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Collana	Applied Mechanics and Materials, , 1662-7482 ; ; Volume 709
Disciplina	670.285
Soggetti	Manufacturing processes - Data processing Manufacturing processes - History Manufacturing processes - Technological innovations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes indexes.
Nota di contenuto	Designing and Researching of Machines and Technologies for Modern Manufacture; Preface, Committees and Sponsors; Table of Contents; Chapter 1: Designing and Researching of Machines and Equipments for Manufacture; A New Fixture for Automobile Belt Tensioner Brace; Key Technology Research on Dynamic Design of a Large Vibrating Screen; Effect of Expansion Tube Structure on Regeneration of Diesel Particulate Filter; Effect of Temperature Distribution on Critical Speeds of a Dual-Rotor System Finite Element Analysis about Push Plates of Dismounting Coupler and Buffer from Passenger Train Base on ANSYS Structural Principle of Hydraulic Engine; The Mechanical Structure of a New Energy-Saving Pumping Unit Analysis by Pro/E; The Research of Stemming Making Jam Machine; The Strength Analysis of Francis Turbine Runner Based on the Fluid-Solid Coupling; Influence of Diversion Tunnels on Insulation Design of the High Temperature Pneumatic Duct; Vertical Assembled Sprayer for Supplying Water and Liquid Fertilizer; Rotating Detonation

Instabilities in Hydrogen-Oxygen Mixture

Dynamic Characteristics Optimization of Joint Interface of Machine Tool

Based on Porous Oily Materials Modeling Analysis and Experiment

Research on Rotary Motor Buffer Overflow Valve; Numerical Simulation

for Premixed Combustion of Multiple Ejection/ Tangential Burner;

Simulation Research of the Effect of Compression Ratios on

Combustion and Emission for Methanol/Diesel Dual Fuel Engine;

Experimental Research on Premixed Porous Media Combustion in

Multiple Ejection/Tangential Burner; Design of Pocket Dies for Metal

Extrusion Using the Finite Element Method

Chapter 2: Theory and Practice of Computational Mechanics About

Experience of Determining Stiffness and Strength Characteristics of

Structural Joints for Modeling Nonlinear Processes of Deformation and

Failure of Long Span Structures; Boundary Element Method with Runge-

Kutta Convolution Quadrature for Three-Dimensional Dynamic

Poroelasticity; About Verification of Wavelet-Based Discrete-Continual

Finite Element Method for Three-Dimensional Problems of Structural

Analysis Part 1: Structures with Constant Physical and Geometrical

Parameters along Basic Direction

About Verification of Wavelet-Based Discrete-Continual Finite Element

Method for Three-Dimensional Problems of Structural Analysis Part 2:

Structures with Piecewise Constant Physical and Geometrical

Parameters along Basic Direction Direct BEM for Three-Dimensional

Transient Dynamic Piezoelectric Analysis; Laplace Domain Boundary

Element Method for 3D Poroelastodynamics; Generalized Multiquadrics

with Optimal Shape Parameter and Exponent for Deflection and Stress

of Functionally Graded Plates; The Performance Comparison Analysis on

Hydraulic Muffler of Quality Room with Parallel Line

Fiber Orientation Angles Optimization for Maximum Fundamental

Frequency of Laminated Composite Plates by the Genetic Algorithm and

Meshless Method

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 3rd International Conference on Mechanical Design and Power Engineering (ICMDPE 2014), October 19, 2014, Jeju Island, Korea. The 109 papers are grouped as follows: Chapter 1: Designing and Researching of Machines and Equipments for Manufacture; Chapter 2: Theory and Practice of Computational Mechanics; Chapter 3: Mechatronics, Robotics and Control; Chapter 4: Advanced Materials Engineering and Processing Technologies; Chapter 5: Biomedical Engineering and Environmental Science; Chapter 6: Methods and Systems of Measurement, Testing an
