

Contents

Lecture	Introduction to Solidification of Metals (IV) / K. GUNJI	N371
Commentary	Outlook of Work Rolls in Hot Strip Finisher for Steel Rolling / J. KIHARA	N386
	Kinetic Analysis on Gaseous Reduction of Agglomerates, Part2, Rate Parameters Included in the Mathematical Model for Gaseous Reduction of Agglomerates / T. MURAYAMA, T. USUI, M. NAITO and Y. ONO	493
Research Note	Complex Oxides between BaO and CrO_x at an Oxygen Partial Pressure of 0.25 Atm T. INOUE, H. FUJIWARA and M. IWASE	507
Paper	Activities of Constituents in FeO · Cr₂O₃-MgO · Cr₂O₃ Spinel Solid Solution M. HINO, K. HIGUCHI, T. NAGASAKA and S. BAN-YA	501
	Rough Estimation of Viscosity for Multicomponent Silicate Melts K. NAKAJIMA, H. MIZUKAMI, M. KAWAMOTO and Z. MORITA	509
	X-ray Fluoroscopic Observations of Bubble Characteristics in a Molten Iron Bath M. IGUCHI, N. TAKANASHI, Y. OGAWA, N. TOKUMITSU and Z. MORITA	515
	Kinetics of Decarburization Reaction of Molten Steel with CO Bubble Evolution in Pressure Decreasing Stage K. HARASHIMA, A. KIYOSE, T. INOMOTO, M. YANO and K. MIYAZAWA	521
	Motion of Small Particles in Solution with a Interfacial Tension Gradient and Engulfment of the Particles by Solidifying Interface / K. MUKAI and W. LIN	527
	Behavior of Non-metallic Inclusions and Bubbles in Front of Solidifying Interface of Liquid Iron K. MUKAI and W. LIN	533
	Effect of Initial Total Oxygen Concentration on the Rate of SiO₂ Inclusion Removal from Molten Cu K. OKUMURA, K. KUNII, M. HIRASAWA, M. SANO and K. MORI	539
	Effect of P Content in Ultra Low C-Ti Steel on Galvannealing Behavior / M. URAI, M. ARIMURA and H. SAKAI	545
	Pattern Recognition of Microstructures using Neural Networks M. TOJIMA, T. SUZUKI, F. KOBAYASHI and Y. MINAMI	551
	Solid Solution Hardening and Softening of Austenite in Plain Carbon Steel / T. SAKAI, Z. XU and G. ZHANG	557
	Effect of Nitrogen in Solution on High Temperature Creep Resistance of High Purity Chromium Y. KONDO, K. MATSUNAGA, J. NAMEKATA and T. SAKAKI	562
	Effects of Aging and Stress Aging on Creep Resistance of Single Crystal Ni-base Superalloy CMSX-4 Y. KONDO, N. KITAZAKI, J. NAMEKATA, N. OHI and H. HATTORI	568
	High-Temperature Oxidation of Fe-38Ni-13Co-4.7Nb-1.5Ti-0.4Si Superalloy in Ar-H₂O Atmosphere K. KUSABIRAKI, J. IKEGAMI, T. NISHIMOTO and T. OOKA	574
Technical Article		T105
ISIJ Information Network		N367