

Min-Kyu Paek

List of Publications by Year in descending order

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docs citations

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times ranked

409
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase equilibria and thermodynamics of the Fe-Al-C system: Critical evaluation, experiment and thermodynamic optimization. <i>Acta Materialia</i> , 2014, 79, 1-15.	3.8	53
2	Thermodynamics of AlN Formation in High Manganese-Aluminum Alloyed Liquid Steels. <i>ISIJ International</i> , 2013, 53, 973-978.	0.6	45
3	Aluminum Deoxidation Equilibria in Liquid Iron: Part I. Experimental. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015, 46, 1826-1836.	1.0	39
4	Reassessment of AlN(s) $+$ Al $+$ N $+$ Equilibration in Liquid Iron. <i>ISIJ International</i> , 2013, 53, 535-537.	0.6	36
5	Reduction investigation of WO ₃ /NiO/Fe ₂ O ₃ and synthesis of nanocrystalline ternary W-Ni-Fe alloy. <i>Journal of Alloys and Compounds</i> , 2009, 472, 314-318.	2.8	34
6	Phase equilibria and thermodynamics of Mn-C, Mn-Si, Si-C binary systems and Mn-Si-C ternary system by critical evaluation, combined with experiment and thermodynamic modeling. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2014, 46, 92-102.	0.7	33
7	Aluminum Deoxidation Equilibria in Liquid Iron: Part II. Thermodynamic Modeling. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015, 46, 2224-2233.	1.0	33
8	Comparative synthesis of nanocrystalline Fe-Ni and Fe-Ni-Co alloys during hydrogen reduction of Ni _x Co _{1-x} Fe ₂ O ₄ . <i>Journal of Alloys and Compounds</i> , 2008, 466, 59-66.	2.8	32
9	Nitrogen solubility in high manganese-aluminum alloyed liquid steels. <i>Metals and Materials International</i> , 2013, 19, 1077-1081.	1.8	28
10	Aluminum Deoxidation Equilibria in Liquid Iron: Part III-Experiments and Thermodynamic Modeling of the Fe-Mn-Al-O System. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 2837-2847.	1.0	27
11	Thermodynamic Relation between Silicon and Aluminum in Liquid Iron. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012, 43, 1106-1112.	1.0	25
12	Thermodynamics of Nitrogen Solubility and AlN Formation in Multi-Component High Mn Steel Melts. <i>ISIJ International</i> , 2017, 57, 1821-1830.	0.6	21
13	Nitrogen Solubility in Liquid Fe-C Alloys. <i>ISIJ International</i> , 2014, 54, 32-36.	0.6	19
14	Thermodynamics of Nitrogen in Fe-Mn-Al-Si-C Alloy Melts. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 1243-1262.	1.0	16
15	Carbon Solubility in Liquid Iron Containing V, Mo and Ni. <i>Materials Transactions</i> , 2014, 55, 610-615.	0.4	14
16	Critical Evaluation and Optimization of the Fe-N, Mn-N and Fe-Mn-N Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2018, 39, 650-677.	0.5	14
17	Reduction Kinetics and Mechanisms of NiFe ₂ O ₄ with Synthesis of Nanocrystalline Fe-Ni Alloy. <i>Materials Transactions</i> , 2007, 48, 3132-3139.	0.4	13
18	Thermal Synthesis of Nanocrystalline (Co _x Ni _{1-x}) _y Fe _{1-y} KOVAR Alloy through Gaseous Reduction of Mixed Oxides. <i>Materials Transactions</i> , 2008, 49, 208-214.		13

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19	Thermodynamic Interactions Among Carbon, Silicon and Iron in Carbon Saturated Manganese Melts. Journal of Korean Institute of Metals and Materials, 2012, 50, 45-51.	0.4	13
20	Synthesis and reduction behavior of sol-precipitated iron oxide/tungsten oxide nanoparticles. Journal of Alloys and Compounds, 2009, 479, 613-618.	2.8	10
21	Hydrogen Reduction of Fe ₂ O ₃ /WO ₃ Mixture with Synthesis of Nanocrystalline Fe/W Composite. Materials Transactions, 2008, 49, 1480-1485.	0.4	9
22	Synthesis of nanocrystalline Fe-W composite through hydrogen reduction of thermally synthesized iron tungstate, Fe ₂ WO ₆ . Journal of Alloys and Compounds, 2009, 477, 357-363.	2.8	9
23	Thermodynamic modelling of the ternary Bi-Ga-Te system for potential application in thermoelectric materials. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 74, 102326.	0.7	9
24	Utilization of mill scale and recycled MoO ₃ from spent acid for economic synthesis of nanocrystalline intermetallic Fe-Mo alloys. Journal of Alloys and Compounds, 2009, 477, 445-449.	2.8	7
25	Nitrogen Solubility in Cast Iron Containing C, Si and Mn. ISIJ International, 2018, 58, 1185-1190.	0.6	7
26	Phase equilibria and liquid phase behavior of the K ₂ O-CaO-SiO ₂ system for entrained flow biomass gasification. Fuel, 2020, 265, 116894.	3.4	7
27	Solubility limit of nitrogen in Fe-Cr-N alloy melt under reduced N ₂ partial pressure. Vacuum, 2020, 182, 109726.	1.6	6
28	Nitrogen Solubility in Liquid Manganese Alloys Containing Silicon, Iron and Carbon. ISIJ International, 2013, 53, 768-773.	0.6	5
29	Thermodynamics of Nitrogen Solubility and Nitride Formation in Fe-Cr-Ti-Al-Si-N Alloy Melts. ISIJ International, 2020, 60, 640-648.	0.6	5
30	Aluminum-Titanium Complex Deoxidation Equilibria in Fe-Cr-Al-Ti-O Melts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 236-244.	1.0	5
31	Thermodynamic Modeling of Ni-C, Co-C, and Ni-Co-C Liquid Alloys Using the Modified Quasichemical Model. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 59-68.	1.0	5
32	Thermodynamic Behavior of Si in Mn-Si Melts. Journal of Korean Institute of Metals and Materials, 2012, 50, 116-121.	0.4	5
33	Impact of recently discovered sodium calcium silicate solutions on the phase diagrams of relevance for glass-ceramics in the Na ₂ O-CaO-SiO ₂ system. Journal of the European Ceramic Society, 2022, 42, 2449-2463.	2.8	5
34	Low Temperature Isothermal Reduction Kinetics of Fe ₂ O ₃ /NiO Mixed Oxides and Comparative Synthesis of Fe _{1-x} Al _x /Fe _{1-x} Ni _x Alloys. Materials Transactions, 2008, 49, 352-359.	0.4	3
35	Effect of Silicon on TiN Formation in Liquid Iron. ISIJ International, 2018, 58, 1437-1442.	0.6	3
36	Thermodynamic Optimization of the Ternary Ga-Sn-Te System Using Modified Quasichemical Model. Metals, 2021, 11, 1363.	1.0	3

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37	Synthesis and Magnetic Properties of Nanocrystalline Fe-Ni Alloys During Hydrogen Reduction of NiFe ₂ O ₄ . Journal of Korean Institute of Metals and Materials, 2011, 49, 52-57.	0.4	3
38	Thermodynamic behaviour of nitrogen in the carbon saturated Fe-Mn-Si alloy during casting. International Journal of Cast Metals Research, 2020, 33, 226-232.	0.5	2
39	Formation of Nitride and Oxide Inclusions in Liquid Fe-Cr-Ti-Al Alloys. Steel Research International, 2021, 92, 2000508.	1.0	2
40	Improved mechanical and wear properties of Cu-Ga-In ternary alloys through liquid reinforcement. Materials Today Communications, 2021, 27, 102409.	0.9	2
41	The Effect of Temperature on Microstructure, Magnetic Properties and Reaction Kinetics of Ni _{0.5} Co _{0.5} Fe ₂ O ₄ Reduction in Hydrogen Atmosphere. Materials Transactions, 2008, 49, 860-868.	0.4	1
42	Mill Scale for Synthesis of Fe-Ni and Fe-Ni-Co Alloys through Gaseous Reduction: Reaction Kinetics and Mechanism. ISIJ International, 2008, 48, 1493-1499.	0.6	1
43	Effect of ball milling time on microstructure and magnetic properties of Fe-W nanocrystalline composite synthesised by hydrogen reduction and sintering. Materials Technology, 2008, 23, 210-214.	1.5	0
44	Thermodynamic Optimization of Mn-Si-C System. , 0, , 641-649.		0
45	Nitrogen Solubility in Liquid Mn-Fe-Si-C Alloys. , 2014, , 667-674.		0
46	Thermodynamics of Sulfur in Carbon Saturated Ni-Mo Alloys. ISIJ International, 2019, 59, 1801-1805.	0.6	0
47	Thermodynamic Assessment of Liquid Fe-Ni-C Alloy Using Modified Quasichemical Model. Jom, 2021, 73, 679-687.	0.9	0
48	Thermodynamic Optimization of Mn-Si-C System. , 2014, , 641-649.		0
49	Nitrogen Solubility in Liquid Mn-Fe-Si-C Alloys. , 2014, , 669-674.		0