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Nota di contenuto	1 Mechanical and Tribological Properties of Scrap Rubber Reinforced with Al ₂ O ₃ Fiber and TiO ₂ -- 2 Investigating Hemp Concrete Mechanical Properties Variability Due To Hemp Particles -- 3 Recycling of Scrap Aluminium (AA7075) Chips for Low Cost Composites -- 4 Scrap Rubber Based Composites Reinforced with Ceramic Oxides and Silica -- 5 Mechanical and Tribological Properties of Scrap Rubber Reinforced with Al ₂ O ₃ Fiber, Aluminium and TiO ₂ -- 6 Thermo mechanical Investigation of Fused Deposition Modeling by Computational and Experimental Methods -- 7 Non Linear Contact Analysis of Self Supporting Lattice -- 8 Process Parameter Effects on Interlaminar Fracture Toughness of FDM Printed Coupons -- 9 Constitutive Equations for Severe Plastic Deformation Processes -- 10 Merging Experimental Evidence and Molecular Dynamics Theory to Develop Efficient Models of Solids Fracture -- 11 Comparison of Patch and Fully Encircled Bonded Composite Repair -- 12 Comparison of

Composite Repair Performance on Drilled and Simulated Defects -- 13 Measuring how Overlap Affects the Strength of Composite Tubes in Bending Torsion -- 14 Thermal Cycling and Environmental Effect on Tensile Impact Behavior of Adhesive Single lap Joints for Fiber Metal Laminate -- 15 Design of Hybrid Composites from Scrap Aluminum Bronze Chips -- 16 Impact Response of Waste Poly Ethylene Terephthalate (PET) Composite Plate -- 17 Particles Reinforced Scrap Aluminum Based Composites by Combined Processing Sintering + Thixoforging -- 18 Recycle of Aluminium (A356) for Processing of New Composites Reinforced with Magnetic Nano Iron Oxide and Molybdenum -- 19 A New Multiscale Bioinspired Compliant Sensor -- 20 Effect of Microstructure on Mechanical Response of MAX Phases -- 21 Controlled Placement of Microcapsules in Polymeric Materials -- 22 Converse Magneto electric Coefficient of Composite Multiferroic Rings -- 23 In situ Sensing of Deformation and Damage in Nanocomposite Bonded Surrogate Energetic Materials -- 24 Quasi Static Characterization of Self Healing Dental Composites -- 25 Load Monitoring Using Surface Response to Excitation Method -- 26 Elevated Temperature Digital Image Correlation Using High Magnification Optical Microscopy -- 27 Design of Hybrid Composites from Scrap Aluminum Reinforced with (SiC+TiO₂+Gr+Ti+B) -- 28 Manufacturing of Low Cost Composites with Porous Structures from Scrap Aluminium (AA2014) Chips -- 29 Development of Functionally Graded Nodular Cast Iron Reinforced with Recycled WC Particles -- 30 Aluminium Matrix Composites Reinforced by Nano Fe₃O₄ doped with TiO₂ by Thermomechanical Process -- 31 Implementation of the Surface Response to Excitation Method for pipes -- 32 Thermal Methods for Evaluating Flows in Composite Materials A new Approach to Data Analysis -- 33 Characterising the Infrared Signature of Damaged Composites for Test Control -- 34 Thermoelastic Stress Analysis and Digital Image Correlation to Assess Composites -- 35 A Study on Mechanical Properties of Raw Sisal Polyester Composites -- 36 HPHT In Situ Strain Measurement of Polymer Composites for Oilfield Applications -- 37 Evaluation of Viscoelastic Characteristics of Polymer by Using Indentation Method.

Sommario/riassunto

Mechanics of Composite, Hybrid, and Multifunctional Materials, Volume 7 of the Proceedings of the 2016 SEM Annual Conference & Exposition on Experimental and Applied Mechanics, the seventh volume of ten 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: Recycled-Constituent Composites Nano and Particulate Composites Damage Detection and Non-Destructive Evaluation of Composites Fracture and Fatigue Novel Developments in Composites Additive Manufacturing of Composites Mechanics of Graphene & Graphene Oxide Smart Materials Novel Developments in Composites Manufacturing and Joining of Composites.
