Record Nr. UNINA9910974428803321 Biomechanics, Neurorehabilitation, Mechanical Engineering, **Titolo** Manufacturing Systems, Robotics and Aerospace: selected, peer reviewed papers from the 3th (sic) International Conference on Biomechanics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace, October 26-28, 2012. Bucharest, Romania / / edited by Adrian Olaru Stafa-Zurich; Enfield, NH:,: Trans Tech Publications, [2013] Pubbl/distr/stampa ©2013 **ISBN** 9783038139355 3038139351 Edizione [1st ed.] Descrizione fisica 1 online resource (358 p.) Collana Applied mechanics and materials; v. 245 Altri autori (Persone) OlaruAdrian Disciplina 620.1 Soggetti Aerospace engineering Space robotics Intelligent control systems 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 indexes. Nota di contenuto Biomechanics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace: Preface: Table of Contents: Invited Papers: Robotics for Neurorehabilitation: Current State and Future Challenges; Healthier by Safe Persuasion; Hybrid Force-Position Dynamic Control of the Robots Using Fuzzy Applications; Optimization of the Robots Fourier Spectrum by Using the Assisted Research, Neural Network, Smart Damper and LabVIEW Instrumentation; Spartacus IV Auto - Pilot System Presentation Customised for EADFP Platform: About Buckling Bio-Composite Sandwich Bars An Analitical Approach Regarding the Choose of Integration Time and Gain Values during a Thermal Camera Calibration Chapter 1: Biomechatronics and Neurorehabilitation; Computational Modeling of Interaction of Dental Implant with Mandible; Contribution to Analyze

and Modeling of the Hand; Evaluation of Surface Roughness Variations

of Solid Dosage Forms in Simulated Physiological Conditions; Study of Straight and Oblique Mandible Fracture Behavior in the Chin Section; Stress-Strain Analysis of Hip Joint after Application of Total Hip Arthroplasty with Consideration of Wear

Rapid Prototyping of a Hand Model for Rehabilitation Selection of Proper Cells Using Connected Components Tracking Algorithms; Chapter 2: Mechanical Engineering; A Novel Variable Impedance Compact Compliant Series Elastic Actuator: Analysis of Design, Dynamics, Materials and Manufacturing; PWM Controlled Proportional Equipment; Results Concerning the Combustion of Liquid Biofuels; How to Enhance Efficiency and Accuracy of the Over-Deterministic Method Used for Determination of the Coefficients of the Higher-Order Terms in Williams Expansion

Effect of Variable Fiber Spacing on Post-Buckling of Boron/Epoxy Fiber Reinforced Laminated Composite Plate Study Concerning the Effect of the Bushings' Deformability on the Static Behavior of the Rear Axle Guiding Linkages; Micro-Crack Propagation in Particulate Composite with Different Types of Matrix; Large Amplitude Vibration Analysis of Composite Beams under Thermal Stresses: Closed-Form Solutions: Dynamic Modelling and Simulation of an Auto Vehicle Steering Mechanism Considering its Elements as Flexible; Expert System for Designing Shaft-Bearing-Gear Transmission Assemblies Chapter 3: Manufacturing Systems Assessment of Engine Deterioration Based on Oil Fe Data: Model Driven Key Performance Indicators Concepts for Manufacturing Execution Systems; Operations Management in Water and Wastewater Treatment Plants; Drive of Extreme Transport Technique: Experimental Investigation of Cutting Forces at Milling Titanium Alloys Comparing to Others Hard Alloys: Material Handling Mechanisms Used in Flexible Manufacturing Systems; Mechanical Enhancement of Carbon Fiber/Epoxy Composites Based on Carbon Nano Fibers by Using Spraying Methodology Generation of the Storage Costs Function Using Neural Networks

Sommario/riassunto

The main objective of the special collection of 53 peer-reviewed papers was to gather some of the current knowledge from leading researchers, engineers and scientists in the field of: Biomechanics, Biomechatronics, Neurorehabilitation, Mechanical Engineering, Manufacturing Systems, Robotics, Aerospace.