



sustainability



Special Issue Reprint

Damage Diagnosis and Safety Assessment of Bridge Structures under Multiple Hazards

www.mdpi.com/books/reprint/8530

Edited by

Kai Wei

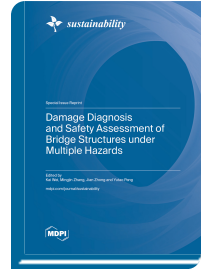
Mingjin Zhang

Jian Zhong

Yutao Pang

ISBN 978-3-0365-9763-8 (Hardback)

ISBN 978-3-0365-9762-1 (PDF)



The states of bridge structures decline over time due to various degradation processes, such as creep, corrosion, and cyclic loading. During its life cycle, a bridge also faces the great threat of multiple hazards, such as winds, earthquakes, collisions, waves, landslides, and so on. Structural damages in an existing bridge affect operational and structural safety and weaken the sustainability of bridges. Therefore, advanced damage diagnosis techniques and safety assessment methods are strongly required to ensure structural safety and achieve infrastructure sustainability. This Special Issue aims to bring together recent scientific developments in probabilistic hazard analysis, structural exposure models, damage diagnosis methods, testing and measurement techniques, dynamic behavior and protection technology, damage mechanisms, risk assessment framework, and resilience-based approaches. Since we have past one year since this Special Issue opened, thirteen papers have been published, the majority of which focus on the structural safety assessment of bridges under wind, earthquake, collision, wave, etc. The Guest Editors believe that this reprint will provide important theoretical and technical support for bridge damage diagnosis and safety assessment and promote communication and cooperation between design, construction, research, teaching, and production.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/8530

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.