

Contents

Ironmaking

- Reduction Rate Analysis of Dense Wustite in Consideration of CaO Enrichment at Reaction Interface
T. INAMI and K. SUZUKI 571

Surface Treatment and Corrosion

- Microstructural Analysis of Rust Layers on Weathering Steels Exposed at Rural and Coastal Areas
M. YAMAMOTO, H. KATAYAMA and T. KODAMA 578
- Effect of Small Amount of Inorganic Additives on the Lightness and the Gloss of
Electrogalvanized Steel Sheets/H. NAKANO, S. OUE, M. IWAI, T. AKIYAMA and H. FUKUSHIMA 584

Transformations and Microstructures

- Nucleation Kinetics in Materials with a Time-independent Driving Force during Phase Transformation
Y. SAITO, M. HONJO, K. MORIMOTO, T. KONISHI and A. KITADA 591

Mechanical Properties

- Effects of Striker Shape and Attached Position of Strain Gage on Measured Load in
Instrumented Charpy Impact Test/T. KOBAYASHI, M. OTANI, S. MORITA and H. TODA 595
- Tensile Properties and Cyto-toxicity of New Biomedical β -type Titanium Alloys
D. KURODA, M. NIINOMI, H. FUKUI, M. MORINAGA, A. SUZUKI and J. HASEGAWA 602
- Heat Treatment Processes and Mechanical Properties of New β -type Biomedical Ti-29Nb-13Ta-4.6Zr
Alloy/D. KURODA, M. NIINOMI, H. FUKUI, A. SUZUKI and J. HASEGAWA 610
- Effect of Solute Mo and W on Transient Creep Deformation of High-Cr Ferritic Steels
Y. KADOYA and E. SHIMIZU 617

New Materials and Processes

- Design of Ultrasonic Field in Liquid Metal Processing
S. HATANAKA, M. KUWABARA and S. ASAI 625

Social and Environmental Engineering

- Production Mechanisms of Bloom and Pig Iron by a Small "Tatara" Furnace
K. NAGATA 633