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| Altri autori (Persone)  | HoheJörg<br>MittelstedtChristian   |
| Disciplina              | 531.7  |
| Soggetti                | Continuum mechanics<br>Mechanics, Applied<br>Solids<br>Building materials<br>Materials science - Data processing<br>Continuum Mechanics<br>Solid Mechanics<br>Structural Materials<br>Computational Materials Science  |
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| Nota di contenuto       | 1. Numerical and Experimental Analysis of Elastic Three-layer Plate Under Static and Low Velocity Impact Loading -- 2. Reviewing Yield Criteria in Plasticity Theory -- 3. Minimum Test Effort-Based Derivation of Constant-Fatigue-Life Curves - Displayed for the Brittle UD Composite Materials -- 4. Experimental Evaluation and Phase-Field Model of Fracture Behavior of Alumina-Aluminium Graded Composite -- 5. On the Potential of Machine Learning Assisted Tomography for Rapid Assessment of FRP Materials with Defects -- 6. On the Semi-Analytical Modelling of the Free-Edge Stress Field in Cross-Ply Laminated Shells Under Mechanical Loads -- 7. Experimental Quantification of Barrier Effects for Microstructural Short Fatigue Crack Propagation in Martensitic Steel -- 8. On the Difficulty to Implement |

the Coupled Criterion to Predict Failure in Tempered Glass -- 9. Extended Reduced Bending Stiffness Method for Shear Deformable Laminated Plates -- 10. How Mechanically Inspired Design Rules Help in the Topology Optimization of Structures with Highly Nonlinear Behavior -- 11. Phase Field Modeling of Cracks in Ice. .

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## Sommario/riassunto

The book is devoted to the retirement of Prof. Wilfried Becker—a liber amicorum for a well-known specialist in the field of structural mechanics. Many excellent scientists from institutions around the world wrote their scientific chapters, stressing the Becker's influence to structural mechanics. Thus, this collection discusses a lot of important problems and applications of mechanics.

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