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Titolo	Advanced materials and processing technologies : IFMPT 2014 : selected, peer reviewed papers from the 2014 International Forum on Materials Processing Technology (IFMPT 2014), January 18-19, 2014, Guangzhou, China // edited by Seung-Bok Choi and Yun-Hae Kim
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Collana	Advanced Materials Research, , 1662-8985 ; ; Volume 900
Disciplina	670.42
Soggetti	Manufacturing processes Production engineering Materials
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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	Advanced Materials and Processing Technologies: IFMPT 2014; Preface and Conference Organization; Table of Contents; Chapter 1: Polymers, Rubber and Elastomers; Characterization of Thermal Reversible Cross-Linking Agents for Flexible Poly(vinyl chloride); Compressive Behavior of a Polyurea Elastomer; Progress in Development of Catalyst Systems for Coordinated Polymerization of Olefins; Study of Molecular Structure of Water-Soluble Phenolic Resin with Different Molecular Weight by Infrared Spectrum Synthesis of a Surfactant Hexadecyl Methyl Dihydroxyethyl Ammonium Bromide by a Non-Solvent Synthesis Method Study on Solvent Resistance of Ternary Plastic Alloys of PEEK/PEI/PES; Chapter 2: Metals and Alloys; A Novel Iron Oxidation Process in Zinc Leaching Solution by Ozone; Corrosion Behaviors of Mg-7Gd-5Y-1Nd-0.5Zr Alloys in CO <sub>2</sub> Atmosphere under Different Relative Humidity; Effect of Rotating Magnetic Field on Fluid Convection and Microstructure during Directional Solidification of Sn-Zn Alloy; Experiments on Effect of Red Mud-Based Slag on Distribution of Sulfur in Liquid Iron Influence of Niobium or Molybdenum in Titanium Alloy for Permanent

Implant Application Inner Connection of Bainite and Pearlite Transformation in Steels; Research on Impact Fracture and Microstructure of 40Cr Steel under Different Tempering Conditions; Simulation and Optimization of Flow Field in the Mold of Slab Continuous Casting; Study on Fe-Mn-Si Shape Memory Alloy Anti-Loosening Bolt; Study on the Forming Accuracy of TRIP Steel Products in ISF; The High Temperature Oxidation Behavior of Hot-Dip Aluminized GH169

Effect of Different Tempering Temperatures on Microstructure and Impact Property of 20CrMnTi Steel Relationship between Heat Treatments and Corrosion of Al-Si-Mg Casting Alloy; The Effect of Process Parameter on the Second Phase Particles in Al-Ti-B Master Alloys; The Modification Research of Al-Ti-B Master Alloy (Progress); A Closed Form Solution for Wave Propagation in a Rectangular Waveguide Filled with Time-Varying Media; Chapter 3: Ceramics; Effect of Sintering Temperature on Microstructure and Electrical Properties of (1-x)BCZT-xBY Lead-Free Ceramics

Fused Silica Ceramics and Composites for Radome

Applications Research Progress of Al<sub>2</sub>O<sub>3</sub> Based and Si<sub>3</sub>N<sub>4</sub> Based Ceramic Tool Materials; The Influence of Sintering Atmosphere and Reoxidation Temperature on the Electrical Properties of the Chip-Type Ba<sub>1-x</sub>Sm<sub>x</sub>TiO<sub>3</sub> Based Ceramics; Chapter 4: Composites; Microstructure and Mechanical Properties of Mg-Based Composites Reinforced with TiB<sub>2</sub> Particles; Preparation and Properties of Organosilicon-Modified Acrylate Resin; Preparation of Functional Particles Modified Epoxy Multilayer Composite and their Radiation Shielding Properties The Influences of Holmium on Microstructure and Properties of In Situ Mg<sub>2</sub>Si/Al Composites

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#### Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 International Forum on Materials Processing Technology (IFMPT 2014), Februar 15-16, 2014, Guangzhou, China. The 163 papers are grouped as follows: Chapter 1: Polymers, Rubber and Elastomers, Chapter 2: Metals and Alloys, Chapter 3: Ceramics, Chapter 4: Composites, Chapter 5: Micro/Nano Materials, Chapter 6: Optical/Electrical/Magnetic Materials, Chapter 7: Energy Materials and Research, Chapter 8: Biomaterials, Chapter 9: Chemical Materials and Testing Technology, Chapter 10: Films, Chapter 11: Building and Road Materials, Construction

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