Record Nr. UNINA9910462521003321 Digital design and manufacturing technology II: selected, peer **Titolo** reviewed papers from the 2011 Global Conference on Digital Design and Manufacturing Technology, January 23-25, 2011, Hangzhou, China // edited by Congda Lu Pubbl/distr/stampa Durnten-Zurich, Switzerland:,: TransTech,, [2011] ©2011 **ISBN** 3-03813-589-5 Descrizione fisica 1 online resource (423 p.) Collana Advanced materials research, , 1022-6680; ; volume 215 Altri autori (Persone) LuCongda Disciplina 670.4275 CAD/CAM systems Soggetti Manufacturing processes - Automation Manufacturing processes - Data processing Production control - Automation Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Digital Design and Manufacturing Technology II; Sponsors, Committees and Preface; Table of Contents; Stamping and Springback of PEMFC Metal Bipolar Plate; Numerical Simulation for Temperature Field of ZK60 Magnesium Alloy Sheet Butt-Welded in GTAW Hybrid a Longitudinal Electromagnetic Field; Analysis of Cutting Forces in Helical Milling Process; Cutting Performance of Carbon Fiber Reinforced Plastics Using PCD Tool; Numerical Simulation of a Novel Bipolar Plate Flow Field of Proton Exchange Membrane Fuel Cell Influence of Quenching Temperature on Microstructure and Properties of 40Cr Steel by Zero Time Holding Quenching Dumping Tags Based on Active RFID: Research on Built-in Adaptive Drilling: Implementation and Application of Involute Profile Track Processing in General CNC System; Interactive System for T-Learning: Introduction of iTV Edutainment Mode; Methods of Evaluation the Uniformity in the Lapping Process;

Thermal Error Modeling and Compensation for an INDEX-G200 Turning Center; Research into the Interactive Design of Touch-Screen Mobile

Phones' Interface Based on the Usability

Technology of Bipolar Plate Flow Field's Geometric Design and Processing of Proton Exchange Membrane Guel Vell Comparison of Two Modes in Engineering Drawing Teaching: Traditional Teaching and Multimedia Network Teaching; Research on Auto-Grinding Free-Curved-Surface of Molds Based on Fussy Control; An Ontology Approach for Manufacturing Enterprise Data Warehouses Development; Situations of Fluid Polishing Processes for Ultra-Smooth Surface; Dynamic Analysis of a High-Speed Grinding Spindle; Study on the Radial Vibration of an Annular Plate Ultrasonic Concentrator with Edge Section

Research on Improved Control Method of Electromagnetic Clutch in the Tufted Carpet Jacquard System A Petri-Net Approach for Modeling Product Configuration Problems under Mass Customization; Preemptive Open-Shop Scheduling: Network Flow Based Algorithm; Virtual Manufacturing and Simulation of Transplanting Mechanism with Non-Circular Gears; Application of Visualization in Scientific Computing Technology; Analysis for Softness Abrasive Flow Field of the Greater Curvature of Small Size Tube; Study on the Leisure Chair Design of Elderly People

Product Ergonomics Design Driven by Parametric Human Body Model Research of Mine Hoist Distributed Collaborative CAE System; Research and Implementation of Design Reuse Based on Variant Design; Working Space Solution and Scale Fitting of a 5-Strut Parallel Machine with Swivel Joints; Research on Quality Knowledge Learning Oriented to Bearing Manufacturing Process; Parameterization Design and Virtual Assembly of a Jet Pump; Based on Pro/E Construction Method of Spiral Bevel Gear Logarithm; Study of Product Innovative Design Methods Based on Idea Emergence Mechanism

Machining of Free-Form Surface Base on Cutter Shaft Tilt Method with Ball-End Cutter

Sommario/riassunto

The rapid growth in digital design and manufacturing processes brings with it some work-flow challenges. While the various existing products provide an ideal solution to most of the steps in the process, more dedicated and integrated systems are sometimes required; raising the question of how best to handle the incoming data and orders, automate the design and possibly the engineering, make robust plans, manage the process and data and deliver quality goods. This collection of peer-reviewed papers on digital design and manufacturing technology explains the ins-and-outs of CAD/CAM technologies