Guanghua Wen

List of Publications by Year
in descending order

40 papers	711 citations	687363 13 h-index	580821 25 g-index
41 all docs	41 docs citations	41 times ranked	307 citing authors

#	Article	IF	Citations
1	The Transient Stages of Inclusion Evolution During Al and/or Ti Additions to Molten Iron. ISIJ International, 2007, 47, 1265-1274.	1.4	112
2	The Influence of Al₂O₃/SiO₂ Ratio on the Viscosity of Mold Fluxes. ISIJ International, 2008, 48, 739-746.	1.4	83
3	Effect of Al Speciation on the Structure of Highâ€Al Steels Mold Fluxes Containing Fluoride. Journal of the American Ceramic Society, 2016, 99, 3941-3947.	3.8	47
4	Effect of basicity and B2O3 on viscosity, melting and crystallization behaviors of low fluorine mold fluxes for casting medium carbon steels. Metals and Materials International, 2015, 21, 126-133.	3.4	45
5	Effect of slag-steel reaction on the structure and viscosity of CaO-SiO2-based mold flux during high-Al steel casting. Journal of Non-Crystalline Solids, 2016, 452, 119-124.	3.1	45
6	Crystallization Behaviors of Mold Fluxes Containing Li₂O Using Single Hot Thermocouple Technique. ISIJ International, 2009, 49, 843-850.	1.4	38
7	The Influence of Na2O on the Solidification and Crystallization Behavior of CaO-SiO2-Al2O3-Based Mold Flux. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1850-1859.	2.1	35
8	Effect of Cooling Rates on the Secondâ€Phase Precipitation and Proeutectoid Phase Transformation of a Nbâ€“Ti Microalloyed Steel Slab. Steel Research International, 2013, 84, 370-376.	1.8	28
9	Effect of Cooling Rate on the Precipitation Behavior of Carbonitride in Microalloyed Steel Slab. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 81-86.	2.1	27
10	Estimating the thermal conductivity of CaOâ€“Al2O3â€“SiO2 slags by equilibrium molecular dynamics simulations. Journal of Non-Crystalline Solids, 2020, 531, 119851.	3.1	20
11	Development and Evaluation of CaOâ€“SiO‹sub›2‹/sub› Based Mould Fluxes for Casting High Aluminum TRIP Steel. Steel Research International, 2015, 86, 110-120.	1.8	19
12	Periodicity of Carbon Element Distribution Along Casting Direction in Continuous-Casting Billet by Using Singular Spectrum Analysis. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1817-1826.	2.1	15
13	Nonâ€Isothermal Crystallization Kinetics of Mold Fluxes Containing Li‹sub›2‹/sub›O for High Aluminum Steel Casting. Steel Research International, 2016, 87, 880-889.	1.8	15
14	A Comprehensive Investigation on the Microstructure and Thermal Conductivity of CaO-Al2O3 Based Mold Slags: Equilibrium Molecular Dynamics Simulations. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1574-1581.	2.1	15
15	A Novel Approach for Evaluating the Contraction of Hypo-Peritectic Steels during Initial Solidification by Surface Roughness. Materials, 2018, 11, 571.	2.9	14
16	Evolution of Temperature and Solid Slag Film During Solidification of Mold Fluxes. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1292-1307.	2.1	11
17	Effect of F^{â^'} Replacing O^{2â^'} on Crystallization Behavior of CaOâ€“SiO₂â€“Al₂O₃ Continuous Casting Mold Flux. ISIJ International, 2019, 59, 367-374.	1.4	11
18	Effect of Shear Stress on Isothermal Crystallization Behavior of CaO-Al2O3-SiO2-Na2O-CaF2 Slags. Materials, 2018, 11, 1085.	2.9	10

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19	Influence of Alloy Elements on Cracking in the Steel Ingot during Its Solidification. Metals, 2019, 9, 836.	2.3	10
20	Qualitative, Quantitative and Mechanism Research of Volatiles in the Most Commonly Used CaOâ€“SiO2â€“CaF2â€“Na2ÎŸ Slag During Casting Process. Transactions of the Indian Institute of Metals, 2021, 74, 775-782.	1.5	10
21	Study of Ferrite During Refinement of Prior Austenite Grains in Microalloyed Steel Continuous Casting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 3074-3082.	2.1	9
22	Analysis of Crack Susceptibility of Peritectic Steels Based on Surface Roughness. Steel Research International, 2020, 91, 1900376.	1.8	9
23	Thermal conductivity prediction and structure-property relationship of CaO-SiO2-Al2O3 ternary system: A combination of molecular dynamics simulations and machine learning. Journal of Molecular Liquids, 2021, 324, 114697.	4.9	9
24	Study of the Effect of Carbon on the Contraction of Hypo-Peritectic Steels during Initial Solidification by Surface Roughness. Metals, 2018, 8, 982.	2.3	7
25	Effect of Al2O3 on non-Newtonian property and its relation to structure of mold fluxes during shear stress field at 1573ÂK. Journal of Non-Crystalline Solids, 2020, 547, 120312.	3.1	7
26	Effects of temperature on the thermal conductivity of amorphous CaOâ€“SiO₂â€“Al₂O₃slags: a computational insight. Physical Chemistry Chemical Physics, 2020, 22, 8808-8816.	2.8	7
27	A combined computational-experimental study on the effect of Na2O on the fluoride volatilization in molten slags. Journal of Molecular Liquids, 2021, 342, 117499.	4.9	7
28	Effect of Bubbles on Crystallization Behavior of CaOâ€“SiO2 Based Slags. Metals, 2019, 9, 193.	2.3	6
29	Computational Insight into the Thermal Conductivity of CaO-SiO2-Al2O3-MgO-Na2O Melts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2391-2399.	2.1	6
30	Quantification of crystalline fraction of solid slag film using X-ray powder diffraction. Powder Diffraction, 2016, 31, 40-51.	0.2	5
31	A Novel Method for Evaluating the Combustion Characteristics of Carbon Materials and Mold Fluxes. Steel Research International, 2021, 92, 2000416.	1.8	5
32	Investigation in CaOâ€“SiO₂â€“CaF₂â€“C slags during the sintering and melting process. Ironmaking and Steelmaking, 2022, 49, 199-207.	2.1	4
33	The role of carbonaceous materials in mold powder and influence on melting behavior. Journal of Thermal Analysis and Calorimetry, 2022, 147, 10965-10975.	3.6	4
34	Effect of Î³â†’Î± Phase Transformation on Refining Austenite Grains of Microalloyed Steel in Continuous Casting by Simulation. High Temperature Materials and Processes, 2016, 35, 653-659.	1.4	3
35	Study on Binder of Cold-Bonded Pellets Containing Basic Oxygen Furnace Dust Based on Hydration Mechanism of Magnesium Potassium Phosphate Cementitious Material. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2400-2412.	2.1	3
36	A Model Estimating the Slab Corner Transverse Cracking Susceptibility of Microalloyed Steel Based on Microstructure. Materials Transactions, 2016, 57, 20-24.	1.2	2

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37	Structure Evolution and Crystallization Behavior of CaOâ€“SiO2-Based Slags with Varying Carbon. Transactions of the Indian Institute of Metals, 2020, 73, 2785-2794.	1.5	2
38	Hydration and Crystallization Behavior of MgO in Cold-Bonded Pellets Containing Basic Oxygen Furnace Dust. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1016-1026.	2.1	2
39	Investigation on Thermal Conductivity and Solidification Process of Molten Slags by Using Copper Finger Dip Test. Transactions of the Indian Institute of Metals, 2019, 72, 3139-3151.	1.5	0
40	Strength and Bonding Mechanism of Nonhydraulic Cementitious Binders: Reutilization of MgO in Basic Oxygen Furnace Dust. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1322-1332.	2.1	0