

1. Record Nr.	UNINA9910367565803321
Autore	Yang Tony
Titolo	Resilience and Sustainability of Civil Infrastructures under Extreme Loads
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019
ISBN	3-03921-402-0
Descrizione fisica	1 electronic resource (408 p.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>There are many regions worldwide which are susceptible to extreme loads such as earthquakes. These can cause loss of life and adverse impacts on civil infrastructures, the environment, and communities. A series of methods and measures have been used to mitigate the effects of these extreme loads. The adopted approaches and methods must enable civil structures to be resilient and sustainable. Therefore, to reduce damage and downtime in addition to protecting life and promoting safety, new resilient structure technologies must be proposed and developed. This special issue book focuses on methods of enhancing the sustainability and resilience of civil infrastructures in the event of extreme loads (e.g., earthquakes). This book contributes proposals of and theoretical, numerical, and experimental research on new and resilient civil structures and their structural performance under extreme loading events. These works will certainly play a significant role in promoting the application of new recoverable structures. Moreover, this book also introduces some case studies discussing the implementation of low-damage structural systems in buildings as well as articles on the development of design philosophies and performance criteria for resilient buildings and new sustainable communities.</p>