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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Intelligent Materials, Applied Mechanics and Design Science; Preface and Committee; Table of Contents; Chapter 1: Intelligent Materials, Energy Science and Dynamic System; Gear Fault Diagnose Based on Ensemble Empirical Mode Decomposition and Instantaneous Energy Density Spectrum; Numerical Analysis of Nonlinear Behaviors of a Flexible Rotor Dynamic System with Turbulent Journal Bearings Support; Dynamic Path Planning Algorithm Based on Chaos Genetic Vehicle Navigation; The Hybrid Genetic Algorithm of Single-Machine Materials Manufacturing Process with Periodic Maintenance The Improved Design of Some Shrunk Super High Pressure Cylinder Based on Equal Strength TheoryDesign of Ultra-High Pressure Cylinders Based on Principle of Autofrettage; The High Resolution Lunar Planet DEM Based on the Altimetry Data of 400-Circle CE-1 Laser Altimeter (2B); Effect of Ammonium and Nitrate Ratios on Growth and Yield of Chinese Kale; Effect of the Nitrogen Nutrient on Pigments of Flower Stalk in Chinese Kale; Process Parameters Optimization on Ultrahigh

Pressure Extraction of Pesticide Residues in Vegetables  
 Impact Analysis of Ultrahigh Pressure Treatment Pesticide Residues in Vegetables on near Infrared Spectroscopy Detection Investigation of Solidification Characteristics of Resin for Integral Stereolithography System; Simulation and Analysis of Optimization Process Parameters for Multi-Cavity Injection Molding Parts Warpage by Genetic Algorithm Method; Study on the Panel Fabrication for the Field Emission Display with Symmetrical Electrode Stripe; Fabrication and Properties of Short-Stripe Insulation Wall in a FED Panel; The Design and Realization of Automation Stamping Machine System  
 Analysis and Achievement of the Leak Detection of High Vacuum System on Magnetron Sputtering Equipment Stress Analysis and Modal Analysis of Robot Manipulator; Study of Vice-Steering Control System for Training Car; The New Progress of Cadmium Sulfide Synthesis; Microstructure and Properties of Zirconia-Mullite Nanocomposites Obtained from Si-Al-Zr-O Amorphous Bulks Doped with CaO and MgO; Chapter 2: Intelligent Materials, Design Science and Applied Mechanics; Optimization for Heat Treatment Process of Supercritical Material F92Steel; Design of Automatic Assembly Tire Machine  
 The Comparative Trail Research on the Performance of a Diesel Engine Fuelled with Diesel Fuel and Biodiesel/Diesel Blended Fuel Non-Linear Dynamic Stability of Shallow Reticulated Spherical Shells; Effect of Calcium Nutrient on Calcium Distribution and Ultrastructure of Cell and Chloroplast in Bunching Onion Leaf; Effect of Water Stress Induced by PEG on Growth and Quality of Bunching Onion; C13 NMR Spectrum Analysis of Perfluoro Polyethers (PFPE) of Fluorocarbon-Based Magnetic Fluid's Base Liquid; Strain Sensing Behaviour of PPy-Coated XLA Fibers Calculation for Equivalent Nodal Force of Prestress in 20 Nodes Isoparametric Element

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#### Sommario/riassunto

In these proceedings are to be found many original ideas and new points of view concerning Intelligent Materials, Applied Mechanics and Design Science. They offered an excellent opportunity for researchers to exchange their innovative ideas and new perspectives, and the resultant contents will provide invaluable guidance to scientists, physicists, chemists, lecturers and others, worldwide. Review from Book News Inc.: The 56 peer-reviewed and selected papers consider such topics as the effect of ammonium and nitrate ratio on the growth and yield of Chinese kale, stress analysis and modal analysis

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