





Special Issue Reprint

Advances in Steel-Concrete Composite Structures

www.mdpi.com/books/reprint/11363

Edited by Jiang Liu Mingjin Zhang Yinping Ma Lipeng Sun

ISBN 978-3-7258-4821-8 (Hardback) ISBN 978-3-7258-4822-5 (PDF)



The aim of this Reprint is to introduce readers to the latest developments in steel-concrete composite structures, which comprehensively covers high-performance bridges and structures, industrial construction methods, and advanced computation methods. This Reprint explores a series of critical topics, including the shear behavior of bellow-sleeved studs, the temperature fields of cable-staved bridge pylons, the assessment of concrete bridge blister disease, and low-carbon assembled construction, which reflect the field's focus on both structural performance and environmental sustainability. Moreover, studies on steel-plate concrete containment structures, preload effects on box columns, and thermal gradient analyses in the Tibet Region based on meteorological data further expand the research scope, showcasing the adaptability and regional applicability of composite structures. Collectively, these works make significant contributions to advancing sustainable development by skillfully integrating numerical models, experimental validation, and innovative methods. Such integration not only enhances the durability and seismic resilience of modern composite structures, but also improves their eco-efficiency in design and construction, pointing out a promising direction for the future development of this discipline.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/11363



MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

