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Altri autori (Persone)	ShuklaA (Arun) RajapakseY HynesMary Ellen
Disciplina	624.176
Soggetti	Building, Bombproof Buildings - Blast effects Structural analysis (Engineering)
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Experimental Investigation of Blast Mitigation for Target Protection -- Application of High Performance Computing to Rapid Assessment of Tunnel Vulnerability to Explosive Blast and Mitigation Strategies -- Numerical Analysis of the Response of Biomimetic Cellular Materials under Static and Dynamic Loadings -- Experimental and Theoretical Studies of Fiber-reinforced Composite Panels Subjected to Underwater Blast Loading -- Underwater Explosive Response of Submerged, Air-backed Composite Materials: Experimental and Computational Studies -- Underwater Implosion Mechanics: Experimental and Computational Overview -- Dynamic Buckling and Fluid-Structure Interaction of Submerged Tubular Structures -- The Use of Tubular Structures as Cores for Sandwich Panels Subjected to Dynamic and Blast loading -- a Current "State of the Art" -- Mitigation of Loading on Personnel in Light Armored Vehicles using Small Model Testing -- Blast Response of Sandwich Composites: Effect of Core Gradation, Pre-Loading and Temperature -- Progressive Collapse Resistance of Reinforced Concrete Structures.
Sommario/riassunto	Blast Mitigation: Experimental and Numerical Studies covers both experimental and numerical aspects of material and structural response

to dynamic blast loads and its mitigation. The authors present the most up-to-date understanding from laboratory studies and computational analysis for researchers working in the field of blast loadings and their effect on material and structural failure, develop designs for lighter and highly efficient structural members for blast energy absorption, discuss vulnerability of underground structures, present methods for dampening blast overpressures, discuss structural post blast collapse and give attention to underwater explosion and implosion effects on submerged infrastructure and mitigation measures for this environment. This book also: Presents experimental methods of material and structural response to dynamic blast loads Includes computational analysis of material and structural response to dynamic blast loads Offers mitigation measures for structures in various environments Relates lab experiments to larger field tests Features more than 150 illustrations Blast Mitigation: Experimental and Numerical Studies is an ideal book for graduate students, practicing engineers and researchers working in the field of blast mitigation.

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