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Nota di contenuto	Part I. Mechanical behaviour of materials -- Chapter 1. Effect of partial replacement of cement with waste granite powder and quartz powder on the compressive strength of hardened mortars for cement masonry (Woniak) -- Chapter 2. Towards Modification of Polyurethane Paint Coatings for Softwood Protection: Preliminary Studies of the Use of Multi Walled Carbon Nanotubes (Brzozowska) -- Chapter 3. Role of SiC Powder in Reducing the Porosity and Increasing the Carbon Content in Wire Arc Additive Manufacturing of Carbon Steel -- Part II. Mechanics of composite materials -- Chapter 4. Fracture toughness analysis of polymer concretes made by waste mineral aggregates and enhanced with glass fibers and metal chips -- Part III. Plasticity -- Chapter 5. Effect of flower pattern design on the springback of high strength steel in cold roll forming process of pipes (Firouzjaei),- Part IV. Fracture mechanics -- Chapter 6. Mixed-mode I/II fracture load prediction in

cracked rock geometries using the tangential stress contour (TSC) method (Bidadi) -- Part V. Optimum design methods -- Chapter 7. Investigation of Geometries and Stability for Increasing the Energy Density in Electromechanical Battery Flywheels.

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#### Sommario/riassunto

This book provides selected papers presented at the 1st International Conference on Mechanics of Solids, held in Porto, Portugal, November 3-4, 2022. The book focuses on the mechanics of deformable solids, dynamics of particles and rigid bodies. Topics like mechanical behaviour of materials, mechanics of composite materials, plasticity, fracture mechanics, and optimum design methods are covered. This volume provides the latest trends related to mechanics of solids and appeals to researchers and practitioners across the broad spectrum.

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