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Titolo	Advances in metallurgical and mining engineering : selected, peer reviewed papers from the International Conference on Chemical, Material and Metallurgical Engineering (ICCMME 2011), December 23-25, 2011, Beihai, China / / edited by Hongxi Zhu and Linjiang Wang
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Collana	Advanced Materials Research, , 1022-6680 ; ; Volume 402
Altri autori (Persone)	ZhuHongxi WangLinjiang
Disciplina	669
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Advances in Metallurgical and Mining Engineering; Preface and Organizing Committee; Table of Contents; Chapter 1: Metallurgical Physical Chemistry; Molecular Identification of a Strain Acidithiobacillus Ferrooxidans and its Biological Characteristics; Kinetics of Leaching Vanadium with Sulfuric Acid from Carbonaceous Shale Containing Vanadium; Influencing Factors and Mechanism of Cobalt Redissolution from Zinc Sulphate Solution; Modeling Investigation of the Oxidation Kinetics of Copper and Aluminum Alloys Determination of Surface Tension of the Freeze Slag in Reaction Shaft of Flash Smelting Furnace Calculating Model of FetO Activity in Alkali-Containing BF Slag; Recovery of Valuable Metals from Copper Slag by Hydrometallurgy; Effect Evaluation of Inhibitor to Barium Sulfate and Strontium Sulfate; Physical Simulation on the Liquid Metal Flow in FC-Mold of Slab Continuous Casting; Mechanism of Precipitate Removal of Arsenic and Bismuth Impurities from Copper Electrolyte by Antimony; Leaching Kinetics and Separation of Antimony and Arsenic from Arsenic Alkali Residue Research on Detoxifying Treatment to Chromium Slag Comparison

Study of the Electrochemical Behavior of Vanadate in NaOH and KOH Solutions; Analysis of Factors Affecting Carbon Content Detection of Ferrochrome Alloy Using LIPS Method; Detection of Carbon in Ferroalloy Using Internal Standard Method Based on LIBS; Chapter 2: Ferrous Metallurgy; Numerical Simulation of Flow-Induced Wall Shear Stress of a One Strand Tundish Design; Experimental Investigation of the Viscosities of High Titanium Containing Slags with Low Mass Ratio of CaO to SiO2
Application of Data Mining in BOF Steelmaking Endpoint Control so thermal Experimental Study on the Effects of Converter Bath Shape on the Melt Mixing; Migration Principle of Chlorine in BF Production; Causes and Countermeasures of Cracking in Cogging Process of 40Cr Bloom; Application of Simulated Annealing Algorithm in Sintering Burdening Optimization; Influence of Casting Speed on Solidification Process and Solidification Structure of Continuously Cast Bloom; Effects of Operation Parameters on Desulphurization of Hot Metal with Passive Magnesium and Calcium Oxide in CSP Plant of WISCO
High-Temperature Oxidation Kinetics of Galvalume-Coated Steel Sheet Influence of Hollow Electrode Ar-CH4 Co-Injection on Temperature in a Ladle Furnace with Alternating Current Supply; MEST of Round Blooms with Different Foot Roll Pitch Designing for Peritectic Steel Casting; Research and Application of the New Technologies on Blast Furnace at Shougang Qiangang Plant; Numerical Simulation and Optimization Practice of Oxygen Lance for Converter Steelmaking; Research on Thermal State of Mould Copper Plate with Different Heat Transfer Coefficient
Study on the Influence Factor of the Caustic Calcined Dolomite Based Compound Desulfurizer Melt Point

Sommario/riassunto

The present 168 peer-reviewed papers are grouped into 8 chapters: Metallurgical Physical Chemistry, Ferrous Metallurgy, Metallurgy of Non-Ferrous Metals, Metallurgical Materials and Environmental Engineering, Mineral Processing, Mining Engineering, Mining Environmental Engineering, Mine Surveying and Safety Engineering. The contents will be of great interest to anyone working in these fields.
Review from Book News Inc.: Over 150 papers cover metallurgical physical chemistry, ferrous metallurgy, the metallurgy of non-ferrous metals, metallurgy materials and environmental engineering, mineral pr