental damping design that current provisions may not adequately cover. The authors also propose a more comprehensive consideration of the core issues in structural damping, which provides a useful foundation for continued research and development in seismic response modification technologies for performance-based engineering. The book includes design examples, based on the authors'™ research and practical experience, to illustrate approaches that include higher-level supplemental damping to complement the use of the current NEHRP/ASCE-7 provisions. A self-contained resource on damping design principles, this book helps earthquake engineers select the most effective type of damper and determine the amount and configuration of damping under given working conditions.

Book Information

Series: Advances in Earthquake Engineering

Hardcover: 581 pages

Publisher: CRC Press; 1 edition (November 21, 2011)

Language: English

ISBN-10: 1439815828

ISBN-13: 978-1439815823

Product Dimensions: 7 x 1.2 x 10 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 3.0 out of 5 stars See all reviews (1 customer review)

Best Sellers Rank: #2,132,328 in Books (See Top 100 in Books) #95 in Books > Engineering &

Transportation > Engineering > Civil & Environmental > Seismic Design #1748 in Books >

Textbooks > Engineering > Civil Engineering #5198 in Books > Crafts, Hobbies & Home > Home

Customer Reviews

The insulation and energy dissipation are two powerful methods to mitigate seismic damage, for this reason I use it in my practical and academic work.ThanksMarcos

[Download to continue reading...](#)

Structural Damping: Applications in Seismic Response Modification (Advances in Earthquake Engineering) Seismic Design Aids for Nonlinear Pushover Analysis of Reinforced Concrete and Steel Bridges (Advances in Earthquake Engineering) Earthquake Engineering: Damage Assessment and Structural Design (Methods & Applications in Civil Engineering) Matrix Analysis of Structural Dynamics: Applications and Earthquake Engineering (Civil and Environmental Engineering) Vibration Damping of Structural Elements Response Spectrum Method in Seismic Analysis and Design of Structures (New Directions in Civil Engineering) Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies: 21 (Geotechnical, Geological and Earthquake Engineering) Seismic design with supplemental energy dissipation devices (Publication / Earthquake Engineering Research Institute) Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering Fundamentals of Earthquake Engineering (Civil engineering and engineering mechanics series) Theory of Nonlinear Structural Analysis: The Force Analogy Method for Earthquake Engineering Wind and Earthquake Resistant Buildings: Structural Analysis and Design (Civil and Environmental Engineering) Host Response to Biomaterials: The Impact of Host Response on Biomaterial Selection Seismic Loads: Guide to the Seismic Load Provisions of ASCE 7 - 10 ASD/LRFD Wind and Seismic: Special Design Provisions for Wind and Seismic with Commentary (2008) Seismic Loads: Guide to the Seismic Load Provisions of ASCE 7-05 Seismic Stratigraphy, Basin Analysis and Reservoir Characterisation (Handbook of Geophysical Exploration: Seismic Exploration) Seismic Design of Building Structures: A Professionals Introduction to Earthquake Forces and Design Details Seismic Design of Building Structures: A Professional's Introduction to Earthquake Forces and Design Details, 8th ed. Seismic Analysis and Design for Soil-Pile-Structure Interactions: Proceedings of a Session Sponsored by the Committee on Geotechnical Earthquake ... of Civil (Geotechnical Special Publication)

[Dmca](#)