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Nota di contenuto	Advanced Manufacturing Technologies and Material Properties; Preface; Table of Contents; Chapter 1: Advanced Material Technologies and Machining; Experimental Study on Milling Force of Nickel-Based High-Temperature Alloy GH3039; Non-Destructive Testing of Polycrystalline Silicon Solar Panel by Scan Acoustic Microscopy; Process Experimental Research of Micro-Hole in Electrochemical Micromachining by Nanosecond Pulse Current; Study about Formation Mechanism of Red Spark Discharge of Micro-Arc Oxidation By External Forces Based on the Equivalent Moment Method for the Installation of an Electronic Radar Rod Deflection Grinding Technology for Engineering Ceramics - A Review; Chapter 2: Tribological Materials Properties, Friction, Wear and Strength; A Study on the Structure and Properties of Metal Framework Steering Wheel Coated with Polyurethane; Fabrication and Fracture Analyses of SiC Particulate-Reinforced Al Matrix Composites; Microstructure and Properties of Laser Cladding Co-Based Alloy Layer; Study on Friction and Wear of Several Metal Materials under Oil Lubrication The Evaluation of Tool Wears in Machining of SiCp/Al Composites Tribological Properties of Ceramics Tool Materials in Contact with Wood-Based Materials; A New Technology of Aircraft Structural Health Monitoring; Crowned Profile Design of Roller Bearings Used in Rolling Mill Based on Three Dimension FEA; Chapter 3: Advanced

Manufacturing Technologies and Equipment, Mechanical Engineering;
Preliminary Study on the Effect of Mass-Induced Damping on Machining
Delicate Work piece Geometry; Research and Development on the Query
Systems of NC Machining Process
Research on the Process of Numerical Control Electrochemical Turning
Based on Finite Element Method Simulation Design of a Novel Algorithm
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Element Analysis of Bending Stress in the Meshing Process for Internal
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Study on Intelligent Controller of Permanent Magnet Synchronous
Motor; The Analysis of Materials Flow and the Environmental Protection
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Cluster; The Application of Image Recognition Based on BP Neural
Networks in Automatic Steel Rolling; Analysis of Mechanophysical
Properties of Fritillaria ussuriensis Maxim and Designing of Grade Sieve
Machine
Study on Building Model and the Dynamic Characteristics Based on
Hydraulic Circuit of Throttle Governing System

Sommario/riassunto

The present volume comprises a collection of peer-reviewed papers covering engineering & technology, material science and technology in manufacturing including artificial material, forming, novel material fabrication, green manufacturing and other related topics. This work will be invaluable to production and research engineers, and also to research students and academics interested in the field. Invited and peer-reviewed papers cover advanced material technologies and machining; tribological materials, friction, wear, and strength; advanced engineering manufacturing technologies and equipment
