Record Nr. UNINA9910983036703321 Autore Lopresto Valentina Titolo Dynamic Response and Failure of Composite Materials: DRAF 2024 / / edited by Valentina Lopresto, Ilaria Papa Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031776977 9783031776960 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (355 pages) Collana Lecture Notes in Mechanical Engineering, , 2195-4364 Altri autori (Persone) Papallaria Disciplina 620.1 Soggetti **Building materials** Industrial engineering Production engineering Mechanics, Applied Structural Materials Industrial and Production Engineering **Engineering Mechanics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Mesh and homogenization effects of simulated high strain rate delamination in CFRP using VCCT -- Detection Of Impact Damages On Full Scale Wing Using Distributed Fiber Optics Sensors Network --Evolution of Unstable Skin-Stringer Debonding Propagation in Composite Aircraft Structures: Implications on Damage Tolerant Design -- A Benchmark Between Conventional And Custom Heat Treaments For Inconel 718 Alloy Processed Through Cold Metal Transfer Technology. Sommario/riassunto This book gathers the latest advances and innovations in the field of dynamic loads and testing of composite materials and sandwich structures, as presented by international researchers and engineers at the 5th International Symposium on Dynamic Response and Failure of Composite Materials (DRAF), held in Ischia, Italy, on June 17–21, 2024. Contributions include a wide range of topics such as low and high

velocity impacts, smart composites, hull slamming, shock and blast, hail and bird impact, damage resistance and tolerance, failure

mechanisms, composite structures, delamination and fractures, progressive damage modeling, micromechanics, ballistic impacts, ceramic and CMC, auxetic materials and structures, additive manufacturing, crashworthiness, green composites, and structural health monitoring.