

ISSN 1006-706X

Volume 28 • Number 5 • May 2021

Journal of Iron and Steel Research International

钢铁研究学报(英文版)



中国钢研科技集团有限公司
CHINA IRON & STEEL RESEARCH INSTITUTE GROUP

万方数据

 Springer

Journal of Iron and Steel Research International

Volume 28 · Number 5 · May 2021

ORIGINAL PAPERS

Numerical simulation of slag layer and its distribution on hot surface of copper stave based on ANSYS birth-death element technology

Q. Shi · J. Tang · M.S. Chu 507

Hybrid optimization for charge planning problem in twin strands continuous casting production

J. Yi · S.J. Jia · B. Du 520

Physicochemical properties of coconut husk activated carbon modified by $\text{Fe}(\text{NO}_3)_3$ and $\text{Mn}(\text{NO}_3)_2$

H.M. Long · B.F. Huang · Z. Shi · L.P. Liu · D.F. Wang · L. Li 530

General heat balance for oxygen steelmaking

N. Madhavan · G.A. Brooks · M.A. Rhamdhani · B.K. Rout · A. Overbosch 538

Effect of Al_2O_3 and MgO on crystallization and structure of $\text{CaO}-\text{SiO}_2-\text{B}_2\text{O}_3$ -based fluorine-free mold flux

J.Y. Chen · W.L. Wang · L.J. Zhou · Z.H. Pan 552

Data-based flatness prediction and optimization in tandem cold rolling

J. Sun · P.F. Shan · Z. Wei · Y.H. Hu · Q.L. Wang · W. Peng · D.H. Zhang 563

Vertical–horizontal coupling nonlinear vibration characteristics of rolling mill under mixed lubrication

D.X. Hou · L. Xu · P.M. Shi 574

Effect of vanadium addition on microstructure and properties of $\text{Al}_{0.5}\text{Cr}_{0.9}\text{FeNi}_{2.5}$ multi-principal alloys

D.X. Hao · N.N. Zhang · Y. Zhang · D.Y. Li 586

Enhancement of glass-forming ability and thermal stability of a soft magnetic $\text{Co}_{75}\text{B}_{25}$ metallic glass by micro-alloying Y and Nb

F. Bao · Y.H. Li · Z.W. Zhu · X.Y. Liang · Y. Zhang · W. Zhang 597

Static recrystallization behavior of SA508Gr.4N reactor pressure vessel steel during hot compressive deformation

S.B. Qiao · X.K. He · C.S. Xie · Z.D. Liu 604

Effects of different alloying elements M (M = Fe, Ni, Mn, Si, Mo, Cu, Y) on Cr_2O_3 with Cl: a first-principles study

Y.N. Niu · N. Dong · S. Liu · J. Yang · P.D. Han · Y.C. Wu 613

Effect of hydrogen addition on compression deformation behaviour of Ti–0.3Mo–0.8Ni alloy argon-arc welded joints

Z.H. Zhang · Q.M. Liu · L. Fu · H.Y. Yang · S.F. Liu 621

M_{23}C_6 precipitation and Si segregation promoted by deep cryogenic treatment aggravating pitting corrosion of supermartensitic stainless steel

X. He · X.Y. Lü · Z.W. Wu · S.H. Li · Q.L. Yong · J.X. Liang · J. Su · L.X. Zhou · J. Li · K.Y. Zhao 629

Further articles can be found at link.springer.com

Indexed/abstracted in *Current contents (ISI)*, *Index Medicus/Medline*, *Chemical Abstracts*, *Bioscience Information Service (BIOSIS)*, *CAS*, *METADEX*, *INSPEC*, *Science Citation Index*, *Ei Compendex*

Instructions for Authors for *J. Iron Steel Res. Int.* are available at www.springer.com/42243