

1. Record Nr.	UNINA9910639892903321
Titolo	Fracture, Fatigue, Failure and Damage Evolution, Volume 3 : Proceedings of the 2022 Annual Conference on Experimental and Applied Mechanics // edited by Allison Beese, Ryan B Berke, Garrett Pataky, Shelby Hutchens
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-17467-4
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (108 pages)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	620.1126
Soggetti	Materials - Fatigue Materials - Analysis Mechanics, Applied Continuum mechanics Building materials Materials Fatigue Characterization and Analytical Technique Engineering Mechanics Continuum Mechanics Structural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Size Effect Analysis and Characterization of Quasibrittle Fracture of Sandstone Rocks -- Fracture Response of Additively Manufactured Aluminum Alloys: Effects of Loading-Rate and Build Orientation -- Open Hole Fatigue Testing of CNT Infused GFRP Multi-scale Composite Laminates using Infrared Thermography -- Effects of Work Hardening on 314 Stainless Steel Alloy -- Gap Test Consequences for Fracture Mechanics of Quasibrittle Materials and Plastic-Hardening Metals -- Testing and Calibration of an in-house built Fatigue Testing Machine -- Fatigue Testing of Additively Manufactured 17-4PH Stainless Steel Samples with a Stress Concentration -- Mixed-mode Fracture

Interactions Along Centrally Cracked Weakened Planes -- Use of Full-field Strain Measurements to Determine Mechanical Properties of Shale Under Repeated Cyclic Loading -- Multiaxial Fatigue of Crystallizing Natural Rubber Under Non-relaxing Loadings: A Study on the Fatigue Life Reinforcement -- The Integrated Digital Image Correlation Technique Applied to Fracture Mechanics: An Improvement on Crack Detection and Localization -- Fatigue of Layered Jamming Materials -- The Novel "Fracture" Gun at the U.S. Army Research Laboratory for Precise, Highly Instrumented Impact Experiments.

---

Sommario/riassunto

Fracture, Fatigue, Failure and Damage Evolution, Volume 3 of the Proceedings of the 2022 SEM Annual Conference & Exposition on Experimental and Applied Mechanics, the third volume of six from the Conference, brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on a wide range of areas, including: Novel Experimental Methods Extreme Environments Interfacial Fracture Integration of Models & Experiments Mechanics of Energy & Energetic Materials Integration of Models & Experiments In Situ Techniques for Fatigue & Fracture Microscale & Microstructural Effects on Mechanical Behavior.

---