Sheng-fu Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2806011/publications.pdf

Version: 2024-02-01

46 papers	1,031 citations	516710 16 h-index	454955 30 g-index
52 all docs	52 docs citations	52 times ranked	748 citing authors

#	Article	IF	Citations
1	Green synthesis of ZnO nanoparticles from Syzygium Cumini leaves extract with robust photocatalysis applications. Journal of Molecular Liquids, 2021, 335, 116567.	4.9	127
2	Relationship between structure and viscosity of CaOâ€“SiO2â€“Al2O3â€“MgOâ€“TiO2 slag. Journal of Non-Crystalline Solids, 2014, 402, 214-222.	3.1	91
3	Thermodynamic and kinetic study of synthesised graphene oxide-CuO nanocomposites: A way forward to fuel additive and photocatalytic potentials. Journal of Molecular Liquids, 2020, 313, 113494.	4.9	81
4	A novel method for removing organic sulfur from high-sulfur coal: Migration of organic sulfur during microwave treatment with NaOH-H2O2. Fuel, 2021, 289, 119800.	6.4	70
5	Strength degradation mechanism of iron coke prepared by mixed coal and Fe2O3. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104897.	5.5	62
6	Cold model of coal gas component concentration distribution in blast furnace raceway. Journal of Iron and Steel Research International, 2009, 16, 1-6.	2.8	55
7	Structure Analysis of CaOâ€“SiO2â€“Al2O3â€“TiO2 Slag by Molecular Dynamics Simulation and FT-IR Spectroscopy. ISIJ International, 2014, 54, 734-742.	1.4	46
8	Effect of TiO2 Content on the Structure of CaOâ€“SiO2â€“TiO2 System by Molecular Dynamics Simulation. ISIJ International, 2013, 53, 1131-1137.	1.4	41
9	Structural transformation of fluid phase extracted from coal matrix during thermoplastic stage of coal pyrolysis. Fuel, 2018, 232, 374-383.	6.4	40
10	Thermal behavior and kinetics of the pyrolysis of the coal used in the COREX process. Journal of Analytical and Applied Pyrolysis, 2013, 104, 660-666.	5.5	39
11	Crystallization Behavior of Perovskite in the Synthesized High-Titanium-Bearing Blast Furnace Slag Using Confocal Scanning Laser Microscope. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 76-85.	2.1	31
12	A Review on Recycling and Reutilization of Blast Furnace Dust as a Secondary Resource. Journal of Sustainable Metallurgy, 2021, 7, 340-357.	2.3	30
13	Thermal behavior and organic functional structure of poplar-fat coal blends during co-pyrolysis. Renewable Energy, 2019, 136, 308-316.	8.9	25
14	Gas-Particle Flow and Combustion Characteristics of Pulverized Coal Injection in Blast Furnace Raceway. Journal of Iron and Steel Research International, 2010, 17, 8-12.	2.8	21
15	Structure characterization and metallurgical properties of the chars formed by devolatilization of lump coals. Fuel Processing Technology, 2015, 129, 174-182.	7.2	20
16	The Temperature Field Digitization of Radiation Images in Blast Furnace Raceway. ISIJ International, 2006, 46, 1410-1415.	1.4	18
17	Density Functional Theory Study on the Carbon-Adhering Reaction on Fe3O4(111) Surface. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2288-2295.	2.1	17
18	Effects of iron compounds on pyrolysis behavior of coals and metallurgical properties of resultant cokes. Journal of Iron and Steel Research International, 2017, 24, 1169-1176.	2.8	16

#	Article	IF	Citations
19	Effects of Additives on Sulfur Transformation, Crystallite Structure and Properties of Coke during Coking Of High-sulfur Coal. Journal of Iron and Steel Research International, 2015, 22, 897-904.	2.8	15
20	Transformation of organic sulfur and its functional groups in nantong and laigang coal under microwave irradiation. Journal of Computational Chemistry, 2019, 40, 2749-2760.	3.3	15
21	Effects of Fe2O3 addition on the thermoplasticity and structure of coking coal matrix during thermoplastic stage of pyrolysis. Fuel, 2020, 260, 116305.	6.4	15
22	Relationship between Texture Features and Mineralogy Phases in Iron Ore Sinter Based on Gray-level Co-occurrence Matrix. ISIJ International, 2009, 49, 709-718.	1.4	12
23	Drying kinetics of Philippine nickel laterite by microwave heating. Drying Technology, 2018, 36, 849-858.	3.1	10
24	Initial Reactions at the Electrodes of the FFC-Cambridge Process in Molten CaCl2 to Produce Ti. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3403-3412.	2.1	10
25	Transient Interaction Between Reduction and Slagging Reactions of Wustite in Simulated Cohesive Zone of Blast Furnace. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 2308-2321.	2.1	10
26	Influence of TiO₂ addition on the structure and metallurgical properties of coke. International Journal of Coal Preparation and Utilization, 2021, 41, 521-537.	2.1	10
27	Effects of poplar addition on tar formation during the co-pyrolysis of fat coal and poplar at high temperature. RSC Advances, 2019, 9, 28053-28060.	3.6	9
28	Phase Transformations and Deoxidation Kinetics during the Electrochemical Reduction of TiO₂ in Molten CaCl₂. Materials Transactions, 2019, 60, 416-421.	1.2	9
29	Prediction of structural and electronic properties of Cl2 adsorbed on TiO2(100) surface with C or CO in fluidized chlorination process: A first-principles study. Journal of Central South University, 2021, 28, 29-38.	3.0	9
30	Smelting Vanadiumâ€“Titanium Magnetite by COREX Process: Effect of Vâ€“Ti Bearing Pellet Ratio on the Softening and Melting Behavior of Mixed Burden. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 4096-4108.	2.1	9
31	Relationship between Mineragraphy Features of Sinter Ore and Its Gray Histogram. ISIJ International, 2008, 48, 186-193.	1.4	8
32	Transformation behaviour of pyrite during microwave desulfurization from coal: Phase and structural change of Fe-S compounds. Fuel, 2022, 316, 123284.	6.4	8
33	A Novel Method for Quantifying the Composition of Mineralogical Phase in Iron Ore Sinter. ISIJ International, 2009, 49, 703-708.	1.4	7
34	Chemical Thermodynamics and Kinetics of Thiophenic Sulfur Removed from Coal by Microwave: A Density Functional Theory Study. Journal of Sustainable Metallurgy, 2021, 7, 1379-1392.	2.3	7
35	Preparation of Mo2C by reduction and carbonization of MoO2 with CH3OH. Journal of Materials Science, 2018, 53, 10059-10070.	3.7	6
36	Preparation of active coke combining coal with biomass and its denitrification performance. Journal of Iron and Steel Research International, 2021, 28, 1203-1211.	2.8	6

#	Article	IF	Citations
37	Effect of Microwave Treating the Blast Furnace Slag Bearing Titanium on Thermal Action. ISIJ International, 2007, 47, 1239-1244.	1.4	4
38	Phase-field method for growth of iron whiskers in the presence of CO gas convection. Journal of Iron and Steel Research International, 2019, 26, 829-837.	2.8	4
39	Density Functional Theory Analysis of the Adsorption Behavior of C4 and Cl2 on the TiO2 (110) Surface. Jom, 2020, 72, 3483-3490.	1.9	4
40	Structural Characterization of Four Chinese Bituminous Coals by X-Ray Diffraction, Fourier-Transform Infrared Spectroscopy and X-Ray Photoelectron Spectroscopy. Minerals, Metals and Materials Series, 2019, , 11-22.	0.4	3
41	Prediction of Structural and Electronic Properties of C and Cl₂ Adsorbed on the Rutile TiO₂ (110) Surface. ACS Omega, 2020, 5, 29002-29008.	3.5	3
42	Reducing Carbon Contamination by Controlling CO32â˜ Formation During Electrochemical Reduction of TiO2. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1061-1070.	2.1	3
43	Effects of annealing temperature and time on decrepitation of lump coals and characteristics of resultant coal chars. Asia-Pacific Journal of Chemical Engineering, 2017, 12, 732-744.	1.5	2
44	Effect of Liquid Addition on Gasâ€Solid Fluidization. Chemical Engineering and Technology, 2021, 44, 1596-1603.	1.5	2
45	Relationships between Combustion Behavior in Air and the Chemical Structure of Bituminous Coal during Combustion Processes. Energies, 2022, 15, 5154.	3.1	1
46	Effect of additives on coke metallurgical property and sulfide phase. , 2011, , .		0