Record Nr. UNINA9910787022903321 Designing of industrial facilities and technologies: selected, peer **Titolo** reviewed papers from the 2014 2nd World Congress on Industrial Materials Applications, Products, and Technologies (WCIM 2014), July 7-8, 2014, Beijing, China / / edited by Dehuai Zeng Pubbl/distr/stampa Pfaffikon, Switzerland:,: TTP,, 2014 Enfield, New Hampshire: .: Trans Tech Publications Ltd., [date of distribution not identified] ©2014 **ISBN** 3-03826-628-0 Descrizione fisica 1 online resource (385 p.) Advanced Materials Research, , 1662-8985;; Volume 1028 Collana 060 Disciplina Facility management Soggetti 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 at the end of each chapters and index. Designing of Industrial Facilities and Technologies; Preface and Nota di contenuto Committee; Table of Contents; Chapter 1: Advanced Materials; Preparation and Swelling Characteristics of Hydrogel from Microbial Low Molecular Weight Poly(-Glutamic Acid); Effect of Meso-Submissions to Electronic Structure and Optical Properties of Ruffled Si Porphyrins Relatives: Age-Hardening Behavior of Pd-Ag-Sn-In-Zn Alloy; Study on Properties of Hard Twist Cotton Yarn; Influence of Fabric Structure on Shielding Effectiveness of Anti-Electromagnetic Radiation Fabric A Molecular Dynamics Study of Fe Adatom Diffusion on Different Sized Fe Nanoparticles The Migration Behaviors of Individual Fe Adatom on Fe Nanoparticle: Preparation and Properties of Capric-Lauric-Palmitic Acid Eutectic Mixtures/Expanded Graphite Composite as Phase Change Materials for Energy Storage; The Application of New Material Development and Research in the Badminton Lines; Analysis of the Cool Bending Fracture of HRB400; Chapter 2: Material Processing Technology; Study on Data Analysis System of Multi-Information in Arc

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Discussion for the Calculation of Carbon Content and Heating Temperature in Austenitizing of Cast Iron DEFORM-Based Analysis and Discussion of Early Failure in Warm Extrusion Dies; Numerical Analysis of Sheet Metal Forming Limit for Local Forming; Research on the Synthesis and Characterization of a Novel Dendritic Thickening Agent; Effects of Laser Cladding Process on Cladding Layer Qualities of Nickel-Base Alloy; Prediction of Plastic Injection Shrinkage Ratio Using Grey Theory; Chapter 3: Designing and Manufacturing Technologies in Mechanical Engineering

Pre-Stressed Modal Analysis of the Shaft Based on ANSYS Workbench Research on Influencing Factors of Manufacturing Listed Companies' Working Capital Policy in China; Stability Analysis of Rectangular Thin Walled Structure under Nonlinear Distributed Stress; Testing Methods Selection for X-Ray Radiation Performance Index of Micro-Dose X-Ray Transmission Body Scanner: Design and Research of Synchronous-Style Clamping Mechanism for Cable-Detecting Robot: Study on Rigidity of Aluminum Alloy Portal-Type Frame Based on Finite Element Method; Fuzzy Yield Index for Optimal Tool Replacement Policy Reliability Modeling on Time between Failures of NC Machine Tools Performance Comparison of the Fabricated Planet Carrier and the Integral Planet Carrier: Numerical Analysis of Elastic Rod Boundary Conditions: Damage Detection Using Lamb Waves (Review): Research on Health Status and the Human Factors and Environmental Parameters of Special Equipment Maintenance Decision; Chapter 4: Automation and Mechatronics; The Chopping Voltage Regulation System Based on PLC Control; The Research on the Error Correcting Method for Acoustic Measurement the Missing Distance of Moving Areal Target Control Strategy Used on UAV Motion System

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 2nd World Congress on Industrial Materials Applications, Products, and Technologies (WCIM 2014), July 7-8, 2014, Beijing, China. The 66 papers are grouped as follows: Chapter 1: Advanced Materials, Chapter 2: Material Processing Technology, Chapter 3: Designing and Manufacturing Technologies in Mechanical Engineering, Chapter 4: Automation and Mechatronics, Chapter 5: Building Materials and Construction Technology, Chapter 6: Product Design, Chapter 7: Agriculture and Food Industry