1. Record Nr. UNINA9910484734503321

Titolo	Fracture, Fatigue, Failure and Damage Evolution , Volume 3 : Proceedings of the 2020 Annual Conference on Experimental and Applied Mechanics / / edited by Shuman Xia, Allison Beese, Ryan B. Berke
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-60959-6
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (viii, 202 pages) : illustrations
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	620.1126
Soggetti	Mechanics, Applied Dynamics Nonlinear theories Building materials Engineering design Materials Engineering Mechanics Applied Dynamical Systems Structural Materials Engineering Design Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Influence of Fracture and Delayed Effects on Steel-Concrete Composite Structures Comparison of Analytical and Numerical Results -- Chapter 2. Characterization of High Frequency Pulse Loading on Fatigue of Metals -- Chapter 3. Fracture Parameters and Failure Visualization of Al6063-T6 under Different Loading Rates -- Chapter 4. Fatigue Life Prediction of Natural Rubber in Antivibratory Applications -- Chapter 5. Fatigue Assessment of Porosity in Electron Beam Melted Ti-6Al-4V -- Chapter 6. Bayesian Updating of a Cracking Model for Reinforced Concrete Structures Subjected to Static and Cyclic Loadings

-- Chapter 7. Crack Jumping in Fabric Composite Fracture Testing -- Chapter 8. Effect of Crack-Parallel Compression or Tension on Mode-I Fracture Energy of Quasibrittle Material – as applied to Concrete -- Chapter 9. Modal Validation of Academic Bladed Disk with DIC -- Chapter 10. Assessing Bond Strength in 304L Stainless Steel Plate Welded using Plastic Explosives -- Chapter 11. Real-Time Visualization of Damage Progression Inside GFRP Composites via High-Speed X-Ray PCI Technique -- Chapter 12. Watching High-Cycle Fatigue with Automated Scanning Electron Microscope Experiments -- Chapter 13. Determination of Mixed-mode (I/III) Fracture of Polycarbonate (PC) -- Chapter 14. Influence of Dynamic Multiaxial Transverse Loading on Dyneema® SK76 Single Fiber Failure -- Chapter 15. Using Crack Geometry to Determine Fracture Properties -- Chapter 16. Dynamic Fracture-Toughness Testing of a Hierarchically Nano-Structured Solid.

Sommario/riassunto

Fracture, Fatigue, Failure and Damage Evolution, Volume 3 of the Proceedings of the 2020 SEM Annual Conference & Exposition on Experimental and Applied Mechanics, the third volume of seven 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.