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Nota di contenuto	Advances in Structural Analysis of Advanced Materials; Preface; Table of Contents; Effect of Fiber Treatment on Fiber Strength and Fiber/Matrix Interface of Hemp Reinforced Polypropylene Composites; A Study of Mechanisms of Poly (PhenyleneSulfide) Thermal Degradation in Air; Chemical Structure Influence of Silicone Adhesives on Curing Process; Dispersion Improvement of Carbon Nanotubes in Epoxy Resin Using Amphiphilic Block Copolymers; Study of DGEBA and Novolac Adhesive Solutions between Ceramic and Steel Substrates; Shear Test on CFRP Full-Field Measurement and Finite Element Analysis Thermo-Mechanical Behaviour of the Raffinate Resulting from the Aqueous Extraction of Sunflower whole Plant in Twin-Screw Extruder: Manufacturing of Biodegradable Agromaterials by Thermo-Pressing Failure Mechanisms of Thin Hard Coatings Submitted to Repeated Impacts: Influence of the Film Thickness; Identification of the Sn96.5Ag3.5 Law Behavior with the Scatter of the Parameters - Study of Aeronautical Application in Power Module; Numerical Modeling of Chemical and Thermal Coupling in a Silicon Carbide Based Heat Exchanger Reactor Digital Image Stereo-Correlation Applied to the Identification of

ElastomersLifetime and Reliability Assessment of AlN Substrates Used in Harsh Aeronautic Environments Power Switch Modules; Prediction of Lifetime in Static Fatigue at High Temperatures for Ceramic Matrix Composites; An On-Line ANN-Based Approach for Quality Estimation in Resistance Spot Welding; Stability Prediction in Turning of Flexible Components; Geometric and Kinematic Modelling of a New Parallel Kinematic Machine Tool: The Tripteor X7 Designed by PCI Links Between Machining Parameters and Surface Integrity in Drilling Ni-SuperalloyControl of Chatter by Spindle Speed Variation in High-Speed Milling; Keywords Index; Authors Index

Sommario/riassunto

The increased use of advanced materials in high-efficiency structures - electronic devices, medical equipment, aircraft and vehicles - requires an improved reliability, increased resistance to breakdown, and better failure and life-span forecasting for a wide variety of loading conditions. The development of materials having advanced structural properties is becoming a key factor in industrial and technological progress. The aim of this special collection was to provide a forum where engineers, researchers, scientists and industrial experts could present their work and discuss the current situ
