

1. Record Nr.	UNINA9910787025103321
Titolo	Advanced concepts in mechanical engineering II : selected, peer reviewed papers from a Collection of Papers from the 6th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2014), June 12-13, 2014, Iasi, Romania // edited by Ioan Doroftei, Cezar Oprisan and Aristotel Popescu
Pubbl/distr/stampa	Pfaffikon, Switzerland : , : TTP, , 2014 Enfield, New Hampshire : , : Trans Tech Publications Ltd, , [date of distribution not identified] ©2014
ISBN	3-03826-656-6
Descrizione fisica	1 online resource (637 p.)
Collana	Applied Mechanics and Materials, , 1662-7482 ; ; Volume 659
Disciplina	621
Soggetti	Mechanical engineering
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.
Nota di contenuto	Advanced Concepts in Mechanical Engineering II; Preface and Committees; Table of Contents; Chapter 1: Science of Materials and Processing Technologies; Micro-Alloying Influence on Hot Work Tool Steel Properties; Wear Resistance and XRD Analyses of CMoCuNiCrSiBO Coatings Obtained by Thermal Deposition on OLC45 Substrate; Wear Resistance and XRD Analyses of CNiCrSiBO Coatings Obtained by Thermal Deposition on OLC45 Substrate; Evaluation of Mechanical Properties of Polyester Composite with Graphene and Graphite through Three-Point Bending Test Corrosion Behaviour of a Cermet Deposited Coating in Sulfuric Acid Solution A Study on Plastic Deformations due to Contact Fatigue Wear on a Cermet Coating Deposited by Thermal Spraying Methods; Experimental Determination of the Yield Stress for Copper, Cu_99.75; Silicon Influence on the Cast Iron Structure; Influence of Cooling Rate on Metallographic Structure for Gray Iron, in the Case of Modification with a Mechanical Mixture of Al and FeSiCaMg; FEM Simulation on Uniaxial Tension of Hyperelastic Elastomers

Mathematical Modeling of the Relationship between the Surface Roughness and the Tool-Chip Interface Temperature in Turning
Experimental Studies for Reducing Flux Consumptions in Atmospheric Controlled Brazing of Aluminum Alloys; Comparative In Vitro Study on MgCa Si MgCaSi Alloys, as Biodegradable Implants; White Cast Irons with Acoustic Properties; Influence of the Degree of Cold Drawing over the Wear Test and XRD Analysis of Pipes Used for Dampers; Considerations Concerning the Causes and Effects of the Occurrence of Residual Stresses in Metallic Materials: A Review
Hybrid Particle/Fiber Polymer Based Composites Analysis Based on DMA Data vs. Material Property Predictions Some Considerations Concerning the Differential Scanning Calorimetry of Ultra Tough Plastic Materials; Surface Generation by Material Removal in Manufacturing Processes from Machine Building; Constitutive Parameters of Mechanical Behaviour Law for Poly (Ether-Ether-Ketone) Based Composites with Carbon Nanotubes and Carbon Fibres; Chapter 2: Design of Vehicles and Combustion Engines; Simulating the Torque and Angular Speed Distribution within a Heavy Vehicle's Planetary Gearbox
Using Neural Networks to Modeling Vehicle DynamicsA New Electric Drive System for a Disc Brake System Used in the Vehicle, Experimental Stand; Experimental Study on the Influence of Certain Parameters over Vehicle's Dynamic Behavior; Vehicle Dynamics Study under Uncertainty; Response Time to Sudden Changes in Speed and Load Regimes for Turbocharged Diesel Engine; Aspects of Modeling and Optimizing Air Circulation Currents in a Car Cabin; Simulation of the Free Piston's Movement from the Single Regime Running Thermo-Hydraulic Generator
Human Head-Neck System Behavior during Virtual Impact Automotive Simulations

Sommario/riassunto

Collection of selected, peer reviewed papers from the 6 th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2014), June 12-13, 2014, Iasi, Romania. The 104 papers are grouped as follows: Chapter 1: Science of Materials and Processing Technologies, Chapter 2: Design of Vehicles and Combustion Engines, Chapter 3: Applied Thermodynamics and Heat Transfer, Renewable Energy, Engineering of Thermal Systems, Chapter 4: Technologies and Machines in Agriculture and Food Processing, Chapter 5: Applied Computational Methods in Design and Modeling, Chapter 6: Engineering Manag
