

Hong Yong Sohn

List of Publications by Year in descending order

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337
papers

7,739
citations

76196

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88477

70
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360
all docs

360
docs citations

360
times ranked

4306
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, sintering, and mechanical properties of nanocrystalline cemented tungsten carbide – A review. International Journal of Refractory Metals and Hard Materials, 2009, 27, 288-299.	1.7	586
2	A structural model for gas-solid reactions with a moving boundary – III. Chemical Engineering Science, 1972, 27, 763-778.	1.9	265
3	Hydrogen Storage Properties of Nanosized $MgH_{2-0.1TiH_2}$ Prepared by Ultrahigh-Energy High-Pressure Milling. Journal of the American Chemical Society, 2009, 131, 15843-15852.	6.6	245
4	The effect of particle size distribution on packing density. Canadian Journal of Chemical Engineering, 1968, 46, 162-167.	0.9	239
5	Grain growth during the early stage of sintering of nanosized $WC-Co$ powder. International Journal of Refractory Metals and Hard Materials, 2008, 26, 232-241.	1.7	158
6	A structural model for gas-solid reactions with a moving boundary – V an experimental study of the reduction of porous nickel-oxide pellets with hydrogen. Chemical Engineering Science, 1973, 28, 1975-1989.	1.9	147
7	Hydrogenation of Nanocrystalline Mg at Room Temperature in the Presence of TiH_2 . Journal of the American Chemical Society, 2010, 132, 6616-6617.	6.6	121
8	The law of additive reaction times in fluid-solid reactions. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1978, 9, 89-96.	0.5	112
9	Structures, preparation and applications of titanium suboxides. RSC Advances, 2016, 6, 79706-79722.	1.7	102
10	Hydrogen Reduction Kinetics of Hematite Concentrate Particles Relevant to a Novel Flash Ironmaking Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1133-1145.	1.0	100
11	An experimental study of the sintering of nanocrystalline $WC-Co$ powders. International Journal of Refractory Metals and Hard Materials, 2005, 23, 249-257.	1.7	98
12	Hydrogen Reduction Kinetics of Magnetite Concentrate Particles Relevant to a Novel Flash Ironmaking Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 133-145.	1.0	87
13	Development of green suspension ironmaking technology based on hydrogen reduction of iron oxide concentrate: rate measurements. Ironmaking and Steelmaking, 2010, 37, 81-88.	1.1	82
14	Hydrogen storage properties of the $Mg-Ti-H$ system prepared by high-energy high-pressure reactive milling. Journal of Power Sources, 2008, 180, 491-497.	4.0	78
15	Effects of CaO , Al_2O_3 , and MgO additions on the copper solubility, ferric/ferrous ratio, and minor-element behavior of iron-silicate slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1998, 29, 583-590.	1.0	73
16	A process for extracting precious metals from spent printed circuit boards and automobile catalysts. Jom, 2004, 56, 55-58.	0.9	73
17	Nonisothermal Determination of the Intrinsic Kinetics of Oil Generation from Oil Shale. Industrial & Engineering Chemistry Process Design and Development, 1980, 19, 420-426.	0.6	72
18	The chemical vapor synthesis of inorganic nanopowders. Jom, 2007, 59, 44-49.	0.9	72

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19	Kinetics of the Reduction of Hematite Concentrate Particles by Carbon Monoxide Relevant to a Novel Flash Ironmaking Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1716-1728.	1.0	72
20	Chemical vapor synthesis (CVS) of tungsten nanopowder in a thermal plasma reactor. International Journal of Refractory Metals and Hard Materials, 2009, 27, 149-154.	1.7	67
21	The effect of intragrain diffusion on the reaction between a porous solid and a gas. Chemical Engineering Science, 1974, 29, 630-634.	1.9	64
22	A structural model for gas-solid reactions with a moving boundary-IV. Langmuir-Hinshelwood kinetics. Chemical Engineering Science, 1973, 28, 1169-1177.	1.9	62
23	Potential of Binary Lithium Magnesium Nitride for Hydrogen Storage Applications. Journal of Physical Chemistry C, 2007, 111, 12129-12134.	1.5	59
24	The reduction of stannic oxide with carbon. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1979, 10, 109-115.	0.5	57
25	A New Li-Al-N-H System for Reversible Hydrogen Storage. Journal of Physical Chemistry B, 2006, 110, 14236-14239.	1.2	57
26	R&D in the metallurgical industry toward the 21st century. Jom, 1997, 49, 33-37.	0.9	56
27	Rate Analysis of Chemical-Looping with Oxygen Uncoupling (CLOU) for Solid Fuels. Energy & Fuels, 2012, 26, 4395-4404.	2.5	53
28	Development of a Novel Flash Ironmaking Technology with Greatly Reduced Energy Consumption and CO ₂ Emissions. Journal of Sustainable Metallurgy, 2016, 2, 216-227.	1.1	53
29	Reactions between solids through gaseous intermediates-I reactions controlled by chemical kinetics. Chemical Engineering Science, 1973, 28, 1789-1801.	1.9	52
30	Mathematical modeling of sulfide flash smelting process: Part I. Model development and verification with laboratory and pilot plant measurements for chalcopyrite concentrate smelting. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1990, 21, 945-958.	0.5	51
31	Process Simulation and Economic Feasibility Analysis for a Hydrogen-Based Novel Suspension Ironmaking Technology. Steel Research International, 2011, 82, 951-963.	1.0	50
32	Upgrading of Low-Grade Manganese Ore by Selective Reduction of Iron Oxide and Magnetic Separation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 1465-1475.	1.0	50
33	Effect of WC particle size on Co distribution in liquid-phase-sintered functionally graded WC-Co composite. International Journal of Refractory Metals and Hard Materials, 2008, 26, 98-105.	1.7	49
34	Flowsheet development, process simulation and economic feasibility analysis for novel suspension ironmaking technology based on natural gas: Part 1 - Flowsheet and simulation for ironmaking with reformerless natural gas. Ironmaking and Steelmaking, 2012, 39, 398-408.	1.1	49
35	A Dehydrogenation Mechanism of Metal Hydrides Based on Interactions between H ⁺ and H ⁻ . Inorganic Chemistry, 2006, 45, 8749-8754.	1.9	48
36	Effect of CaO and SiO ₂ on swelling and iron whisker formation during reduction of iron oxide compact. Ironmaking and Steelmaking, 2011, 38, 447-452.	1.1	46

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37	A Review on the Modeling of Gaseous Reduction of Iron Oxide Pellets. <i>Steel Research International</i> , 2020, 91, 1900270.	1.0	46
38	Enhanced photocatalytic activity and photocurrent properties of plasma-synthesized indium-doped zinc oxide nanopowder. <i>Materials Today Chemistry</i> , 2019, 11, 60-68.	1.7	44
39	A New Process for Converting SO ₂ to Sulfur without Generating Secondary Pollutants through Reactions Involving CaS and CaSO ₄ . <i>Environmental Science & Technology</i> , 2002, 36, 3020-3024.	4.6	43
40	Oxidation Kinetics of Cu ₂ O in Oxygen Carriers for Chemical Looping with Oxygen Uncoupling. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 2976-2986.	1.8	43
41	Effect of Milling Parameters on the Dehydrogenation Properties of the Mg-H System. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19344-19350.	1.5	42
42	Analysis of Slag Chemistry by FTIR and Raman Spectroscopy: Effect of Water Vapor Content in H ₂ O-H ₂ O ₂ -CO ₂ Mixtures Relevant to a Novel Green Ironmaking Technology. <i>Steel Research International</i> , 2015, 86, 740-752.	1.0	42
43	The sintering behavior of nanosized tungsten powder prepared by a plasma process. <i>International Journal of Refractory Metals and Hard Materials</i> , 2009, 27, 701-704.	1.7	41
44	Effects of Firing and Reduction Conditions on Swelling and Iron Whisker Formation during the Reduction of Iron Oxide Compact. <i>ISIJ International</i> , 2011, 51, 906-912.	0.6	41
45	Intrinsic kinetics of the oxidation of chalcopyrite particles under isothermal and nonisothermal conditions. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1986, 17, 51-60.	0.5	40
46	The selective chlorination of iron from Ilmenite ore by CO-Cl ₂ mixtures: Part I. intrinsic kinetics. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1990, 21, 321-330.	0.5	40
47	The intrinsic thermal decomposition kinetics of SrCO ₃ by a nonisothermal technique. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1997, 28, 1063-1068.	1.0	40
48	Mathematical modeling of minor-element behavior in flash smelting of copper concentrates and flash converting of copper mattes. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1989, 20, 39-51.	0.5	39
49	The Effect of Bulk Flow Due to Volume Change in the Gas Phase on Gas-Solid Reactions: Initially Nonporous Solids. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1980, 19, 237-242.	0.6	37
50	Sodium aluminate leaching and desilication in lime-soda sinter process for alumina from coal wastes. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1985, 16, 707-713.	0.5	37
51	Reduction of molybdenite with carbon in the presence of lime. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1997, 28, 265-274.	1.0	37
52	Simultaneous fluid-solid reactions in porous solids: Reactions between one solid and two fluid reactants. <i>Chemical Engineering Science</i> , 1980, 35, 1625-1635.	1.9	36
53	Mathematical modeling of liquid phase migration in solid-liquid mixtures: Application to the sintering of functionally graded WC-Co composites. <i>Acta Materialia</i> , 2007, 55, 3111-3119.	3.8	36
54	Plasma synthesis of tungsten carbide and cobalt nanocomposite powder. <i>Journal of Alloys and Compounds</i> , 2009, 481, 274-277.	2.8	36

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55	Reaction Mechanisms in the $\text{Li}_{3\text{AlH}_6/\text{LiBH}_4}$ and Al/LiBH_4 Systems for Reversible Hydrogen Storage. Part 2: Solid-State NMR Studies. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6048-6056.	1.5	36
56	Computational Fluid Dynamics Simulation of the Hydrogen Reduction of Magnetite Concentrate in a Laboratory Flash Reactor. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 3489-3500.	1.0	36
57	Sintering kinetics and alumina yield in lime-soda sinter process for alumina from coal wastes. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1985, 16, 385-395.	0.5	35
58	Kinetics of carbothermic reduction of magnesia and zinc oxide by thermogravimetric analysis technique. <i>Scandinavian Journal of Metallurgy</i> , 2003, 32, 171-176.	0.3	35
59	Flowsheet development, process simulation and economic feasibility analysis for novel suspension ironmaking technology based on natural gas: Part 3 – Economic feasibility analysis. <i>Ironmaking and Steelmaking</i> , 2013, 40, 44-49.	1.1	35
60	Interactions of Alumina-Based and Magnesia-Based Refractories with Iron Melts and Slags: A Review. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 1860-1882.	1.0	35
61	Tungsten carbide nanopowder by plasma-assisted chemical vapor synthesis from $\text{WCl}_6\text{-CH}_4\text{-H}_2$ mixtures. <i>Journal of Materials Science</i> , 2008, 43, 5185-5192.	1.7	34
62	Plasma Synthesis of Tungsten Carbide Nanopowder from Ammonium Paratungstate. <i>Journal of the American Ceramic Society</i> , 2009, 92, 655-660.	1.9	34
63	Intrinsic Kinetics of the Reaction between Oxygen and Carbonaceous Residue in Retorted Oil Shale. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1980, 19, 550-555.	0.6	33
64	Effect of bulk flow due to volume change in the gas phase on gas-solid reactions: initially porous solids. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1982, 21, 658-663.	0.6	33
65	Mathematical modeling of sulfide flash smelting process: Part III. Volatilization of minor elements. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 1991, 22, 791-799.	1.0	33
66	Chemical vapor synthesis of Mg-Ti nanopowder mixture as a hydrogen storage material. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 7700-7706.	3.8	33
67	Mathematical modeling of sulfide flash smelting process: Part II. Quantitative analysis of radiative heat transfer. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1990, 21, 959-966.	0.5	32
68	Dip coating of alumina films by the sol-gel method. <i>Journal of Materials Research</i> , 1993, 8, 3151-3157.	1.2	32
69	Kinetics of dehydrogenation of the Mg-Ti-H hydrogen storage system. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8344-8350.	3.8	32
70	Kinetics of Hydrogen Reduction of Magnetite Concentrate Particles in Solid State Relevant to Flash Ironmaking. <i>Steel Research International</i> , 2017, 88, 1600133.	1.0	32
71	Recycling and utilization of spent potlining by different high temperature treatments. <i>Journal of Cleaner Production</i> , 2021, 289, 125704.	4.6	32
72	The effect of reaction order in non-catalytic gas-solid reactions. <i>Canadian Journal of Chemical Engineering</i> , 1972, 50, 674-676.	0.9	31

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73	A Novel Cyclic Reaction System Involving CaS and CaSO ₄ for Converting Sulfur Dioxide to Elemental Sulfur without Generating Secondary Pollutants. 3. Kinetics of the Hydrogen Reduction of the Calcium Sulfate Powder to Calcium Sulfide. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 3092-3096.	1.8	31
74	Effects of Reducing Gas on Swelling and Iron Whisker Formation during the Reduction of Iron Oxide Compact. <i>Steel Research International</i> , 2012, 83, 903-909.	1.0	31
75	Analysis of the Hydrogen Reduction Rate of Magnetite Concentrate Particles in a Drop Tube Reactor Through CFD Modeling. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 1669-1680.	1.0	31
76	The selective carbochlorination of iron from titaniferous magnetite ore in a fluidized bed. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1990, 21, 341-347.	0.5	30
77	Reactions of Nonporous Solids. , 1976, , 65-107.		27
78	Mathematical and experimental investigation of the self-propagating high-temperature synthesis (SHS) of TiAl ₃ and Ni ₃ Al intermetallic compounds. <i>Journal of Materials Science</i> , 1996, 31, 3281-3288.	1.7	27
79	Effect of Water Vapor Content in H ₂ -CO Mixtures on the Equilibrium Distribution of Manganese between CaO and MnO. <i>Steel Research International</i> , 2014, 85, 875-884.	1.0	27
80	Effect of oxygen vacancies in non-stoichiometric ceria on its photocatalytic properties. <i>Nano Structures Nano Objects</i> , 2019, 18, 100257.	1.9	27
81	Preparation of ultrafine tungsten carbide powder by CVD method from WCl ₆ -H ₂ mixtures. <i>Journal of Materials Research</i> , 1993, 8, 2702-2708.	1.2	26
82	A Novel Cyclic Reaction System Involving CaS and CaSO ₄ for Converting Sulfur Dioxide to Elemental Sulfur without Generating Secondary Pollutants. 1. Determination of Process Feasibility. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 3081-3086.	1.8	26
83	The influence of chemical equilibrium on fluid-solid reaction rates and the falsification of activation energy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004, 35, 121-131.	1.0	26
84	Effect of milling intensity on the formation of LiMgN from the dehydrogenation of LiNH ₂ -MgH ₂ (1:1) mixture. <i>Journal of Power Sources</i> , 2010, 195, 1992-1997.	4.0	26
85	Effect of oxygen vacancies and phases on catalytic properties of hydrogen-treated nanoceria particles. <i>Materials Research Express</i> , 2018, 5, 035501.	0.8	26
86	Kinetics of the reaction between hydrogen sulfide and lime particles. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1985, 16, 163-168.	0.5	25
87	The mixed-control kinetics of ferric chloride leaching of galena. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1989, 20, 107-110.	0.5	25
88	The selective chlorination of iron from Ilmenite ore by CO-Cl ₂ mixtures: Part II. mathematical modeling of the fluidized-bed process. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1990, 21, 331-340.	0.5	25
89	Calcined calcium magnesium acetate as a superior SO ₂ sorbent: I. Thermal decomposition. <i>AIChE Journal</i> , 2002, 48, 2971-2977.	1.8	25
90	Potential and Reaction Mechanism of Li-Mg-Al-Na-H System for Reversible Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16686-16692.	1.5	25

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91	Analysis of the Reduction Rate of Hematite Concentrate Particles in the Solid State by H ₂ or CO in a Drop-Tube Reactor Through CFD Modeling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2677-2684.	1.0	25
92	Energy Consumption and CO ₂ Emissions in Ironmaking and Development of a Novel Flash Technology. Metals, 2020, 10, 54.	1.0	25
93	Kinetics of As, Sb, Bi and Pb volatilization from industrial copper matte during Ar+O ₂ bubbling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 651-661.	1.0	24
94	Methods for Calculating Energy Requirements for Processes in Which a Reactant Is Also a Fuel: Need for Standardization. Jom, 2014, 66, 1557-1564.	0.9	24
95	Mixed-control kinetics of oxygen leaching of chalcopyrite and pyrite from porous primary ore fragments. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1987, 18, 497-503.	0.5	23
96	Model for ferric sulfate leaching of copper ores containing a variety of sulfide minerals: Part I. Modeling uniform size ore fragments. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1992, 23, 537-548.	0.5	23
97	Developments in physical chemistry and basic principles. Jom, 1993, 45, 40-44.	0.9	23
98	Kinetics of Copper Oxidation in the Air Reactor of a Chemical Looping Combustion System using the Law of Additive Reaction Times. Industrial & Engineering Chemistry Research, 2011, 50, 13330-13339.	1.8	23
99	Application of Spectroscopic Analysis Techniques to the Determination of Slag Structures and Properties: Effect of Water Vapor on Slag Chemistry Relevant to a Novel Flash Ironmaking Technology. Jom, 2013, 65, 1559-1565.	0.9	23
100	Effect of water vapour content in H ₂ -CO mixtures on activity of iron oxide in slags relevant to novel flash ironmaking technology. Ironmaking and Steelmaking, 2014, 41, 665-675.	1.1	23
101	Recovery of Copper and Cobalt from Converter Slags via Reduction-Sulfurization Smelting Using Spent Pot Lining as the Reductant. ACS Sustainable Chemistry and Engineering, 2021, 9, 4234-4246.	3.2	23
102	Intrinsic kinetics of the hydrogen reduction of Cu ₂ S. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1985, 16, 831-839.	0.5	22
103	The coming of age of process engineering in extractive metallurgy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1991, 22, 737-754.	1.0	22
104	Mathematical modeling of fluidized-bed chlorination of rutile. AIChE Journal, 1996, 42, 3102-3112.	1.8	22
105	Flash synthesis of Magnéli phase (Ti _n O _{2n-1}) nanoparticles by thermal plasma treatment of H ₂ TiO ₃ . Ceramics International, 2018, 44, 3929-3936.	2.3	22
106	Successive gas-solid reaction model for the hydrogen reduction of cuprous sulfide in the presence of lime. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1985, 16, 645-661.	0.5	21
107	The ignition and combustion of chalcopyrite concentrate particles under suspension-smelting conditions. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1993, 24, 975-985.	0.5	21
108	Ti and TiAl powders by the flash reduction of chloride vapors. Jom, 1998, 50, 50-51.	0.9	21

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109	Intrinsic Kinetics and Mechanism of Rutile Chlorination by CO + Cl ₂ Mixtures. Industrial & Engineering Chemistry Research, 1998, 37, 3800-3805.	1.8	21
110	Experimental investigation and three-dimensional computational fluid-dynamics modeling of the flash-converting furnace shaft: Part II. Formulation of three-dimensional computational fluid-dynamics model incorporating the particle-cloud description. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2001, 32, 869-886.	1.0	21
111	Mechanisms of the Formation of Silica Particles from Precursors with Different Volatilities by Flame Spray Pyrolysis. Aerosol Science and Technology, 2009, 43, 911-920.	1.5	21
112	Reaction Mechanisms in the Li ₃ AlH ₆ /LiBH ₄ and Al/LiBH ₄ Systems for Reversible Hydrogen Storage. Part 1: H Capacity and Role of Al. Journal of Physical Chemistry C, 2011, 115, 6040-6047.	1.5	21
113	Sulfur Distribution between Liquid Iron and Magnesia-Saturated Slag in H ₂ /H ₂ O Atmosphere Relevant to a Novel Green Ironmaking Technology. Industrial & Engineering Chemistry Research, 2012, 51, 3639-3645.	1.8	21
114	Phosphorus Distribution between Liquid Iron and Magnesia-Saturated Slag in H ₂ /H ₂ O Atmosphere Relevant to a Novel Ironmaking Technology. Industrial & Engineering Chemistry Research, 2012, 51, 7028-7034.	1.8	21
115	The law of additive reaction times applied to the hydrogen reduction of porous nickel-oxide pellets. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1984, 15, 403-406.	0.5	20
116	Simplified treatment of the rates of gas-solid reactions involving multicomponent diffusion. Industrial & Engineering Chemistry Research, 1993, 32, 42-48.	1.8	20
117	Kinetics of the Hydrogen Reduction of Silica Incorporating the Effect of Gas-Volume Change upon Reaction. Journal of the American Ceramic Society, 2005, 88, 882-888.	1.9	20
118	Effects of particle shape and size distribution on the overall fluid-solid reaction rates of particle assemblages. Canadian Journal of Chemical Engineering, 2016, 94, 1516-1523.	0.9	20
119	Effect of CaSO ₄ Pelletization Conditions on a Novel Process for Converting SO ₂ to Elemental Sulfur by Reaction Cycles involving CaSO ₄ /CaS " Part I. CaSO ₄ Pellet Strength and Reducibility by Hydrogen. Chemical Engineering and Technology, 2007, 30, 628-634.	0.9	19
120	Effect of Water Vapor on Sulfur Distribution Between Liquid Fe and MgO-Saturated Slag Relevant to a Flash Ironmaking Technology. Steel Research International, 2015, 86, 753-759.	1.0	19
121	Nanoceria synthesis in the KCl-LiCl salt system: Crystal formation and properties. Journal of the American Ceramic Society, 2017, 100, 1863-1875.	1.9	19
122	The trajectories and distribution of particles in a turbulent axisymmetric gas jet injected into a flash furnace shaft. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1988, 19, 871-884.	0.5	18
123	Microstructural Changes in Several Titaniferous Materials during Chlorination Reaction. Industrial & Engineering Chemistry Research, 1996, 35, 954-962.	1.8	18
124	The Kinetics of Oxidation of Molybdenite Concentrate by Water Vapor. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2007, 38, 689-693.	1.0	18
125	Nanoceria synthesis in molten KOH-NaOH mixture: Characterization and oxygen vacancy formation. Ceramics International, 2018, 44, 3847-3855.	2.3	18
126	Photocatalytic properties of plasma-synthesized zinc oxide and tin-doped zinc oxide (TZO) nanopowders and their applications as transparent conducting films. Journal of Materials Science: Materials in Electronics, 2018, 29, 14945-14959.	1.1	18

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127	Measurement and Correlation of Drop-Size Distribution in Liquid. Liquid Emulsions Formed by High-Velocity Bottom Gas Injection.. ISIJ International, 1995, 35, 234-241.	0.6	18
128	A Unified Theory of Ammonium Perchlorate Deflagration and the Low Pressure Deflagration Limit. Combustion Science and Technology, 1975, 10, 137-154.	1.2	17
129	Gas-Solid Reactions of Industrial Importance. , 1976, , 338-391.		17
130	Approximate closed-form solutions to various model equations for fluid-solid reactions. AIChE Journal, 1986, 32, 1574-1578.	1.8	17
131	Kinetics of the sulfidation of chalcopyrite with gaseous sulfur. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2003, 34, 61-68.	1.0	17
132	Effect of water vapour content in H ₂ O-CO mixtures on MgO solubility in slag under conditions of novel flash ironmaking technology. Ironmaking and Steelmaking, 2014, 41, 575-582.	1.1	17
133	Plasma-assisted chemical vapor synthesis of indium tin oxide (ITO) nanopowder and hydrogen-sensing property of ITO thin film. Materials Research Express, 2018, 5, 065045.	0.8	17
134	The carbothermal reduction of nickel sulfide in the presence of lime. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1983, 14, 605-615.	0.5	16
135	Distribution of lead between copper and matte and the activity of PbS in copper-saturated mattes. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1984, 15, 441-449.	0.5	16
136	Distribution of Gold and Silver between Copper and Matte. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1985, 16, 53-59.	0.5	16
137	Effect of nonuniform distribution of solid reactant on fluid-solid reactions. 1. Initially nonporous solids. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 386-394.	0.6	16
138	Effect of nonuniform distribution of solid reactant on fluid-solid reactions. 2. Porous solids. Industrial & Engineering Chemistry Research, 1987, 26, 246-254.	1.8	16
139	Determination of kinetic parameters using differential thermal analysis—Application to the decomposition of CaCO ₃ . Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1997, 28, 1157-1164.	1.0	16
140	Synthesis of ultrafine particles of intermetallic compounds by the vapor-phase magnesium reduction of chloride mixtures: Part I. Titanium aluminides. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1998, 29, 457-464.	1.0	16
141	Flux growth of 2M-wollastonite crystals for the preparation of high aspect ratio particles. Ceramics International, 2014, 40, 5973-5982.	2.3	16
142	Reduction of Magnetite Concentrate Particles by H ₂ +CO at 1673 K. ISIJ International, 2015, 55, 706-708.	0.6	16
143	Kinetics and Sulfur fixation in the reduction or oxidation of metal Sulfides mixed with lime. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1983, 14, 175-180.	0.5	15
144	Intrinsic kinetics of the reaction between zinc sulfide and water vapor. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1987, 18, 451-457.	0.5	15

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