

1. Record Nr.	UNINA9910460561803321
Titolo	Advances in materials and materials processing V : selected, peer reviewed papers from the 2014 5th International Conference on Advances in Materials and Manufacturing (ICAMMP 2014), December 20-21, 2014, Fuzhou, China // edited by Zhengyi Jiang and Xianghua Liu
Pubbl/distr/stampa	Pfaffikon, Switzerland : , : Trans Tech Publications Ltd, , 2015 ©2015
ISBN	3-03826-817-8
Descrizione fisica	1 online resource (966 p.)
Collana	Advanced Materials Research, , 1662-8985 ; ; Volume 1095
Disciplina	670.42
Soggetti	Manufacturing processes Materials Electronic books.
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 indexes.
Nota di contenuto	Advances in Materials and Materials Processing V; Preface and Committee; Table of Contents; Chapter 1: Composites; Analysis of the Geometry and Microcracks of Kevlar/Epoxy Composites; Effect of Diamond Shape on Surface Roughness of Diamond/Cu Composites; Effect of Diamond Shape on Thermal-Physical Properties of Diamond/Cu Composites; Effects of Sintering Temperature on Microstructure and Wear Properties of Al <sub>2</sub> O <sub>3</sub> Particle Reinforced Al Composites; Preparation of Nickel-Based Al <sub>2</sub> O <sub>3</sub> -TiB <sub>2</sub> Composite Ceramic Powder The Influence of Sintering Temperature and Whisker Content on the Flexural Strength of Aluminum Borate Whisker Reinforced Aluminum Phosphate Composite Materials The Study of Composite Material of Al-C System; Chapter 2: Low-Dimensional and Nano-Materials; Atomistic Simulation on Buckling Behavior of Monolayer Graphene; Modeling and Simulation for Current-Illumination Characteristics of Carbon Nanotube; Preparation and Thermal Fatigue Behaviors of Silicon Nitride Nano-Ceramics; Study on Dispersion and Rheology of Particles in

## Water-Based Nano TiN Fluid

Transmission Performance of Water-Based Nano Fluid Based on Computational Fluid Dynamics-Cyclodextrin Modified Hybrid Magnetic Nanoparticles as an Adsorbent for Phenol Removal; The Preparation of ZrO<sub>2</sub> and the Influence of the Calcination Temperature; The Synthesis of Single-Crystal BiOI Nanoplates with {001} Facets Exposed; Chapter 3: Metal-Based Materials and Alloys; A Study on Mechanical and Fatigue Properties of a Stainless Steel; Development of 590MPa Grade Hot-Dip Galvannealed DP Steels; Effect of Annealing Temperature on Microstructure and Damping Capacity of Twin Roll Cast ZK60 Alloy Effect of Ca and Nd Alloying on the Microstructure of Mg-6Al-Ca-Nd Alloy Effect of Cu on the Electrochemical Corrosion Behavior of Sn-8Zn-3Bi Lead-Free Solder Alloy; Effect of Electropulsing Rolling on the Microstructure and Properties of Industrial Pure Titanium TA1; Effect of Er on Microstructure and Hardness of Al-Zn-In Alloy; Effect of Grain Size on Microstructure and Orientation of Fe-25Mn-3Si-3Al Steel; Effect of Nd on Primary Silicon and Mechanical Properties of Hypereutectic Al-17.5%Si Alloy; Experiment and Analyses on 16 Mn Steel under Cyclic Loading Controlled by Strain Experimental Study on the Effect of Retained Austenite on the Impact Toughness of a Low-Carbon Martensite Steel Galvanic Corrosion of 70-30 Copper-Nickel Alloy in Contact with Nickel-Aluminum Bronze in Simulated Deep Sea Environment; High Temperature Oxidation Investigation of Hot Roll Material with High-Speed Steel; Influence of Neodymium on Wear Resistance of Hypereutectic Al-Si Alloy; Influence of Pre-Deformation Strain on Recovery Performance of Ni<sub>47</sub>Ti<sub>44</sub>Nb<sub>9</sub> Alloy 8mm Pipe Joint Influence of Solution Treatment on the Microstructure and Mechanical Properties of an Deformed Al-12.7Si-0.7Mg Alloy

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### Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 5th International Conference on Advances in Materials and Manufacturing (ICAMMP 2014), December 20-21, 2014, Fuzhou, China. The 192 papers are grouped as follows: Chapter 1: Composites; Chapter 2: Low-dimensional and Nano-Materials; Chapter 3: Metal-based Materials and Alloys; Chapter 4: Building and Construction Materials; Chapter 5: Biomaterials and Technologies; Chapter 6: Chemical Materials and Technologies; Chapter 7: Material Testing, Characterization and Applications; Chapter 8: Surface Engineering and Coating Technology; Chapter

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