Record Nr. UNINA9910366601203321 Autore Wu Hao Titolo Notes on Projectile Impact Analyses / / by Hao Wu, Yong Peng, Xiangzhen Kong Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-13-3253-3 Edizione [1st ed. 2020.] 1 online resource (XIV, 370 p. 328 illus., 286 illus. in color.) Descrizione fisica 624 Disciplina Soggetti Civil engineering Computer simulation Mechanics, Applied Solids Multibody systems Vibration Metals Civil Engineering Computer Modelling Solid Mechanics Multibody Systems and Mechanical Vibrations Metals and Alloys Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Rigid projectile impact on concrete target -- Erosive projectile impact on concrete target -- Shaped charge formed projectile impact on concrete target -- Shaped charge formed jet impact on concrete/steel target -- Rigid projectile impact on metallic target --Erosive projectile impact on metallic target -- Concluding remarks. This book presents comprehensive experimental, numerical, and Sommario/riassunto

This book presents comprehensive experimental, numerical, and theoretical research on projectile impact analysis, such as the rigid projectile penetration/perforation of concrete and metallic targets, and shaped-charge-formed projectile and jet penetrations. Concrete and metal materials are widely used in protective structures in both civil

engineering and armored vehicles, such as military fortifications,

underground shelters, infantry fighting vehicles, and tanks, which are designed to withstand intentional or accidental impact loadings caused by projectiles and fragments, and the responses of these targets under projectile impact have been a topic of discussion for several decades. Written for researchers and engineers working in the fields of protective structures and high-speed penetration mechanics, the book is also a valuable reference for senior undergraduate and postgraduate students majoring in defense engineering, terminal ballistics and other related fields.