

An Economical Approach for the Recycling of High-Purity Kerf Slurry Waste

Silicon

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Study on the synthesis of SiC nanoparticles from diamond-wire silicon cutting waste. RSC Advances, 2019, 9, 23785-23790.	1.7	30
2	Remanufacturing of silicon powder waste cut by a diamond-wire saw through high temperature non-transfer arc assisted vacuum smelting. Journal of Hazardous Materials, 2019, 379, 120796.	6.5	52
3	Study on the kinetics of iron removal from silicon diamond-wire saw cutting waste: Comparison between heterogeneous and homogeneous reaction methods. Separation and Purification Technology, 2019, 221, 261-268.	3.9	48
4	Thermodynamic study on the carbothermal nitridation synthesis of silicon nitride using silicon kerf loss. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1883-1893.	2.0	5
5	Recycling of silicon kerf loss derived from diamond-wire saw cutting process to prepare silicon nitride. Journal of Cleaner Production, 2020, 247, 119163.	4.6	30
6	Dissolution and mineralization behavior of metallic impurity content in diamond wire saw silicon powder during acid leaching. Journal of Cleaner Production, 2020, 248, 119256.	4.6	40
7	Recycling silicon from silicon cutting waste by Al-Si alloying. Journal of Cleaner Production, 2020, 251, 119647.	4.6	37
8	Preparation of Low-Boron Silicon from Diamond Wire Sawing Waste by Pressure-Less Sintering and CaO-SiO ₂ Slag Treatment. ACS Sustainable Chemistry and Engineering, 2020, 8, 11755-11763.	3.2	14
9	Recovery of silicon kerf waste from diamond wire sawing by two-step sintering and acid leaching method. Journal of Cleaner Production, 2020, 265, 121911.	4.6	32
10	Occurrence State and Dissolution Mechanism of Metallic Impurities in Diamond Wire Saw Silicon Powder. ACS Sustainable Chemistry and Engineering, 2020, 8, 12577-12587.	3.2	18
11	Thermodynamic Study on the Synthesis of SiC with Silicon Cutting Waste. Silicon, 2020, , 1.	1.8	1
12	Review of Silicon Recovery and Purification from Saw Silicon Powder. Jom, 2020, 72, 2633-2647.	0.9	29
13	Microwave-Assisted Acid Leaching for Recovery of Silicon from Diamond-Wire Cutting Waste Slurry. Jom, 2020, 72, 2656-2662.	0.9	10
14	Recycling of silicon from silicon cutting waste by Al-Si alloying in cryolite media and its mechanism analysis. Environmental Pollution, 2020, 265, 114892.	3.7	30
15	Preparation of reactive sintering Si ₃ N ₄ -Si ₂ N ₂ O composites ceramics with diamond-wire saw powder waste as raw material. Journal of Hazardous Materials, 2020, 400, 123145.	6.5	21
16	Novel Reaction Media of Na ₂ CO ₃ -CaO for Silicon Extraction and Aluminum Removal from Diamond Wire Saw Silicon Powder by Roasting-Smelting Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 4146-4157.	3.2	34
17	Identification of the Silica Nanoparticles Appeared in the Slurry Generated during the Sawing Step to Manufacture the Photovoltaic Cells. Silicon, 2021, 13, 2763-2769.	1.8	0
18	Progress in recovery and recycling of kerf loss silicon waste in photovoltaic industry. Separation and Purification Technology, 2021, 254, 117581.	3.9	54

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19	Recycling high-purity silicon from diamond-wire saw kerf slurry waste by vacuum refining process. <i>Journal of Cleaner Production</i> , 2021, 286, 124979.	4.6	29
20	Recycling Si waste cut from diamond wire into high performance porous Si@SiO ₂ @C anodes for Li-ion battery. <i>Journal of Hazardous Materials</i> , 2021, 407, 124778.	6.5	22
21	A Novel Approach on Reusing Silicon Wafer Kerf Particle as Potential Filler Material in Polymer Composite. <i>Silicon</i> , 2022, 14, 1537-1548.	1.8	12
22	Recycling of the Diamond-Wire Saw Powder Waste to Prepare Silica Nanoparticles. <i>Silicon</i> , 2022, 14, 1605-1615.	1.8	3
23	Investigation of Na ₂ CO ₃ •CaO•NaCl (or Na ₃ AlF ₆) additives for the remanufacturing of silicon from diamond wire saw silicon powder waste. <i>Journal of Cleaner Production</i> , 2021, 286, 125525.	4.6	31
24	Silicon Carbide Recovery from Cutting Fluid Waste: Evolution of Recycling Performance for Valorization with Higher Added Value. <i>Silicon</i> , 0, , 1.	1.8	0
25	Characterization and Parametric Optimization of Performance Parameters of DLC-Coated Tungsten Carbide (WC) Tool Using TOPSIS. <i>Coatings</i> , 2021, 11, 760.	1.2	17
27	Effect of Recovered Silicon Filler Inclusion on Mechanical and Tribological Properties of Polytetrafluoroethylene (PTFE) Composite. <i>Silicon</i> , 2022, 14, 4601-4610.	1.8	20
28	Preparation of Al•Si alloys with silicon cutting waste from diamond wire sawing process. <i>Journal of Environmental Management</i> , 2021, 290, 112548.	3.8	21
29	Recycling of photovoltaic silicon waste for high-performance porous silicon/silver/carbon/graphite anode. <i>Waste Management</i> , 2021, 132, 56-63.	3.7	24
30	Al ₂ O ₃ and CaO as sintering aids: A strategy to remove impurity boron and SiO ₂ surface-layer of diamond wire saw silicon waste. <i>Separation and Purification Technology</i> , 2021, 270, 118823.	3.9	14
31	Review of resource and recycling of silicon powder from diamond-wire sawing silicon waste. <i>Journal of Hazardous Materials</i> , 2022, 424, 127389.	6.5	12
32	Effects and function mechanism of Fe-containing additives on SiC synthesis with silicon cutting waste. <i>International Journal of Applied Ceramic Technology</i> , 2022, 19, 299-311.	1.1	1
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34	Upcycling of Silicon Solar Cells: What Are the Options?. <i>Lecture Notes in Production Engineering</i> , 2021, , 19-24.	0.3	0
35	Ultrasound-Assisted Leaching of Iron from Silicon Diamond-Wire Saw Cutting Waste. <i>Jom</i> , 2021, 73, 791-800.	0.9	16
36	Application of Pressure-less Sintering and Dynamic-Slag Treatment to Recover Diamond Wire Saw Silicon Powder. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 19023-19031.	3.2	12
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38	A novel approach for simultaneous recycling of Ti-bearing blast furnace slag, diamond wire saw Si powder, and Al alloy scrap for preparing TiSi ₂ and Al-Si alloys. <i>Journal of Hazardous Materials</i> , 2022, 427, 127905.	6.5	14
39	Efficient recycling of silicon cutting waste by Al Si alloying with the assistance of cryolite. <i>Science of the Total Environment</i> , 2022, 816, 151580.	3.9	5
40	High-value recycling of photovoltaic silicon waste: Accelerated removal of impurity boron through Na ₃ AlF ₆ -enhanced slag refining. <i>Separation and Purification Technology</i> , 2022, 289, 120732.	3.9	8
41	Recovery and Purification of Silicon From Diamond Wire Saw Wasted Silicon Powder by a Technique of Induction Smelting Followed by Directional Solidification. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2022, 53, 2704-2711.	1.0	2
42	Recycling the diamond-wire saw silicon powder for preparing the regulable Si ₃ N ₄ materials by non-catalytic nitridation. <i>Journal of Cleaner Production</i> , 2022, 371, 133656.	4.6	4
43	Preparation of Al-Si alloy from silicon cutting waste: Enabling oxide surface removing and silicon utilization improving via vacuum sintering. <i>Science of the Total Environment</i> , 2023, 863, 161038.	3.9	4
44	Study on recycling Si from silicon diamond-wire saw cutting waste by a slag refining process in industrial scale. <i>Journal of Cleaner Production</i> , 2023, 398, 136557.	4.6	6
45	Efficient recycling of silicon cutting waste for producing high-quality Si-Fe alloys. <i>Environmental Science and Pollution Research</i> , 2023, 30, 62355-62366.	2.7	2