Yongqi Sun

List of Publications by Year
in descending order

60 papers	1,431 citations	279701 23 h-index	345118 36 g-index
65 all docs	65 docs citations	65 times ranked	790 citing authors

#	Article	IF	Citations
1	FTIR, Raman and NMR investigation of CaOâ€“SiO2â€“P2O5 and CaOâ€“SiO2â€“TiO2â€“P2O5 glasses. Journal of Non-Crystalline Solids, 2015, 420, 26-33.	1.5	102
2	Heat Recovery from High Temperature Slags: A Review of Chemical Methods. Energies, 2015, 8, 1917-1935.	1.6	83
3	Effect of Al2O3 on the Viscosity and Structure of CaO-SiO2-MgO-Al2O3-FetO Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 537-541.	1.0	65
4	Structural Roles of Boron and Silicon in the CaO-SiO2-B2O3 Glasses Using FTIR, Raman, and NMR Spectroscopy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1549-1554.	1.0	62
5	Experimental investigation and modeling of cooling processes of high temperature slags. Energy, 2014, 76, 761-767.	4.5	61
6	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
7	Effect of B2O3 on the Structure and Viscous Behavior of Ti-Bearing Blast Furnace Slags. Jom, 2014, 66, 2168-2175.	0.9	55
8	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
9	Understanding the Relationship Between Structure and Thermophysical Properties of CaO-SiO2-MgO-Al2O3 Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 677-687.	1.0	51
10	Two-stage high temperature sludge gasification using the waste heat from hot blast furnace slags. Bioresource Technology, 2015, 198, 364-371.	4.8	45
11	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
12	Synthesis of a ceramic tile base based on high-alumina fly ash. Construction and Building Materials, 2017, 155, 930-938.	3.2	42
13	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
14	Characteristics of low temperature biomass gasification and syngas release behavior using hot slag. RSC Advances, 2014, 4, 62105-62114.	1.7	36
15	Selective Crystallization Behavior of CaO-SiO2-Al2O3-MgO-FetO-P2O5 Steelmaking Slags Modified through P2O5 and Al2O3. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2246-2254.	1.0	33
16	Short-range and Medium-range Structural Order in CaOâ€“SiO₂â€“TiO₂â€“B₂O₃ Glasses. ISIJ International, 2016, 56, 752-758.	0.6	32
17	Integrated utilization of fly ash and waste glass for synthesis of foam/dense bi-layered insulation ceramic tile. Energy and Buildings, 2018, 168, 67-75.	3.1	32
18	General roles of sludge ash, CaO and Al2O3 on the sludge pyrolysis toward clean utilizations. Applied Energy, 2019, 233-234, 412-423.	5.1	29

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19	Investigation on Viscosity and Nonisothermal Crystallization Behavior of P-Bearing Steelmaking Slags with Varying TiO_2 Content. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 527-537.	1.0	28
20	Biomass gasification using the waste heat from high temperature slags in a mixture of CO_2 and H_2O. Energy, 2019, 167, 688-697.	4.5	28
21	Achieving waste to energy through sewage sludge gasification using hot slags: syngas production. Scientific Reports, 2015, 5, 11436.	1.6	27
22	Decarbonising the iron and steel sector for a 2â€‰Â°C target using inherent waste streams. Nature Communications, 2022, 13, 297.	5.8	26
23	Co-modification and Crystalline-control of Ti-bearing Blast Furnace Slags. ISIJ International, 2015, 55, 158-165.	0.6	25
24	Evolution of trace elements and polluting gases toward clean co-combustion of coal and sewage sludge. Fuel, 2020, 280, 118685.	3.4	25
25	Integration of biomass/steam gasification with heat recovery from hot slags: Thermodynamic characteristics. International Journal of Hydrogen Energy, 2016, 41, 5916-5926.	3.8	24
26	Effect of P_2O_5 Addition on the Viscosity and Structure of Titanium Bearing Blast Furnace Slags. ISIJ International, 2014, 54, 1491-1497.	0.6	23
27	Integrating biomass pyrolysis with waste heat recovery from hot slags via extending the C-loops: Product yields and roles of slags. Energy, 2018, 149, 792-803.	4.5	23
28	Effect of Al_2O_3 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
29	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
30	Experimental studies of liquid/spinel/matte/gas equilibria in the Si-Fe-O-Cu-S system at controlled $P(SO_2)$ 0.3 and 0.6â€¯atm. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 66, 101642.	0.7	21
31	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
32	Integrated biomass gasification using the waste heat from hot slags: Control of syngas and polluting gas releases. Energy, 2016, 114, 165-176.	4.5	17
33	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	[illegible]
34	Environmental mitigation of sludge combustion via two opposite modifying strategies: Kinetics and stabilization effect. Fuel, 2018, 227, 346-354.	3.4	13
35	Phase Equilibrium Studies of Iron Silicate Slag Under Direct to Blister Copper-Making Condition. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1-5.	1.0	13
36	Viscous Flow and Crystallization Behaviors of P-bearing Steelmaking Slags with Varying Fluorine Content. ISIJ International, 2016, 56, 546-553.	0.6	12

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37	Cellular and compositional insight into the sludge dewatering process using enzyme treatment. Environmental Science and Pollution Research, 2018, 25, 28942-28953.	2.7	11
38	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
39	Distributional and compositional insight into the polluting materials during sludge combustion: Roles of ash. Fuel, 2018, 220, 318-329.	3.4	10
40	Modification of the microstructures of CaO-SiO2-Al2O3-MgO slags using various minor elements. Journal of Non-Crystalline Solids, 2019, 515, 50-57.	1.5	10
41	Phase Equilibrium Studies of Iron Silicate Slag in the Liquid/Spinel/White Metal/Gas System for Copper Converting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 426-432.	1.0	9
42	Effect of CaO on the liquid/spinel/matte/gas equilibria in the Siâ€“Feâ€“Oâ€“Cuâ€“S system at controlled P(SO2) 0.3 and 0.6Âatm. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 69, 101751.	0.7	9
43	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
44	Enhancement of Rutile Formation by ZrO₂ Addition in Ti-bearing Blast Furnace Slags. ISIJ International, 2015, 55, 1384-1389.	0.6	7
45	The partitioning behavior of trace element and its distribution in the surrounding soil of a cement plant integrated utilization of hazardous wastes. Environmental Science and Pollution Research, 2016, 23, 13943-13953.	2.7	7
46	Effect of MgO on the liquid/spinel/matte/gas equilibria in the Siâ€“Feâ€“Mgâ€“Oâ€“Cuâ€“S system at controlled P(SO2) 0.3 and 0.6Âatm. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 70, 101803.	0.7	7
47	Equilibria of Iron Silicate Slags for Continuous Converting Copper-Making Process Based on Phase Transformations. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2039-2045.	1.0	7
48	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
49	Utilization of High-Temperature Slags From Metallurgy Based on Crystallization Behaviors. Jom, 2018, 70, 1274-1281.	0.9	6
50	Development of Ferrous-Calcium Silicate Slag for the Direct to Blister Copper-Making Process and the Equilibria Investigation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 973-984.	1.0	5
51	Modification of the Structure of Ti-Bearing Mold Flux by the Simultaneous Addition of B2O3 and Na2O. Metallurgical and Materials Transactions E, 2016, 3, 28-36.	0.5	4
52	Phase Equilibria of Ferrous-Calcium Silicate Slags in the Liquid/Spinel/White Metal/Gas System for the Copper Converting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2012-2020.	1.0	4
53	Disposal of High-Temperature Slags: A Review of Integration of Heat Recovery and Material Recycling. Metallurgical and Materials Transactions E, 2016, 3, 114-122.	0.5	3
54	Modification of Phosphorous Enrichment Behaviours in Steelmaking Slags Based on Phase Transformations. Jom, 2021, 73, 1845-1852.	0.9	2

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55	Heat Recovery from High Temperature Slags: Chemical Methods. , 2016, , 41-48.		2
56	Energy Saving and Emission Reduction from the Steel Industry: Heat Recovery from High Temperature Slags. Lecture Notes in Energy, 2017, , 249-280.	0.2	1
57	Oxidation kinetics of magnesium aluminum oxynitrideâ€"boron nitride (MgAlONâ€"BN) composites. Journal of the Ceramic Society of Japan, 2014, 122, 829-834.	0.5	0
58	In Situ Study on the Transformation Behavior of Ti-Bearing Slags in the Oxidation Atmosphere. Minerals, Metals and Materials Series, 2019, , 51-59.	0.3	0
59	Structural Characterization of the â€œFeOâ€•SiO2 Slags Using Raman Spectra. Minerals, Metals and Materials Series, 2021, , 181-189.	0.3	0
60	Viscous and Crystallization Characteristics of CaO-SiO2-MgO-Al2O3-FetO-P2O5-(CaF2) Steelmaking Slags. , 2016, , 495-500.		0