Zhengjie Chen

List of Publications by Year
in descending order

47	496	840776 11	794594 19
papers	citations	h-index	g-index

47	47	47	222
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of hydrometallurgy techniques for the removal of impurities from metallurgical-grade silicon. Hydrometallurgy, 2021, 201, 105553.	4.3	69
2	Influence of carbon material on the production process of different electric arc furnaces. Journal of Cleaner Production, 2018, 174, 17-25.	9.3	37
3	Artificial neural network modeling for evaluating the power consumption of silicon production in submerged arc furnaces. Applied Thermal Engineering, 2017, 112, 226-236.	6.0	36
4	Influence of carbothermic reduction on submerged arc furnace energy efficiency during silicon production. Energy, 2016, 116, 687-693.	8.8	35
5	Effect of raw materials on the production process of the silicon furnace. Journal of Cleaner Production, 2017, 158, 359-366.	9.3	34
6	The effect of the carbonaceous materials properties on the energy consumption of silicon production in the submerged arc furnace. Journal of Cleaner Production, 2018, 191, 240-247.	9.3	27
7	Fabrication of ultra-low antireflection SiNWs arrays from mc-Si using one step MACE. Journal of Materials Science: Materials in Electronics, 2017, 28, 8510-8518.	2.2	17
8	Detailed vacuum-assisted desulfurization of high-sulfur petroleum coke. Separation and Purification Technology, 2017, 175, 115-121.	7.9	16
9	Effects of potassium feldspar on slagging and fluxing in phosphorus produced via electric furnace. Phosphorus, Sulfur and Silicon and the Related Elements, 2017, 192, 475-480.	1.6	15
10	Thermodynamic Estimation of Silicon Tetrachloride to Trichlorosilane by a Low Temperature Hydrogenation Technique. Silicon, 2017, 9, 69-75.	3.3	14
11	A Study of the Performance of Submerged Arc Furnace Smelting of Industrial Silicon. Silicon, 2018, 10, 1121-1127.	3.3	14
12	Boron Removal from Industrial Silicon by Combined Slagging and Acid Leaching Treatment Technology. Jom, 2020, 72, 2670-2675.	1.9	13
13	Novel and efficient purification of silicon through ultrasonic-Cu catalyzed chemical leaching. Ultrasonics Sonochemistry, 2019, 56, 474-480.	8.2	12
14	The Effect of Silica and Reducing Agent on the Contents of Impurities in Silicon Produced. Silicon, 2022, 14, 2779-2792.	3.3	11
15	The effect of Ni on Fe and Al impurities by MIVM model for the silicon production. Energy, 2022, 254, 124459.	8.8	9
16	An Innovative Metal Ions Sensitive â€œTest Paperâ€•Based on Virgin Nanoporous Silicon Wafer: Highly Selective to Copper(II). Scientific Reports, 2016, 6, 36654.	3.3	8
17	Simple and High-Effective Purification of Metallurgical-Grade Silicon Through Cu-Catalyzed Chemical Leaching. Jom, 2018, 70, 2041-2047.	1.9	8
18	Effects of grinding media on the material properties and strengthening mechanism of silicon production. Journal of Cleaner Production, 2021, 278, 123438.	9.3	8

#	Article	IF	Citations
19	Effect of the reactive blend conditions on the thermal properties of waste biomass and soft coal as a reducing agent for silicon production. Renewable Energy, 2022, 187, 302-319.	8.9	8
20	NiSO4 as Additive Effect on the Carbothermal Reduction Process of Phosphate Rock and SiO2. Silicon, 2019, 11, 2829-2836.	3.3	7
21	Research on surface nano-texturation and wet-chemical passivation of multi-crystalline silicon wafer. Journal of Materials Science: Materials in Electronics, 2017, 28, 18825-18834.	2.2	6
22	Effect of K2CO3 as an Additive Agent on the Carbothermic Reduction Process of Silicon Production. Silicon, 2020, 12, 1575-1584.	3.3	6
23	Effect of AC as a reductant through the coupling treatment of microwave-assisted and alkali carbonate on silicon production. Journal of Alloys and Compounds, 2020, 817, 152737.	5.5	6
24	Concentration-Controlled and Phytic Acid-Assisted Synthesis of Self-Assembled LiFePO₄ as Cathode Materials for Lithium-Ion Battery. Nano, 2020, 15, 2050003.	1.0	6
25	Application of a Waste Carbon Material as the Carbonaceous Reductant During Silicon Production. Silicon, 2018, 10, 2409-2417.	3.3	5
26	Clean and effective utilization of moldy peel as a biomass waste resource in the gasification process of petroleum coke. Sustainable Energy and Fuels, 2020, 4, 6096-6104.	4.9	5
27	Influence of the Grinding Media Applying in the Soft Coal and Waste Biomass on the Carbothermic Reduction Process of Silica. Silicon, 2021, 13, 3963-3970.	3.3	5
28	Predicting the Electricity Consumption and the Exergetic Efficiency of a Submerged Arc Furnace with Raw Materials using an Artificial Neural Network. Silicon, 2018, 10, 603-608.	3.3	4
29	The Effect of K-feldspar and Silica as Fluxing Agent on the Production Process of Phosphorus Furnace. Silicon, 2019, 11, 233-239.	3.3	4
30	Silica, Alkali Carbonate and Alkali Rich Metal Ore as Additive Effect on the Carbothermic Reduction Process of Phosphorus Ore. Silicon, 2020, 12, 613-620.	3.3	4
31	The Additive Effect of K2CO3-NiSO4 on the Carbothermal Reduction Process of Phosphate Rock and SiO2. Silicon, 2020, 12, 1985-1994.	3.3	4
32	Overview of Current Phosphoric Acid Production Processes and a New Idea of Kiln Method. Mini-Reviews in Organic Chemistry, 2021, 18, 328-338.	1.3	4
33	Effect of Silica and Carbon-Reducing Agents on Ni and Ti Impurities during Silicon Production. Silicon, 2022, 14, 4925-4934.	3.3	4
34	Effect of grinding media on the synergistic characteristics of coal and biomass for the carbothermal reduction of silica. Phosphorus, Sulfur and Silicon and the Related Elements, 2021, 196, 594-603.	1.6	4
35	Vacuum-assisted and alkali roasting for desulfurization of petroleum coke. Journal of Cleaner Production, 2022, 332, 130052.	9.3	4
36	Experimental study of various fluxing agents in a phosphorus furnace. Phosphorus, Sulfur and Silicon and the Related Elements, 2017, 192, 1048-1053.	1.6	3

#	Article	IF	Citations
37	Study of the Silica or K-feldspar as fluxing agent for the yellow phosphorus production. Phosphorus, Sulfur and Silicon and the Related Elements, 2018, 193, 520-527.	1.6	3
38	Studies on extraction of phosphorus from phosphate ore by electric furnace with different fluxing agents. Phosphorus, Sulfur and Silicon and the Related Elements, 2018, 193, 141-148.	1.6	3
39	Effect of off-centered silicon ladle on the removal strength of aluminum and calcium impurities. Separation and Purification Technology, 2018, 201, 301-308.	7.9	3
40	Study on kinetics of the pyrolysis process of aluminum sulfate. Phosphorus, Sulfur and Silicon and the Related Elements, 2020, 195, 285-292.	1.6	3
41	Evaluating of the exergy efficiency of the silicon production process using artificial neural networks. Phosphorus, Sulfur and Silicon and the Related Elements, 2020, 195, 756-766.	1.6	3
42	Thermodynamics and kinetics of the carbothermal reduction of aluminum sulfate. Phosphorus, Sulfur and Silicon and the Related Elements, 2021, 196, 71-78.	1.6	3
43	Synergistic Effect of Distillersâ€™ Grains and Petroleum Coke as Reducing Agent on the Carbothermic Reduction of Silica. Silicon, 2022, 14, 7809-7818.	3.3	2
44	Structural Transformation of High-sulfur Petroleum Cokes with Additives after Heat Treatment. Journal of Chemical Engineering of Japan, 2018, 51, 848-854.	0.6	1
45	Effect of Carbonaceous Reducers on Carbon Emission during Silicon Production in SAF of 8.5 MVA and 12.5 MVA. Silicon, 2022, 14, 7123-7133.	3.3	1
46	Effect of carbon material composition on the energy consumption in 22.5 MVA silicon furnace. Phosphorus, Sulfur and Silicon and the Related Elements, 2022, 197, 1036-1044.	1.6	1
47	Study on Si-P-Fe and Si-P-Al ternary System Interactions Applied by MIVM Model for the Process of Specific Actual Production. Silicon, 0, , 1.	3.3	1