Weizao Liu

List of Publications by Year
in descending order

61 papers	1,822 citations	236925 25 h-index	302126 39 g-index
62 all docs	62 docs citations	62 times ranked	720 citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient extraction and separation of zinc and iron from electric arc furnace dust by roasting with FeSO4Â·7H2O followed by water leaching. Separation and Purification Technology, 2022, 281, 119936.	7.9	20
2	Influence of phosphorus on the NH3-SCR performance of CeO2-TiO2 catalyst for NO removal from co-incineration flue gas of domestic waste and municipal sludge. Journal of Colloid and Interface Science, 2022, 610, 463-473.	9.4	38
3	Simultaneous extraction of lithium, rubidium, cesium and potassium from lepidolite via roasting with iron(II) sulfate followed by water leaching. Hydrometallurgy, 2022, 208, 105820.	4.3	22
4	Deactivation mechanisms of MnO -CeO2/Ti-bearing blast furnace slag low-temperature SCR catalyst by PbO and PbCl2. Molecular Catalysis, 2022, 521, 112209.	2.0	4
5	Simultaneous CO2 mineral sequestration and rutile beneficiation by using titanium-bearing blast furnace slag: Process description and optimization. Energy, 2022, 248, 123643.	8.8	21
6	Insights into co-doping effect of Sm and Fe on anti-Pb poisoning of Mn-Ce/AC catalyst for low-temperature SCR of NO with NH3. Fuel, 2022, 319, 123763.	6.4	70
7	Insights into samarium doping effects on catalytic activity and SO2 tolerance of MnFeO catalyst for low-temperature NH3-SCR reaction. Fuel, 2022, 321, 124113.	6.4	85
8	A novel conversion of Ti-bearing blast furnace slag into Ti-containing zeolites: Comparison study between FAU and MFI type zeolites. Advanced Powder Technology, 2022, 33, 103559.	4.1	4
9	Simultaneous removal of NO and dioxins over V2O5-WO3/TiO2 catalyst for iron ore sintering flue gas: The poisoning effect of Pb. Fuel, 2022, 324, 124483.	6.4	16
10	Separation of calcium chloride from waste acidic raffinate in HCl wet process for phosphoric acid manufacture: Simulated and experimental study. Journal of Environmental Chemical Engineering, 2022, 10, 108076.	6.7	6
11	In situ deposition of 0D CeO2 quantum dots on Fe2O3-containing solid waste NH3-SCR catalyst: Enhancing redox and NH3 adsorption ability. Waste Management, 2022, 149, 323-332.	7.4	17
12	Efficient MnO -CeO2/Ti-bearing blast furnace slag catalyst for NH3-SCR of NO at low temperature: Study of support treating and Mn/Ce ratio. Journal of Environmental Chemical Engineering, 2022, 10, 108238.	6.7	18
13	Improving the tolerance to alkali and alkaline earth metal chlorides of WO3 and Nb2O5 promoted V2O5/TiO2 catalysts for the NH3-SCR reaction. Fuel, 2022, 328, 125262.	6.4	10
14	CO2 mineral sequestration by using blast furnace slag: From batch to continuous experiments. Energy, 2021, 214, 118975.	8.8	60
15	Synthesis of sole gismondine-type zeolite from blast furnace slag during CO2 mineralization process. Journal of Environmental Chemical Engineering, 2021, 9, 104652.	6.7	26
16	Separation and recovery of cesium sulfate from the leach solution obtained in the sulfuric acid baking process of lepidolite concentrate. Hydrometallurgy, 2021, 199, 105537.	4.3	13
17	Insight into N2O Formation Over Different Crystal Phases of MnO2 During Low-Temperature NH3â€"SCR of NO. Catalysis Letters, 2021, 151, 2964-2971.	2.6	38
18	Research on integrated CO2 absorption-mineralization and regeneration of absorbent process. Energy, 2021, 222, 120010.	8.8	7

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19	CO2 mineral carbonation using industrial solid wastes: A review of recent developments. Chemical Engineering Journal, 2021, 416, 129093.	12.7	198
20	Advances in recovery and utilization of carbon dioxide: A brief review. Journal of Environmental Chemical Engineering, 2021, 9, 105644.	6.7	83
21	Application of manganese-containing soil as novel catalyst for low-temperature NH3-SCR of NO. Journal of Environmental Chemical Engineering, 2021, 9, 105426.	6.7	25
22	Comparative study on the physicochemical properties and de-NOx performance of waste bamboo-derived low-temperature NH3-SCR catalysts. Research on Chemical Intermediates, 2021, 47, 5303-5320.	2.7	4
23	Recent developments and challenges in zeolite-based composite photocatalysts for environmental applications. Chemical Engineering Journal, 2021, 417, 129209.	12.7	109
24	The combination effects of K2O and PbO poisoning on NH3-SCR TiO2-CeO2 catalyst. Journal of Environmental Chemical Engineering, 2021, 9, 106127.	6.7	17
25	Effect of oxygen vacancies on improving NO oxidation over CeO2 {111} and {100} facets for fast SCR reaction. Journal of Environmental Chemical Engineering, 2021, 9, 106218.	6.7	43
26	Phosphate ore particles dissolution kinetics in hydrochloric acid based on a structure-related segmented model. Powder Technology, 2021, 392, 141-149.	4.2	15
27	Synergistic effect and mechanism of FeO and CeO co-doping on the superior catalytic performance and SO2 tolerance of Mn-Fe-Ce/ACN catalyst in low-temperature NH3-SCR of NO. Journal of Environmental Chemical Engineering, 2021, 9, 106360.	6.7	44
28	CO₂ Mineral Sequestration and Faujasite Zeolite Synthesis by Using Blast Furnace Slag: Process Optimization and CO₂ Net-Emission Reduction Evaluation. ACS Sustainable Chemistry and Engineering, 2021, 9, 13963-13971.	6.7	19
29	Direct recovery of low valence vanadium from vanadium slag â€”â€” Effect of roasting on vanadium leaching. Hydrometallurgy, 2020, 191, 105156.	4.3	36
30	Efficient co-extraction of lithium, rubidium, cesium and potassium from lepidolite by process intensification of chlorination roasting. Chemical Engineering and Processing: Process Intensification, 2020, 147, 107777.	3.6	31
31	Solvent extraction of rubidium from a sulfate solution with high concentrations of rubidium and potassium using 4-tert-butyl-2-(Î±-methylbenzyl)-phenol. Journal of the Taiwan Institute of Chemical Engineers, 2020, 116, 43-50.	5.3	15
32	Solvent-free synthesis of hydroxycancrinite zeolite microspheres during the carbonation process of blast furnace slag. Journal of Alloys and Compounds, 2020, 847, 156456.	5.5	21
33	Absorption of SO2 with recyclable melamine slurry. Separation and Purification Technology, 2020, 251, 117285.	7.9	14
34	Ti3O5 and Al2TiO5 Crystals Flotation Characteristics from Ti-bearing Blast Furnace Slag: A Density Functional Theory and Experimental Study. Crystals, 2020, 10, 838.	2.2	4
35	FeSTi Superacid Catalyst for NH₃-SCR with Superior Resistance to Metal Poisons in Flue Gas. ACS Sustainable Chemistry and Engineering, 2020, 8, 16878-16888.	6.7	24
36	Simultaneous preparation of TiO2 and ammonium alum, and microporous SiO2 during the mineral carbonation of titanium-bearing blast furnace slag. Chinese Journal of Chemical Engineering, 2020, 28, 2256-2266.	3.5	16

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37	Mechanistic Aspects of Highly Efficient Fe_{<i>a</i>}S_{<i>b</i>}TiO_{<i>x</i>} Catalysts for the NH₃-SCR Reaction: Insight into the Synergistic Effect of Fe and S Species. Industrial & Engineering Chemistry Research, 2020, 59, 8164-8173.	3.7	11
38	Removal of chloride from simulated acidic wastewater in the zinc production. Chinese Journal of Chemical Engineering, 2019, 27, 1037-1043.	3.5	21
39	Insights into the Roasting Kinetics and Mechanism of Blast Furnace Slag with Ammonium Sulfate for CO₂ Mineralization. Industrial & Engineering Chemistry Research, 2019, 58, 14026-14036.	3.7	18
40	Aqueous carbonation of MgSO₄ with (NH₄)₂CO₃ for CO₂ sequestration. , 2019, 9, 209-225.		7
41	Combined synthesis of Li4SiO4 sorbent with high CO2 uptake in the indirect carbonation of blast furnace slag process. Chemical Engineering Journal, 2019, 370, 71-80.	12.7	39
42	Energy-efficient and simultaneous extraction of lithium, rubidium and cesium from lepidolite concentrate via sulfuric acid baking and water leaching. Hydrometallurgy, 2019, 185, 244-249.	4.3	45
43	Phase Diagrams of (NH₄)₂SO₄â€"Al₂(SO₄)₃â€"H₂O Ternary System: Effect of Sulfuric Acid and Its Application in Recovery of Aluminum from Coal Fly Ash. Journal of Chemical & Engineering Data, 2019, 64, 557-566.	1.9	16
44	Indirect mineral carbonation of chlorinated tailing derived from Tiâ€bearing blastâ€furnace slag coupled with simultaneous dechlorination and recovery of multiple valueâ€added products. , 2019, 9, 52-66.		13
45	Energy-efficient mineral carbonation of CaSO4 derived from wollastonite via a roasting-leaching route. Hydrometallurgy, 2019, 184, 151-161.	4.3	24
46	Facile and cost-efficient indirect carbonation of blast furnace slag with multiple high value-added products through a completely wet process. Energy, 2019, 166, 1314-1322.	8.8	29
47	Optimising the recovery of high-value-added ammonium alum during mineral carbonation of blast furnace slag. Journal of Alloys and Compounds, 2019, 774, 1151-1159.	5.5	30
48	Process simulation and energy integration in the mineral carbonation of blast furnace slag. Chinese Journal of Chemical Engineering, 2019, 27, 157-167.	3.5	20
49	Phase Equilibrium of the MgSO₄â€"(NH₄)₂SO₄â€"H₂O Ternary System: Effects of Sulfuric Acid and Iron Sulfate and Its Application in Mineral Carbonation of Serpentine. Journal of Chemical & Engineering Data, 2018, 63, 1603-1612.	1.9	20
50	Study on reactions of gaseous P 2 O 5 with Ca 3 (PO 4) 2 and SiO 2 during a rotary kiln process for phosphoric acid production. Chinese Journal of Chemical Engineering, 2018, 26, 795-805.	3.5	19
51	Indirect mineral carbonation of titanium-bearing blast furnace slag coupled with recovery of TiO 2 and Al 2 O 3. Chinese Journal of Chemical Engineering, 2018, 26, 583-592.	3.5	47
52	Phase diagrams of the MgSO4-Al2(SO4)3-(NH4)2SO4-H2O system at 25 and 55â€¯Â°C and their application in mineral carbonation. Fluid Phase Equilibria, 2018, 473, 226-235.	2.5	14
53	Energy-efficient mineral carbonation of blast furnace slag with high value-added products. Journal of Cleaner Production, 2018, 197, 242-252.	9.3	50
54	Combined production of synthetic rutile in the sulfate TiO2 process. Journal of Alloys and Compounds, 2017, 705, 572-580.	5.5	32

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55	Recovery of Manganese Ore Tailings by High-Gradient Magnetic Separation and Hydrometallurgical Method. Jom, 2017, 69, 2352-2357.	1.9	16
56	Indirect mineral carbonation of blast furnace slag with (NH4)2SO4 as a recyclable extractant. Journal of Energy Chemistry, 2017, 26, 927-935.	12.9	51
57	Preparation of synthetic rutile via selective sulfation of ilmenite with (NH 4) 2 SO 4 followed by targeted removal of impurities. Chinese Journal of Chemical Engineering, 2017, 25, 821-828.	3.5	31
58	Investigations on the V(III) Reduction Process of All-Vanadium Redox Flow Battery. International Journal of Electrochemical Science, 2016, , 3492-3501.	1.3	2
59	Selective extraction of nitric and acetic acids from etching waste acid using N235 and MIBK mixtures. Separation and Purification Technology, 2016, 169, 50-58.	7.9	31
60	Removal of chloride from simulated zinc sulfate electrolyte by ozone oxidation. Hydrometallurgy, 2016, 160, 147-151.	4.3	32
61	Combined oxidation and 2-octanol extraction of iron from a synthetic ilmenite hydrochloric acid leachate. Separation and Purification Technology, 2016, 158, 96-102.	7.9	11