



an Open Access Journal by MDPI

Seismic Performance of Long-Span Bridges Subjected to Near/Cross Fault Earthquake: Analysis, Design and Assessment

Guest Editors:

Dr. Hongyu Jia

School of Civil Engineering,
Southwest Jiaotong University,
Chengdu 610031, China

Dr. Chao Zhang

College of Civil Engineering,
Fuzhou University, Fuzhou
350108, China

Prof. Dr. Wangbao Zhou

School of Civil Engineering,
Central South University,
Changsha 410075, China

Deadline for manuscript
submissions:

closed (31 January 2024)

Message from the Guest Editors

Dear Colleagues,

This Special Issue, entitled “Seismic Performance of Long-Span Bridges Subjected to Near/Cross Fault Earthquake: Analysis, Design and Assessment”, aims to collate a variety of research into topics connected to bridge security.

Research is presented into the characteristics of ground motion caused by different earthquake fault rupture mechanisms and the method for simulating near/cross-seismic fault ground motion. Under complex terrains such as mountain canyons and deep-water areas, the relevant experimental technology, numerical simulation and simplified analysis method of the seismic performance of long-span bridges was subjected to near/cross-seismic fault earthquake excitations. Research is compiled on seismic system and shock-absorbing devices for long-span bridges, taking into consideration near/cross-fault earthquakes excitation. Based on the concept of seismic resilience, the seismic resilience improvement method and novel seismic system of long-span bridges, subjected to near/cross-fault earthquake excitations, were examined.

Dr. Hongyu Jia

Dr. Chao Zhang

Prof. Dr. Wangbao Zhou

Guest Editors



mdpi.com/si/160657

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)