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Disciplina	670
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Advances in Non Conventional Materials Processing Technologies; Preface, Committees and Sponsors; Table of Contents; A Procedure Based on Magnetic Induction to Evaluate the Effect of Plastic Deformation by Multiaxial Stresses on TRIP Steels; Analysis of the Laser Weldability under Conduction Regime of 2024, 5083, 6082 and 7075 Aluminium Alloys; Analytical Approach to the Indentation Process. Application of the Upper Bound Element Technique; Application of Different Simulation Strategies for the Analysis of Multi-Stroke Localised-Incremental Forging Operations Application of Laser Remelting Treatments to Improve the Properties of Ti6Al4V Alloy Comparison between FEM and Experimental Results in the Upsetting of Nano-Structured Materials; Current Research Trends in Abrasive Waterjet Machining of Fiber Reinforced Composites; Customizing Food with an Additive Manufacturing Technology; Development of a Laser Hardening Simulation Method Including

Material Characterization for Rapid Heating Rates; Effect of Electrolyte on the Surface Smoothness Obtained by Electropolishing of Stainless Steel; Effective Utilization of Rapid Prototyping Technology
Experimental Analysis of Laser Micro-Machining Process Parameters
FEA of the Influence of Assembly Parameters on the Fatigue Life of Metal-Composite Bolted Joints; FEM Modeling and Experimental Analysis of AA6082 Processed by ECAE; Geometry Modelling of Clads Generated by Laser Cladding; Kerf Profile Modelling in Abrasive Waterjet Milling; New Technologies for Increasing the Capacities of WEDM Machines; Numerical Analysis of the Stress/Strain Evolution in Incremental Sheet Forming and Stretch-Bending Processes; Parameter Study on Laser Surface Finishing with 2D Scan Head
Shiphull Welding: Trajectory Generation Strategies Using a Retrofit Welding Robot
Study of the Proper Sintering Conditions of Anionically-Polymerized Polyamide 6 Matrices for the Fabrication of Greencomposites; Surface Topography Prediction on Laser Processed Tool Steel; Tensile Ductility of Electron Beam Welded Titanium Alloys; Theoretical Model of a Multi-Layered Polymer Coated Steel-Strip Ironing Process Using a Neural Network; Two FEM Thermal Models for Shallow and Deep Grinding; Keywords Index; Authors Index

Sommario/riassunto

This work presents the most recent Advances in Non-Conventional Materials Processing Technologies presented at the 4 th Manufacturing Engineering Society International Conference (MESIC2011), held during September 2011 in Cadiz, Spain. Here, Forming, Simulation, Laser, Water-Jet, Rapid Prototyping, WEDM, Grinding and Additive Manufacturing Technologies are, among others, the main topics to be found in this book, which is aimed especially at manufacturing engineers who work in the above fields. Review from Book News Inc.: Non conventional technologies rather than materials or processes are the
