Jialiang Gu

List of Publications by Year in descending order

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76	2,728	117571	189801
papers	citations	34 h-index	50 g-index

77	77	77	2323
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In situ DRIFTS investigation on the SCR of NO with NH3 over V2O5 catalyst supported by activated semi-coke. Applied Surface Science, 2014, 313, 660-669.	3.1	145
2	Environmental investigation on co-combustion of sewage sludge and coal gangue: SO 2 , NO x and trace elements emissions. Waste Management, 2016, 50, 213-221.	3.7	108
3	Promoting effect of Nd on the reduction of NO with NH₃ over CeO₂ supported by activated semi-coke: an in situ DRIFTS study. Catalysis Science and Technology, 2015, 5, 2251-2259.	2.1	105
4	Investigation of the Viscosity and Structural Properties of CaO-SiO2-TiO2 Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1389-1397.	1.0	99
5	Effect of Al₂O₃/SiO₂ Ratio on the Viscosity and Structure of Slags. ISIJ International, 2012, 52, 753-758.	0.6	90
6	Heat Recovery from High Temperature Slags: A Review of Chemical Methods. Energies, 2015, 8, 1917-1935.	1.6	83
7	Preparation and properties of a nano TiO2/Fe3O4 composite superparamagnetic photocatalyst. Rare Metals, 2009, 28, 423-427.	3.6	78
8	Activated Semi-coke in SO₂ Removal from Flue Gas: Selection of Activation Methodology and Desulfurization Mechanism Study. Energy & Fuels, 2013, 27, 3080-3089.	2.5	78
9	Low-temperature SCR of NO with NH3 over activated semi-coke composite-supported rare earth oxides. Applied Surface Science, 2014, 309, 1-10.	3.1	71
10	In situ DRIFTS studies on MnO nanowires supported by activated semi-coke for low temperature selective catalytic reduction of NO with NH3. Applied Surface Science, 2016, 366, 139-147.	3.1	71
11	Effect of water-washing on the co-removal of chlorine and heavy metals in air pollution control residue from MSW incineration. Waste Management, 2017, 68, 221-231.	3.7	62
12	Synthesis of a foam ceramic based on ceramic tile polishing waste using SiC as foaming agent. Ceramics International, 2018, 44, 10078-10086.	2.3	62
13	Studies on the PEG-Assisted Hydrothermal Synthesis and Growth Mechanism of ZnO Microrod and Mesoporous Microsphere Arrays on the Substrate. Crystal Growth and Design, 2010, 10, 1500-1507.	1.4	60
14	Tailoring CoOâ€“ZnO nanorod and nanotube arrays for Li-ion battery anode materials. Journal of Materials Chemistry A, 2013, 1, 9654.	5.2	59
15	Crystallization Behavior of Rutile in the Synthesized Ti-bearing Blast Furnace Slag Using Single Hot Thermocouple Technique. ISIJ International, 2011, 51, 1396-1402.	0.6	58
16	Insight into the Relationship Between Viscosity and Structure of CaO-SiO2-MgO-Al2O3 Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2930-2941.	1.0	57
17	Magnetic multi-metal co-doped magnesium ferrite nanoparticles: An efficient visible light-assisted heterogeneous Fenton-like catalyst synthesized from saprolite laterite ore. Journal of Hazardous Materials, 2018, 344, 829-838.	6.5	56
18	The Influence of SiO₂ on the Extraction of Ti Element from Tiâ€bearing Blast Furnace Slag. Steel Research International, 2011, 82, 607-614.	1.0	55

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19	Effect of B2O3 on the Structure and Viscous Behavior of Ti-Bearing Blast Furnace Slags. Jom, 2014, 66, 2168-2175.	0.9	55
20	Integrated utilization of high alumina fly ash for synthesis of foam glass ceramic. Ceramics International, 2018, 44, 13681-13688.	2.3	55
21	Reuse of mineral wool waste and recycled glass in ceramic foams. Ceramics International, 2019, 45, 15057-15064.	2.3	55
22	Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanideâ€“organic frameworks. Journal of Materials Chemistry, 2012, 22, 7813.	6.7	53
23	Integrated carbon dioxide/sludge gasification using waste heat from hot slags: Syngas production and sulfur dioxide fixation. Bioresource Technology, 2015, 181, 174-182.	4.8	53
24	Influence of Basicity and TiO2 Content on the Precipitation Behavior of the Ti-bearing Blast Furnace Slags. ISIJ International, 2013, 53, 1696-1703.	0.6	50
25	Ultrasensitive sorption behavior of isostructural lanthanideâ€“organic frameworks induced by lanthanide contraction. Journal of Materials Chemistry, 2012, 22, 21076.	6.7	48
26	Effects of chemistry and mineral on structural evolution and chemical reactivity of coal gangue during calcination: towards efficient utilization. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2779-2793.	1.3	48
27	Recycling ground MSWI bottom ash in cement composites: Long-term environmental impacts. Waste Management, 2018, 78, 841-848.	3.7	46
28	Two-stage high temperature sludge gasification using the waste heat from hot blast furnace slags. Bioresource Technology, 2015, 198, 364-371.	4.8	45
29	Multi-Stage Control of Waste Heat Recovery from High Temperature Slags Based on Time Temperature Transformation Curves. Energies, 2014, 7, 1673-1684.	1.6	42
30	Synthesis of a ceramic tile base based on high-alumina fly ash. Construction and Building Materials, 2017, 155, 930-938.	3.2	42
31	Hydrothermal growth of well-aligned TiO2 nanorod arrays: Dependence of morphology upon hydrothermal reaction conditions. Rare Metals, 2010, 29, 286-291.	3.6	40
32	The Effect of P2O5 on the Crystallization Behaviors of Ti-Bearing Blast Furnace Slags Using Single Hot Thermocouple Technique. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1446-1455.	1.0	40
33	Fabrication and characterization of porous cordierite ceramics prepared from fly ash and natural minerals. Ceramics International, 2019, 45, 18306-18314.	2.3	40
34	Characteristics of low temperature biomass gasification and syngas release behavior using hot slag. RSC Advances, 2014, 4, 62105-62114.	1.7	36
35	Co-combustion and emission characteristics of coal gangue and low-quality coal. Journal of Thermal Analysis and Calorimetry, 2015, 120, 1883-1892.	2.0	31
36	Trace element partitioning behavior of coal gangue-fired CFB plant: experimental and equilibrium calculation. Environmental Science and Pollution Research, 2015, 22, 15469-15478.	2.7	29

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37	Application of washed MSWI fly ash in cement composites: long-term environmental impacts. Environmental Science and Pollution Research, 2018, 25, 12127-12138.	2.7	29
38	Pyrite transformation and sulfur dioxide release during calcination of coal gangue. RSC Advances, 2014, 4, 42506-42513.	1.7	27
39	Achieving waste to energy through sewage sludge gasification using hot slags: syngas production. Scientific Reports, 2015, 5, 11436.	1.6	27
40	Co-modification and Crystalline-control of Ti-bearing Blast Furnace Slags. ISIJ International, 2015, 55, 158-165.	0.6	25
41	Effect of P2O5 Addition on the Viscosity and Structure of Titanium Bearing Blast Furnace Slags. ISIJ International, 2014, 54, 1491-1497.	0.6	23
42	Promotional effect of rare earth-doped manganese oxides supported on activated semi-coke for selective catalytic reduction of NO with NH3. Environmental Science and Pollution Research, 2017, 24, 24473-24484.	2.7	23
43	Calculations of Freezing Point Depression, Boiling Point Elevation, Vapor Pressure and Enthalpies ofÂVaporization of Electrolyte Solutions by a Modified Three-Characteristic Parameter Correlation Model. Journal of Solution Chemistry, 2009, 38, 1097-1117.	0.6	22
44	Effect of Al2O3 Addition on the Precipitated Phase Transformation in Ti-Bearing Blast Furnace Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1390-1399.	1.0	21
45	Role of steel slags on biomass/carbon dioxide gasification integrated with recovery of high temperature heat. Bioresource Technology, 2017, 223, 1-9.	4.8	21
46	Effect of Substrate Pretreatment on Controllable Growth of TiO2 Nanorod Arrays. Journal of Materials Science and Technology, 2012, 28, 577-586.	5.6	20
47	Integration of coal gasification and waste heat recovery from high temperature steel slags: an emerging strategy to emission reduction. Scientific Reports, 2015, 5, 16591.	1.6	19
48	The Preparation and Characterization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="bold">Î²</mml:mi></mml:math>-SiAlON Nanostructure Whiskers. Journal of Nanomaterials, 2008, 2008, 1-6.	1.5	18
49	Facile and economical synthesis of porous activated semi-cokes for highly efficient and fast removal of microcystin-LR. Journal of Hazardous Materials, 2015, 299, 325-332.	6.5	17
50	Integrated Utilization of Sewage Sludge and Coal Gangue for Cement Clinker Products: Promoting Tricalcium Silicate Formation and Trace Elements Immobilization. Materials, 2016, 9, 275.	1.3	17
51	Roles of P₂O₅ Addition on the Viscosity and Structure of CaOâ€“SiO₂â€“Al₂O₃â€“Na₂Oâ€“P<s Melts. ISIJ International, 2018, 58, 1644-1649.	0.6	17
52	Development of structure-informed artificial neural network for accurately modeling viscosity of multicomponent molten slags. Ceramics International, 2021, 47, 30691-30701.	2.3	16
53	A Novel Kinematic Model for Molten Slag Fiberization: Prediction of Slag Fiber Properties. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 993-1001.	1.0	12
54	ANN-based structure-viscosity relationship model of multicomponent slags for production design in mineral wool. Construction and Building Materials, 2022, 319, 126010.	3.2	12

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55	Kinetic studies on bituminous coal char gasification using CO₂ and H₂O mixtures. International Journal of Green Energy, 2019, 16, 1144-1151.	2.1	11
56	Preparation, Sintering Behavior and Consolidation Mechanism of Vanadium-Titanium Magnetite Pellets. Crystals, 2021, 11, 188.	1.0	11
57	Structural and Viscous Insight into Impact of MoO3 on Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3730-3743.	1.0	11
58	Preparation and modeling of energy-saving building materials by using industrial solid waste. Energy and Buildings, 2015, 97, 6-12.	3.1	10
59	In Situ DRIFTS Investigation on CeOx Catalyst Supported by Fly-Ash-Made Porous Cordierite Ceramics for Low-Temperature NH3-SCR of NOX. Catalysts, 2019, 9, 496.	1.6	10
60	Thermodynamic study and syntheses of Î²-SiAlON ceramics. Science in China Series D: Earth Sciences, 2009, 52, 3122-3127.	0.9	9
61	Coâ€pyrolysis characteristics of coal and sludge blends using thermogravimetric analysis. Environmental Progress and Sustainable Energy, 2015, 34, 1780-1789.	1.3	9
62	Facile and Economical Preparation of SiAlON-Based Composites Using Coal Gangue: From Fundamental to Industrial Application. Energies, 2015, 8, 7428-7440.	1.6	9
63	Solid wastes utilization in the iron and steel industry in China: towards sustainability. Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy, 2017, 126, 41-46.	0.6	8
64	Promoting Effect of Ti Species in MnOx-FeOx/Silicalite-1 for the Low-Temperature NH3-SCR Reaction. Catalysts, 2020, 10, 566.	1.6	8
65	Conductivity properties of Î²-SiAlON ceramics. Science China Technological Sciences, 2012, 55, 2409-2415.	2.0	7
66	Enhancement of Rutile Formation by ZrO₂ Addition in Ti-bearing Blast Furnace Slags. ISIJ International, 2015, 55, 1384-1389.	0.6	7
67	Three-Stage Method Energyâ€“Mass Coupling High-Efficiency Utilization Process of High-Temperature Molten Steel Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3004-3015.	1.0	7
68	Investigation of cooling processes of molten slags to develop multilevel control method for cleaner production in mineral wool. Journal of Cleaner Production, 2022, 339, 130548.	4.6	7
69	Template-free hydrothermal synthesis of single-crystalline SnO2 nanocauliflowers and their optical properties. Rare Metals, 2009, 28, 449-453.	3.6	6
70	A Fe-C-Ca big cycle in modern carbon-intensive industries: toward emission reduction and resource utilization. Scientific Reports, 2016, 6, 22323.	1.6	6
71	Highly dispersed MnO_xâ€“FeO_x supported by silicalite-1 for the selective catalytic reduction of NO_x with NH₃ at low temperatures. Catalysis Science and Technology, 2020, 10, 5525-5534.	2.1	6
72	Long-term leaching behaviours of cement composites prepared by hazardous wastes. RSC Advances, 2018, 8, 27602-27609.	1.7	5

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73	Activity of VO1.5 in CaO-SiO2-MgO-Al2O3 Slags at Low Vanadium Contents and Low Oxygen Pressures. , 2009, 80, 251.		4
74	Designing Structureâ€“Thermodynamics-Informed Artificial Neural Networks for Surface Tension Prediction of Multi-component Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 2018-2029.	1.0	4
75	Effects of pretreatment of substrates on the preparation of large scale ZnO nanotube arrays. Rare Metals, 2010, 29, 21-25.	3.6	3
76	Experimental Investigation of Vitrification Process for the Disposal of Hazardous Solid Waste Containing Chlorides. Processes, 2022, 10, 526.	1.3	0