Record Nr. UNINA9910787025403321 **Titolo** Frontiers of energy, materials and information engineering: selected, peer reviewed papers from the 2014 International Conference on Frontiers of Energy, Materials and Information Engineering (ICFMEI 2014), August 21-22, 2014, Hong Kong / / edited by Jimmy (C.M.) Kao, Wen-Pei Sung and Ran Chen Pfaffikon, Switzerland:,: TTP,, 2014 Pubbl/distr/stampa Enfield, New Hampshire:,: Trans Tech Publications Ltd,, [date of distribution not identified] ©2014 **ISBN** 3-03826-661-2 Descrizione fisica 1 online resource (1922 p.) Advanced Materials Research, , 1662-8985;; Volumes 1044-1045 Collana 620 Disciplina Soggetti Engineering Engineering - Technological innovations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Frontiers of Energy, Materials and Information Engineering; Preface, Committees and Co-Sponsors; Table of Contents; Chapter 1: Materials and Chemical Engineering and Technologies: A Kind of Novel Dual-Core High Birefringence Photonic Crystal Fiber; Application of a New Type of Fiber in Knitted Garment Industry; Bioactivities of Mimosa pudica and Phyllanthus niruri Crude Extracts Collected from the Locality of Chaiyaphum, Thailand; Composition and Microstructure of Cement-Like Materials Synthesized by Solution Combustion Technique Cure Characteristics and Mechanical Properties of ZnO Nanoparticles as Activator in Unfilled Natural Rubber Dispersion and Degradation of Polycarbonate/MWCNT Nanocomposites with Melt Extrusion; Effects of Build Orientations on Tensile Properties of PLA Material Processed by FDM; Effects of Preparation Parameters on Morphology of Cellulose Nanowhiskers; Electrochemical Behavior of Glucose Oxidase on Gold

Electrode Modified by Poly(3, 4-Ethylenedioxy-Thiophene);

Electrochemical Degradation of Benzene in Water Using Platinum

Supported on Carbon Black Materials

Experimental Research on Hard and Crack-Free Electro deposited Chromium Coatings Influence of Pouring Temperature on the Solidification Characteristics of A357 Aluminium Alloy; Interactions between TiAl and ZrO2 Face Coat during Centrifugal Investment Casting; Investigation of Nucleation and Crystallization Behavior of Li2O-MgO-Al2O3-SiO2-MgF2 Glass-Ceramics System; Investigation of the Influence of Electrolytic-Plasma Processing on Structural-Phase State and Mechanical Properties of the 40CrNiAl Alloy; Nonlinear Simulation Analysis on Steel Concrete Composite Beam with Rubber Aggregate

Numerical Simulation of Semi-Solid Die Casting Technology of Bearing Cage Performance of an Maleic Anhydride Based Polymers as Scale Inhibitor and Iron (III) Scaling in Industrial Cooling Water Systems; Prediction of Solubilities for the Salt-Water System CaCl2-KCl-H2O at 348.15 K; Preparation of Helical Monosubstituted Polyacetylene@CdSe Quantum Dots Composite and its Application for Low Infrared Emissivity; Preparation of Photoluminescent ZnSe/PAMAM Nanocomposites; Simple Synthesis of Mesoporous SnO2 Microspheres and their Gas Sensing Properties

Study of Stress Distribution for Ceramic Materials in Human Denture by 3D Finite Element Model Study of the Attenuation Characteristic of Electromagnetic Waves in Plasma Sheath; Study on Mechanical Properties and Mechanism of Sisal Fiber Cement Mortar; Study on Preparation and Properties of Foam Rubber from Natural Rubber Ribbed Smoked Sheet Using Salt of Amino Alcohol and Carbonic Acid as Foaming Agent; Synthesis and Effect of DCCA on the Ambient Pressure Dried, TEOS-Based Silica Aerogel; Synthesis of Zeolite from Blast Furnace Slag Using Alkali Fusion with Addition of EDTA The Compatibility Research of the Organic Montmorillonites with SEBS

Sommario/riassunto

Collection of Selected, Peer Reviewed Papers from the 2014 International Conference on Frontiers of Energy, Materials and Information Engineering (ICFMEI 2014), August 21-22, 2014, Hong Kong. The 411 papers are grouped as follows: Chapter 1: Materials and Chemical Engineering and Technologies, Chapter 2: Power, Energy and Thermal Engineering, Environmental and Safety Engineering, Chapter 3: Civil and Building Engineering, Structural and Geotechnical Engineering, Applied Mechanics, Chapter 4: Mechatronics, Measurement and Detection, Control and Automation, Mechanics Applications, Chapter 5: Com