Youn-Bae Kang

List of Publications by Year
in descending order

130 papers	3,116 citations	136740 32 h-index	197535 49 g-index
138 all docs	138 docs citations	138 times ranked	1595 citing authors

#	Article	IF	Citations
1	Thermodynamic modeling and diffusion kinetic experiments of binary Mgâ€“Gd and Mgâ€“Y systems. Acta Materialia, 2014, 71, 164-175.	3.8	142
2	Critical evaluation and thermodynamic optimization of the Alâ€“Ce, Alâ€“Y, Alâ€“Sc and Mgâ€“Sc binary systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 413-422.	0.7	113
3	Inclusions Chemistry for Mn/Si Deoxidized Steels: Thermodynamic Predictions and Experimental Confirmations. ISIJ International, 2004, 44, 1006-1015.	0.6	97
4	A Reaction Between High Mn-High Al Steel and CaO-SiO2-Type Molten Mold Flux: Part I. Composition Evolution in Molten Mold Flux. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 299-308.	1.0	93
5	A Reaction Between High Mn-High Al Steel and CaO-SiO2-Type Molten Mold Flux: Part II. Reaction Mechanism, Interface Morphology, and Al2O3 Accumulation in Molten Mold Flux. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 309-316.	1.0	81
6	Thermodynamic Model and Database for Sulfides Dissolved in Molten Oxide Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2009, 40, 979-994.	1.0	79
7	Thermodynamic evaluation and modeling of the Feâ€“Coâ€“O system. Acta Materialia, 2004, 52, 507-519.	3.8	73
8	Modeling short-range ordering in solutions. International Journal of Materials Research, 2007, 98, 907-917.	0.1	73
9	Thermodynamic evaluation and optimization of the MnO-Al2O3 and MnO-Al2O3-SiO2 systems and applications to inclusion engineering. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 259-268.	1.0	72
10	Effect of ferrosilicon addition on the composition of inclusions in 16Cr-14Ni-Si stainless steel melts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 791-797.	1.0	72
11	Thermodynamic evaluation and optimization of Alâ€“La, Alâ€“Ce, Alâ€“Pr, Alâ€“Nd and Alâ€“Sm systems using the Modified Quasichemical Model for liquids. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 30-41.	0.7	66
12	<i>In Situ</i> Observation of the Dissolution of <scp><scp>SiO</scp></scp>₂ Particles in <scp><scp>CaO</scp></scp>â€“<scp><scp>Al</scp></scp>₂<scp><scp>O</scp></scp>₃â€“<scp><scp>SiO Slags and Mathematical Analysis of its Dissolution Pattern. Journal of the American Ceramic Society, 2014, 97, 316-325.	1.9	66
13	Critical evaluation and thermodynamic optimization of the VOâ€“VO2.5 system. Journal of the European Ceramic Society, 2012, 32, 3187-3198.	2.8	65
14	Thermodynamic evaluation and optimization of Alâ€“Gd, Alâ€“Tb, Alâ€“Dy, Alâ€“Ho and Alâ€“Er systems using a Modified Quasichemical Model for the liquid. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 456-466.	0.7	64
15	Thermodynamic evaluations and optimizations of binary Mg-light Rare Earth (La, Ce, Pr, Nd, Sm) systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 38, 100-116.	0.7	64
16	Transmission electron microscopy and thermodynamic studies of CaO-added AZ31 Mg alloys. Acta Materialia, 2013, 61, 3267-3277.	3.8	55
17	In situ observation of the dissolution phenomena of SiC particle in CaOâ€“SiO2â€“MnO slag. Journal of the European Ceramic Society, 2010, 30, 3181-3186.	2.8	53
18	Phase equilibria and thermodynamics of the Feâ€“Alâ€“C system: Critical evaluation, experiment and thermodynamic optimization. Acta Materialia, 2014, 79, 1-15.	3.8	53

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19	Modeling short-range ordering in liquids: The Mgâ€“Alâ€“Sn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 180-188.	0.7	51
20	Sulfide Capacity of the CaOâ€“SiO2â€“MnO Slag at 1873 K. ISIJ International, 2011, 51, 1375-1382.	0.6	49
21	Critical Evaluation and Thermodynamic Optimization of the Binary Systems in the Mg-Ce-Mn-Y System. Journal of Phase Equilibria and Diffusion, 2007, 28, 342-354.	0.5	48
22	Critical evaluation and thermodynamic optimization of Feâ€“Cu, Cuâ€“C, Feâ€“C binary systems and Feâ€“Cuâ€“C ternary system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2014, 45, 127-137.	0.7	48
23	Thermodynamic Analysis of Mn-depleted Zone Near Ti Oxide Inclusions for Intragranular Nucleation of Ferrite in Steel. ISIJ International, 2010, 50, 501-508.	0.6	46
24	Study on Oxide Inclusion Dissolution in Secondary Steelmaking Slags using High Temperature Confocal Scanning Laser Microscopy. Steel Research International, 2016, 87, 57-67.	1.0	46
25	Thermodynamic assessment of the Caâ€“Zn, Srâ€“Zn, Yâ€“Zn and Ceâ€“Zn systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 423-431.	0.7	45
26	Critical Thermodynamic Evaluation and Optimization of the CaO-MnO-SiO2 and CaO-MnO-Al2O3 Systems. ISIJ International, 2004, 44, 965-974.	0.6	42
27	Phase Equilibria and Thermodynamic Properties of the CaO-MnO-Al2O3-SiO2 System by Critical Evaluation, Modeling and Experiment. ISIJ International, 2004, 44, 975-983.	0.6	42
28	On the Dissolution Behavior of Sulfur in Ternary Silicate Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 1211-1217.	1.0	42
29	Aluminum Deoxidation Equilibria in Liquid Iron: Part I. Experimental. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1826-1836.	1.0	39
30	Development of thermodynamic database for high Mnâ€“high Al steels: Phase equilibria in the Feâ€“Mnâ€“Alâ€“C system by experiment and thermodynamic modeling. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 51, 89-103.	0.7	36
31	Influence of Al/Ti Ratio in Ti-ULC Steel and Refractory Components of Submerged Entry Nozzle on Formation of Clogging Deposits. ISIJ International, 2019, 59, 749-758.	0.6	36
32	Thermodynamic assessment of the Siâ€“Zn, Mnâ€“Si, Mgâ€“Siâ€“Zn and Mgâ€“Mnâ€“Si systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 470-477.	0.7	34
33	Phase equilibria and thermodynamics of Mnâ€“C, Mnâ€“Si, Siâ€“C binary systems and Mnâ€“Siâ€“C ternary system by critical evaluation, combined with experiment and thermodynamic modeling. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2014, 46, 92-102.	0.7	33
34	Aluminum Deoxidation Equilibria in Liquid Iron: Part II. Thermodynamic Modeling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2224-2233.	1.0	33
35	Reassessment of Oxide Stability Diagram in the Feâ€“Alâ€“Tiâ€“O System. ISIJ International, 2017, 57, 1665-1667.	0.6	32
36	Thermodynamic assessment of the Ceâ€“Si, Yâ€“Si, Mgâ€“Ceâ€“Si and Mgâ€“Yâ€“Si systems. International Journal of Materials Research, 2009, 100, 208-217.	0.1	30

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37	A Reaction between High Mnâ€“High Al Steel and CaOâ€“SiO₂-Type Molten Mold Flux: Reaction Mechanism Change by High Al Content ([pct Al]₀ = 5.2) in the Steel and Accumulation of Reaction Product at the Reaction Interface. ISIJ International, 2018, 58, 686-695.	0.6	29
38	Oxidation of Ti Added ULC Steel by CO Gas Simulating Interfacial Reaction between the Steel and SEN during Continuous Casting. ISIJ International, 2018, 58, 1257-1266.	0.6	29
39	Thermodynamic Database for the Al-Ca-Co-Cr-Fe-Mg-Mn-Ni-Si-O-P-S System and Applications in Ferrous Process Metallurgy. Journal of Phase Equilibria and Diffusion, 2009, 30, 443-461.	0.5	28
40	Critical thermodynamic evaluation and optimization of the MnOâ€“â€œ TiO2 â€â€“â€œ Ti2O3 â€•system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2006, 30, 235-247.	0.7	27
41	Aluminum Deoxidation Equilibria in Liquid Iron: Part IIIâ€”Experiments and Thermodynamic Modeling of the Fe-Mn-Al-O System. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2837-2847.	1.0	27
42	Experimental Study of Phase Equilibria in the MnO-"TiO2"-"Ti2O3" System. ISIJ International, 2005, 45, 1543-1551.	0.6	25
43	Dissolution kinetics of alumina in molten CaOâ€“Al₂O₃â€“Fe<i>_t</i>Oâ€“MgOâ€“SiO₂ oxide representing theÂRH slag in steelmaking process. Journal of the American Ceramic Society, 2020, 103, 2210-2224.	1.9	25
44	Thermodynamic and volumetric databases and software for magnesium alloys. Jom, 2009, 61, 75-82.	0.9	24
45	Thermodynamic Modeling of the Fe-Mn-C and the Fe-Mn-Al Systems Using the Modified Quasichemical Model for Liquid Phase. Journal of Phase Equilibria and Diffusion, 2015, 36, 453-470.	0.5	24
46	Experimental Study of Phase Equilibria in the MnO-SiO2-"TiO2"-"Ti2O3" System. ISIJ International, 2005, 45, 1552-1560.	0.6	22
47	Thermodynamic Database Development of the Mg-Ce-Mn-Y System for Mg Alloy Design. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1231-1243.	1.1	22
48	Practical application of thermodynamics to inclusions engineering in steel. Journal of Physics and Chemistry of Solids, 2005, 66, 219-225.	1.9	21
49	Dissolution behavior of alumina in mold fluxes for steel continuous casting. Metals and Materials International, 2005, 11, 183-190.	1.8	20
50	Relationship between surface tension and Gibbs energy, and application of Constrained Gibbs Energy Minimization. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 50, 23-31.	0.7	20
51	Thermodynamic study of MnO-SiO2-Al2O3 slag system: Liquidus lines and activities of MnO at 1823 K. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 915-920.	1.0	19
52	Development of a multicomponent reaction rate model coupling thermodynamics and kinetics for reaction between high Mn-high Al steel and CaO-SiO2-type molten mold flux. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2018, 61, 105-115.	0.7	19
53	Growth of Initial Clog Deposits during Continuous Casting of Ti-ULC Steel â€“ Formation and Reduction of the Initial Deposits at Nozzle/Steel Interface. ISIJ International, 2020, 60, 426-435.	0.6	18
54	Compositional Evolution of Oxide Inclusions in Austenitic Stainless Steel during Continuous Casting. Steel Research International, 2015, 86, 284-292.	1.0	17

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55	Mathematical Modeling of the Early Stage of Clogging of the SEN During Continuous Casting of Ti-ULC Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 4167-4178.	1.0	17
56	Experimental Study of High Temperature Phase Equilibria in the Iron-Rich Part of the Fe-P and Fe-C-P Systems. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5351-5364.	1.1	16
57	Phase equilibria of Al2O3â€"TiO system under various oxygen partial pressure: Emphasis on stability of Al2TiO5â€"Ti3O5 pseudobrookite solid solution. Journal of the European Ceramic Society, 2021, 41, 7362-7374.	2.8	16
58	Critical thermodynamic evaluation and optimization of the MnOâ€"SiO2â€"â€œ TiO2 â€â€"â€œ Ti2O3 â€•system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2006, 30, 226-234.	0.7	15
59	Thermodynamic modeling of oxide phases in the Feâ€"Mnâ€"O system. Journal of Physics and Chemistry of Solids, 2016, 98, 237-246.	1.9	15
60	Electrochemical Transfer of S Between Molten Steel and Molten Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1311-1321.	1.0	15
61	Interfacial Reaction Between Ultra LowÂC Steel and Gas Generated from Refractory Material Used for Submerged Entry Nozzle for Continuous Casting. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2018, 163, 18-22.	0.4	15
62	Experimental Investigations of Phase Equilibria of MnS Containing Sub-systems in the MnOâ€"SiO2â€"Al2O3â€"MnS System. ISIJ International, 2009, 49, 1490-1497.	0.6	14
63	The Role of Iron Oxide Bearing Molten Slag in Iron Melting Process for the Direct Contact Carburization. ISIJ International, 2011, 51, 166-168.	0.6	14
64	Thermodynamics of MnO-SiO2-Al2O3-MnS Liquid Oxysulfide: Experimental and Thermodynamic Modeling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 535-545.	1.0	14
65	Experimental investigation of phase equilibria and thermodynamic modeling of the CaOâ€"Al2O3â€"CaS and the CaOâ€"SiO2â€"CaS oxysulfide systems. Acta Materialia, 2013, 61, 683-696.	3.8	14
66	Thermodynamic Modeling of Feâ€"Câ€"S Ternary System. ISIJ International, 2017, 57, 782-790.	0.6	14
67	Critical evaluations and thermodynamic optimizations of the Mnâ€"S and the Feâ€"Mnâ€"S systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 232-244.	0.7	13
68	Numerical Analysis of Surface Tension Gradient Effect on the Behavior of Gas Bubbles at the Solid/Liquid Interface of Steel. ISIJ International, 2012, 52, 1730-1739.	0.6	13
69	Activity Measurement of the CaSâ€"MnS Sulfide Solid Solution and Thermodynamic Modeling of the CaOâ€"MnOâ€"Al2O3â€"CaSâ€"MnSâ€"Al2S3 System. ISIJ International, 2013, 53, 2132-2141.	0.6	13
70	Evaporation Mechanism of Sn and SnS from Liquid Fe: Part I: Experiment and Adsorption of S on Reaction Site. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 250-258.	1.0	13
71	Electrochemical Desulfurization of Molten Steel with Molten Slag: Reaction Rate and Current Efficiency. Journal of the Electrochemical Society, 2018, 165, E816-E825.	1.3	13
72	Feasibility of BF Hearth Protection Using Spinel Formation by Slag Composition Control. ISIJ International, 2013, 53, 1779-1785.	0.6	13

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73	Evaporation Mechanism of Cu from Liquid Fe Containing C and S. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2164-2176.	1.0	12
74	Oxide Stability Diagram of Liquid Steels â€“ Construction and Utilization. ISIJ International, 2018, 58, 1371-1382.	0.6	12
75	Progress of Thermodynamic Modeling for Sulfide Dissolution in Molten Oxide Slags: Sulfide Capacity and Phase Diagram. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 2859-2882.	1.0	12
76	Simultaneous Analysis of Soluble and Insoluble Oxygen Contents in Steel Specimens Using Inert Gas Fusion Infrared Absorptiometry. ISIJ International, 2021, 61, 2464-2473.	0.6	12
77	Thermodynamic Assessment of MnO and FeO Activities in FeOâ€“MnOâ€“MgOâ€“P2O5â€“SiO2(â€“CaO) Molten Slag. ISIJ International, 2013, 53, 1325-1333.	0.6	11
78	Reassessment of TiN(s)=Ti+N Equilibration in Liquid Iron. ISIJ International, 2015, 55, 2318-2324.	0.6	11
79	Evaporation Mechanism of Sn and SnS from Liquid Fe: Part II: Residual Site and Evaporation Kinetics via Sn(g) and SnS(g). Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 259-266.	1.0	11
80	Simultaneous Evaporation of Cu and Sn from Liquid Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2564-2570.	1.0	11
81	Kinetics of CO Gas Dissolution into Stirred Liquid Fe at 1823 K and Its Impact on Nozzle Clogging during Continuous Casting. ISIJ International, 2020, 60, 258-266.	0.6	11
82	Influence of Partial Pressure of Sulfur and Oxygen on Distribution of Fe and Mn between Liquid Fe-Mn Oxysulfide and Molten Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 1069-1077.	1.0	10
83	Critical evaluation and thermodynamic optimization of Mgâ€“Ga system and effect of low pressure on phase equilibria. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2014, 46, 168-175.	0.7	10
84	Evaporation Mechanism of Sn and SnS from Liquid Fe: Part III. Effect of C on Sn Removal. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 267-277.	1.0	10
85	A Reaction Between High Mnâ€“High Al Steel and CaO-SiO2-Type Molten Mold Flux: Reduction of Additive Oxide Components in Mold Flux by Al in Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2077-2082.	1.0	10
86	Composites of copper and cast iron fabricated via the liquid: In the vicinity of the limits of strength in a non-deformed condition. Materials Characterization, 2017, 130, 260-269.	1.9	9
87	Reoxidation of Al-Killed Ultra-Low C Steel by FetO in RH Slag: Experiment, Reaction Rate Model Development, and Mechanism Analysis. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3032-3044.	1.0	9
88	The Uniqueness of a Correction to Interaction Parameter Formalism in a Thermodynamically Consistent Manner. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 795-804.	1.0	8
89	Thermodynamic Modeling of Liquid Steel. ISIJ International, 2020, 60, 2717-2730.	0.6	8
90	The shape of liquid miscibility gaps and short-range-order. Journal of Chemical Thermodynamics, 2013, 60, 19-24.	1.0	7

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91	Thermodynamics of the MnOâ€“FeOâ€“MnSâ€“FeSâ€“SiO2 System at SiO2 Saturation under Reducing Condition: Immiscibility in the Liquid Phase. ISIJ International, 2013, 53, 751-760.	0.6	7
92	Microstructural evolution of a focused ion beam fabricated Mg nanopillar at high temperatures: Defect annihilation and sublimation. Scripta Materialia, 2014, 86, 44-47.	2.6	7
93	Modeling surface tension of multicomponent liquid steel using Modified Quasichemical Model and Constrained Gibbs Energy Minimization. Metals and Materials International, 2015, 21, 765-774.	1.8	7
94	Evaporation of S from Liquid Feâ€“Câ€“S Alloy. ISIJ International, 2018, 58, 10-16.	0.6	7
95	Phase Equilibria in the <scp><scp>Mn</scp></scp>â€“<scp><scp>V</scp></scp>â€“<scp><scp>O</scp></scp> System Near <scp><scp>MnO</scp></scp>â€“<scp><scp>V</scp></scp>₂<scp><scp>O</scp></scp>₃ Isopleth. Journal of the American Ceramic Society, 2012, 95, 2059-2064.	1.9	6
96	Desulfurization of Liquid Steel by Passing Steel Droplets through a Slag Layer. ISIJ International, 2015, 55, 1581-1590.	0.6	6
97	Critical Evaluations and Thermodynamic Optimizations of the MnO-Mn $$_{2}$$ 2 O $$_{3}$$ 3 -SiO $$_{2}$$ 2 and FeO-Fe $$_{2}$$ 2 O $$_{3}$$ 3 -MnO-Mn $$_{2}$$ 2 O $$_{3}$$ 3 -SiO $$_{2}$$ 2 Systems. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1721-1735.	1.0	6
98	Erratum to â€œReassessment of Oxide Stability Diagram in the Feâ€“Alâ€“Tiâ€“O Systemâ€•[ISIJ International, 57 (2017), No. 9, pp. 1665â€“1667]. ISIJ International, 2017, 57, 2269-2269.	0.6	6
99	Critical evaluation and thermodynamic modeling of the Feâ€“P and Feâ€“Câ€“P system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 70, 101795.	0.7	6
100	An Attempt to Correlate Electrochemical Desulfurization of Molten Iron Using CaOâ€“Al2O3â€“MgOsat. Molten Slag and Applied Electricity at 1673 K (1400 Â°C). Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 2960-2970.	1.0	6
101	Thermodynamic Study for P Reduction from Slag to Molten Steel by using the Microwave Heating. Korean Journal of Materials Research, 2010, 20, 42-46.	0.1	6
102	Thermodynamic Basis of Isothermal Carbothermic Reduction of Oxide in Liquid Steel for Simultaneous Analysis of Soluble/Insoluble Oxygen Contents in the Steel Specimens. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 1980-1988.	1.0	6
103	Comment on â€œThermodynamic modelling of an Al2O3â€“MnO system using the ionic modelâ€•by A.B. Farina and F.B. Neto. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 255-257.	0.7	5
104	Evaporation of Cu, Sn, and S from Fe-C-Cu-Sn-S Liquid Alloys in the Temperature Range from 1513ÂK to 1873ÂK (1240ÂÂ°C to 1600ÂÂ°C). Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1089-1100.	1.0	5
105	Dissolution Behavior of Sn in CaOâ€“CaF2 Molten Flux and Its Distribution Ratio Between CaOâ€“CaF2 Molten Flux and Liquid Iron. Jom, 2021, 73, 1080-1089.	0.9	5
106	Determination of Gibbs Free Energy of Formation of MnV2O4 Solid Solution at 1823ÂK (1550ÂÂ°C). Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 131-141.	1.0	4
107	Prediction of Phase Separation of Immiscible Ga-Tl Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3130-3136.	1.1	4
108	Oxide Solubility Minimum in Liquid Fe-M-O Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2942-2958.	1.0	4

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109	Decarburization of Molten Feâ€“C Droplet: Numerical Simulation and Experimental Validation. ISIJ International, 2014, 54, 2559-2568.	0.6	4
110	Role of liquid and solid particles in solid-liquid mixed fluxes on sulfur removal from molten iron under centrifugal stirring by an impeller. Powder Technology, 2022, 396, 1-12.	2.1	4
111	Inclusion Agglomeration on Ultra-Low C Liquid Steel Surface: Roles of Ti in the Steel and the Oxygen Potential. Metals and Materials International, 2022, 28, 3106-3119.	1.8	4
112	Simultaneous Analysis of Soluble and Insoluble Oxygen Contents in Al-Killed Steels of Various C Contents and Supersaturation Phenomena in the Steel. ISIJ International, 2022, 62, 1705-1714.	0.6	4
113	Suppressing initial clog deposits on inner surface of submerged entry nozzle refractory for casting liquid steel: Absorbing CO gas by CO absorbers. Journal of the European Ceramic Society, 2022, 42, 6275-6287.	2.8	4
114	Comment on â€œThermodynamic description of the Hgâ€“Te systemâ€•[Journal of Alloys and Compounds 494 (1â€“2) (2010) 102â€“108]. Journal of Alloys and Compounds, 2010, 505, 483-485.	2.8	3
115	Reaction Between High Mn-High Al Steel and CaO-SiO$$_2$$-Type Molten Mold Flux: Retardation of $${{ext{Al}}_2} {{ext{O}}_3}$$ Accumulation at High Al Content $$([{ext{pct Al}}]_0$$ $$ge $$) Tj ETQq1 1 0.784314 rgBT /Overlo Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 3067-3078.	1.0	3
116	Effect of Trace of Oxygen in Ar Gas on Initial Growth of Nozzle Clogging Deposits on SEN for Ti Added Ultraâ€Low C Steel Casting. Steel Research International, 2022, 93, .	1.0	3
117	Calculation of surface tension using CALPHAD software as a Zero Phase Fraction line of â€œsurfaceâ€• phase. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 50, 105-112.	0.7	2
118	Regarding "Sulfide Capacity in Ladle Slag at Steelmaking Temperatures," C. Allertz, Du Sichen; MMTB 2015 December. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 3241-3243.	1.0	2
119	Calculation of property diagram as a Zero-Phase Fraction line of auxiliary phase. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2016, 55, 69-75.	0.7	2
120	In-situ X-ray fluoroscopic observation for motion of bubbles in liquid iron for correction of drag coefficient used in numerical simulation. Metals and Materials International, 2016, 22, 681-693.	1.8	2
121	Thermodynamic Modeling of Oxide Phases in the Mn-O System. Metallurgical and Materials Transactions E, 2016, 3, 156-170.	0.5	2
122	A Novel Technology to Develop a Nickel-Enriched Layer on Slab Surface by Utilizing NiO-Containing Synthetic Powder. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 779-787.	1.0	1
123	Evaporation of As and Sn from Liquid Iron: Experiments and a Kinetic Model during Top-Blown Oxygen Steelmaking Process. Materials, 2022, 15, 4771.	1.3	1
124	Thermodynamic Optimization of Mn-Si-C System. , 0, , 641-649.		0
125	Erratum to â€œThermodynamic Assessment of MnO and FeO Activities in FeOâ€“MnOâ€“MgOâ€“P2O5â€“SiO2(â€“CaO) Molten Slagâ€•[ISIJ Int. 53(8): 1325â€“1333 (2013)]. ISIJ International, 2014, 54, 1456-1456.	0.6	0
126	Distribution of Alumina in Aluminum Prediction Based on Thermodynamic and Diffusion Analysis. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2697-2700.	1.1	0

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127	On the Evaporation of S from Liquid Feâ€“Câ€“S Alloy. Minerals, Metals and Materials Series, 2018, , 815-823.	0.3	0
128	Thermodynamic Optimization of Mn-Si-C System. , 2014, , 641-649.		0
129	Erratum to â€œDesulfurization of Liquid Steel by Passing Steel Droplets through a Slag Layerâ€•[ISIJ Int. 55(8): 1581â€“1590 (2015)]. ISIJ International, 2015, 55, 2272-2272.	0.6	0
130	A Reaction Model to Simulate Composition Change of Mold Flux During Continuous Casting of High Al Steel. , 2016, , 271-277.		0