

1. Record Nr.	UNINA9910566486103321
Autore	Bedon Chiara
Titolo	Buildings and Structures under Extreme Loads II
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 online resource (266 p.)
Soggetti	History of engineering & technology Technology: general issues History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Exceptional loads on buildings and structures are known to take origin and manifest from different causes, like natural hazards and possible high-strain dynamic effects, human-made attacks and impact issues for load-bearing components, possible accidents, and even unfavorable/extreme operational conditions. All these aspects can be critical for specific structural typologies and/or materials that are particularly sensitive to external conditions. In this regard, dedicated analysis methods and performance indicators are required for the design and maintenance under the expected lifetime. Typical issues and challenges can find huge efforts and clarification in research studies, which are able to address with experiments and/or numerical analyses the expected performance and capacity of a given structural system, with respect to demands. Accordingly, especially for existing structures or strategic buildings, the need for retrofit or mitigation of adverse effects suggests the definition of optimal and safe use of innovative materials, techniques, and procedures. This Special Issue follows the first successful edition and confirms the need of continuous research efforts in support of building design under extreme loads, with a list of original research papers focused on various key aspects of structural performance assessment for buildings and systems under exceptional design actions and operational conditions.

