

1. Record Nr.	UNINA9910789474103321
Titolo	Mechanics, simulation and control III : selected, peer reviewed papers from the 2013 International Conference on Mechanics, Simulation and Control (ICMSC 2013), June 22-23, 2013, Kanyakumari, India / / edited by K.M. Gupta
Pubbl/distr/stampa	Durnten-Zurich : , : Trans Tech Publications, , [2013] ©2013
ISBN	3-03826-169-6
Descrizione fisica	1 online resource (555 p.)
Collana	Applied mechanics and materials ; ; 367
Altri autori (Persone)	GuptaK. M
Disciplina	620.0044
Soggetti	Automatic control Mechanical engineering - Computer simulation
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	Mechanics, Simulation and Control III; Preface and Committees; Table of Contents; Chapter 1: Advanced Materials Engineering and Technologies; Investigation of Electrohydrodynamic Patterning of Micro Structures at Room Temperature; In Situ Polymerization of Polyaniline/Viscose Fiber; Hard Template Synthesis of Mesoporous and Nanocrystalline Alkali Metal Niobates with Enhanced Photocatalytic Performance; Effect of Sulfur and Chlorine on the Speciation of Mercury in Coal; Study of Hydrothermal Synthesis of Analcime Phase Transition Behaviors and Thermal Conductivity of Ge Doped Sb ₂ Te Thin Films for Phase Change Random Access Memory Influence of the Gas Environment on the Transferred Film of the Tribologic Brass (CuZn)/XC48 Steel COUPLE; Artificial Neural Network Model: Prediction of Mechanical Properties in Beta-Titanium Biomaterial; Adsorption Kinetics of Pb ²⁺ Ions Using Chitosan Nanoparticles; Synthesis Na-Y Zeolite by Hydrothermal; Chapter 2: Mechanical Engineering and Design, Applied Mechanics; Numerical Simulation of Turbulent Transport and Structures in Temporally Developing Plane Mixing Layers The Effect of Cusp Contact in the Meshing Process for Internal Gear Pairs with few Teeth Difference Dynamic Stability and Natural Frequency of Composite Corrugated Bellows Expansion Joint; Finite Element

Analysis of the Material Properties' Influence on Tire/Road Contact Pressure and Area; Formalism for Determining the Force and Torque on a Sphere Moving in a Quiescent Fluid at Arbitrary Reynolds Numbers; Finite Element Investigation of Stress Intensity Factors of Multiple Semi-Elliptical Surface Cracks in Solid Shaft
 Parametric Studies on Weld Penetration on Plate of Aluminium Alloy 6061-T6 Using FEM Simulation Design of Fault Tolerant Control Laws for Jet Engines; Design Maps and Shape Optimization of a Prototype Vehicle Chassis; Elasticity Based Stress Analysis under Arbitrary Load using Fourier Series; Modelling of Multi-Axial Ultimate Elastic Wall Stress (UEWS) Test for Glass Fibre Reinforced Epoxy (GRE) Composite Pipes; Modeling and Simulation of Dynamic Property of Vehicle Frame Based on Finite Element Method; The Finite Element Analysis of New Forged Coupler Knuckle
 A Transform Free Higher Order Compact Finite Difference Scheme for Simulating the Flow behind a Rotationally Oscillating Circular Cylinder at Reynolds Number 500 Kinematic Simulation of a Novel RV-Planet Gear Drive with Small Teeth Difference Used in Wind Turbine; The Edge Effect and Longitudinal Modification of Involute Gear Drive Used in Automobile; Finite Element Analysis of the Roller Bearing Used in Rolling Mill; Topology Optimization for the Light Rail Vehicle Body Based on Sub-Structure Technology; Green Design for Concurrent Engineering in Agriculture Machinery
 Finite Element Formulation for the Vibration Analysis of Couple-Stress Continuum

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Mechanics, Simulation and Control (ICMSC 2013), June 22-23, 2013, Kanyakumari, India. The 99 papers are grouped as follows: Chapter 1: Advanced Materials Engineering and Technologies; Chapter 2: Mechanical Engineering and Design, Applied Mechanics; Chapter 3: Electrical Engineering and Electric Machines; Chapter 4: Power System and Electronics, Energy Engineering, Its Applications; Chapter 5: Instrumentation, Measurement Technologies, Analysis and Methodology; Chapter 6: Modern Control, Automation
