

1. Record Nr.	UNINA9910845488503321
Titolo	Dynamic Behavior of Soft and Hard Materials, Volume 2 [[electronic resource]] : Proceedings of 13th International Symposium on Plasticity and Impact Mechanics 2022 // edited by R. Velmurugan, G. Balaganesan, Naresh Kakur, Krishnan Kanny
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9962-55-2
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (X, 424 p. 262 illus., 240 illus. in color.)
Collana	Springer Proceedings in Materials, , 2662-317X ; ; 35
Disciplina	620.19
Soggetti	Soft condensed matter Materials - Fatigue Mechanics, Applied Soft Materials Materials Fatigue Engineering Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: Blast mitigation studies -- Chapter 1. Sandwich panel with different web cores under blast loading -- Chapter 2. Effect of explosive location on the response and damage behavior of reinforced concrete wall -- Chapter 3. Numerical Modelling & Simulation of Stiffened Mild Steel panel Subjected to Near-field Blast Loading -- Chapter 4. Dynamic Responses of Monolithic and corrugated sandwich Al 7075T-6 Panels under Blast Loading: A Comparative Study -- Chapter 5. Dynamic response of steel with aluminium foam-based sandwich panels under blast loading -- Chapter 6. Numerical Simulation of Failure of a Rock Slope with Tension Crack under Blast Loading -- Chapter 7. Damage Evaluation of Tunnel Due to Internal Blast in Adjacent Tunnel -- Chapter 8. Analytical and Numerical studies of Hemispherical Closure Shell Subjected to Blast Loading -- Chapter 9. Study of Blast pressure, Velocity and Mass Distribution of controlled Fragments caused by cylindrical warhead -- Chapter 10. Influence of different ground parameters on energy transfer under blast loading --

Chapter 11. Behavior of rc slab subjected to blast loading -- Chapter 12. Response of sdof system coupled with inerter based isolators under blast load -- Chapter 13. Reflected wave eliminator for blast wave simulator -- Chapter 14. Numerical Analysis of Underground Tunnel System with GFRP Shield against Internal Explosion -- Chapter 15. Numerical analysis of underground pipelines with CFRP against surface and subsurface blasts. etc.

Sommario/riassunto

This book comprises the select peer-reviewed proceedings of the 13th International Symposium on Plasticity and Impact Mechanics (IMPLAST) 2022. It aims to provide a comprehensive and broad-spectrum picture of the state-of-the-art research and development in diverse areas, such as constitutive relations, theories of plasticity, stress waves in solids, earthquake loading, high-speed impact problems, fire and blast loading, structural crashworthiness and failure, mechanics of penetration and perforation, among others. The contents focus on aspects of large deformations and failure of materials, including metals, composites, cellular, geomaterials, or concrete, and structures resulting from quasi-static earthquake, fire, impact, or blast loading. This book is a valuable resource for researchers and professionals working in academia and industry in the areas of mechanical, materials, and aerospace engineering.
