

Xiahhui Gui

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2045849/publications.pdf>

Version: 2024-02-01

57
papers

2,433
citations

186265
28
h-index

206112
48
g-index

57
all docs

57
docs citations

57
times ranked

956
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent experimental advances for understanding bubble-particle attachment in flotation. <i>Advances in Colloid and Interface Science</i> , 2017, 246, 105-132.	14.7	196
2	Improving the adsorption of oily collector on the surface of low-rank coal during flotation using a cationic surfactant: An experimental and molecular dynamics simulation study. <i>Fuel</i> , 2019, 235, 687-695.	6.4	173
3	Enhancement of the surface hydrophobicity of low-rank coal by adsorbing DTAB: An experimental and molecular dynamics simulation study. <i>Fuel</i> , 2019, 239, 145-152.	6.4	123
4	Clean low-rank-coal purification technique combining cyclonic-static microbubble flotation column with collector emulsification. <i>Journal of Cleaner Production</i> , 2017, 153, 657-672.	9.3	108
5	The application of atomic force microscopy in mineral flotation. <i>Advances in Colloid and Interface Science</i> , 2018, 256, 373-392.	14.7	108
6	Role of molecular simulation in understanding the mechanism of low-rank coal flotation: A review. <i>Fuel</i> , 2020, 262, 116535.	6.4	108
7	Intensification mechanism of oxidized coal flotation by using oxygen-containing collector β -furanacrylic acid. <i>Powder Technology</i> , 2017, 305, 109-116.	4.2	94
8	Interaction forces between coal and kaolinite particles measured by atomic force microscopy. <i>Powder Technology</i> , 2016, 301, 349-355.	4.2	88
9	New insight into surface wetting of coal with varying coalification degree: An experimental and molecular dynamics simulation study. <i>Applied Surface Science</i> , 2020, 511, 145610.	6.1	88
10	Separation of unburned carbon from coal fly ash: A review. <i>Powder Technology</i> , 2019, 353, 372-384.	4.2	86
11	Effect of compound collector and blending frother on froth stability and flotation performance of oxidized coal. <i>Powder Technology</i> , 2017, 305, 166-173.	4.2	84
12	Performance of used lubricating oil as flotation collector for the recovery of clean low-rank coal. <i>Fuel</i> , 2019, 239, 717-725.	6.4	77
13	Synergistic adsorption of polar and nonpolar reagents on oxygen-containing graphite surfaces: Implications for low-rank coal flotation. <i>Journal of Colloid and Interface Science</i> , 2019, 557, 276-281.	9.4	60
14	Recovering unburned carbon from gasification fly ash using saline water. <i>Waste Management</i> , 2019, 98, 29-36.	7.4	58
15	Investigation of interactions between oxygen-containing groups and water molecules on coal surfaces using density functional theory. <i>Fuel</i> , 2021, 287, 119556.	6.4	58
16	Enhancement of flotation response of fine low-rank coal using positively charged microbubbles. <i>Fuel</i> , 2019, 245, 505-513.	6.4	56
17	Studying interactions between undecane and graphite surfaces by chemical force microscopy and molecular dynamics simulations. <i>Fuel</i> , 2020, 269, 117367.	6.4	56
18	Effect of Ultrasonic Pretreatment on Oxidized Coal Flotation. <i>Energy & Fuels</i> , 2017, 31, 14367-14373.	5.1	53

#	ARTICLE	IF	CITATIONS
19	Interaction Forces between Paraffin/Stearic Acid and Fresh/Oxidized Coal Particles Measured by Atomic Force Microscopy. <i>Energy & Fuels</i> , 2017, 31, 3305-3312.	5.1	52
20	The hydrophobic force for bubble-particle attachment in flotation – a brief review. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 24421-24435.	2.8	52
21	Mechanism of shale oil as an effective collector for oxidized coal flotation: From bubble-particle attachment and detachment point of view. <i>Fuel</i> , 2019, 255, 115885.	6.4	47
22	Improved floatability of low-rank coal through surface modification by hydrothermal pretreatment. <i>Journal of Cleaner Production</i> , 2020, 246, 119025.	9.3	44
23	Effect of microemulsion on low-rank coal flotation by mixing DTAB and diesel oil. <i>Fuel</i> , 2020, 260, 116321.	6.4	42
24	Recent advances for understanding the role of nanobubbles in particles flotation. <i>Advances in Colloid and Interface Science</i> , 2021, 291, 102403.	14.7	40
25	Synergistic Adsorption Mechanism of Anionic and Cationic Surfactant Mixtures on Low-Rank Coal Flotation. <i>ACS Omega</i> , 2020, 5, 20630-20637.	3.5	36
26	Improving the floatability of coal with varying surface roughness through hypobaric treatment. <i>Powder Technology</i> , 2019, 345, 643-648.	4.2	35
27	Effects of pore compression pretreatment on the flotation of low-rank coal. <i>Fuel</i> , 2019, 239, 63-69.	6.4	32
28	Adhesion forces for water/oil droplet and bubble on coking coal surfaces with different roughness. <i>International Journal of Mining Science and Technology</i> , 2021, 31, 681-687.	10.3	32
29	Effect of surface roughness on the detachment between bubble and glass beads with different contact angles. <i>Powder Technology</i> , 2020, 361, 812-816.	4.2	29
30	Combined effect of chemical composition and spreading velocity of collector on flotation performance of oxidized coal. <i>Powder Technology</i> , 2018, 325, 1-10.	4.2	27
31	Flotation intensification of low-rank coal using a new compound collector. <i>Powder Technology</i> , 2020, 370, 197-205.	4.2	24
32	Oily collector pre-dispersion for enhanced surface adsorption during fine low-rank coal flotation. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 82, 303-308.	5.8	23
33	New Insights into the Role of Surface Nanobubbles in Bubble-Particle Detachment. <i>Langmuir</i> , 2020, 36, 4339-4346.	3.5	23
34	Effect of polyethylene oxide on flotation of molybdenite fines. <i>Minerals Engineering</i> , 2020, 146, 106146.	4.3	22
35	Interaction characteristics between diesel and coal with different hydrophilicity: Kinetic and force effects. <i>Separation and Purification Technology</i> , 2020, 232, 115958.	7.9	21
36	Effect of Nanobubbles on the Flotation Performance of Oxidized Coal. <i>ACS Omega</i> , 2020, 5, 20283-20290.	3.5	21

#	ARTICLE	IF	CITATIONS
37	Effect of Dodecane and Oleic Acid on the Attachment between Oxidized Coal and Bubbles. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 29.	2.0	16
38	Removal of organic pollutants in coking wastewater based on coal-based adsorbents: A pilot-scale study of static adsorption and flotation. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106844.	6.7	16
39	Polyethylene oxide assisted separation of molybdenite from quartz by flotation. <i>Minerals Engineering</i> , 2021, 162, 106765.	4.3	14
40	Effect of vibration mode on detachment of low-rank coal particle from oscillating bubble. <i>Powder Technology</i> , 2019, 356, 880-883.	4.2	13
41	Hydration film measurement on mica and coal surfaces using atomic force microscopy and interfacial interactions. <i>Journal of Central South University</i> , 2018, 25, 1295-1305.	3.0	11
42	Flotation of a new chelate collector on fine refractory iron ore-containing carbonate. <i>Journal of Central South University</i> , 2016, 23, 1058-1065.	3.0	9
43	Mechanism analysis of DTAB on the change in surface wettability of low-rank coal and its relationship to flotability. <i>International Journal of Coal Preparation and Utilization</i> , 2022, 42, 82-96.	2.1	9
44	Process intensification of fine coal separation using two-stage flotation column. <i>Journal of Central South University</i> , 2013, 20, 3648-3659.	3.0	7
45	Effect of Calcium Ion on Coal Flotation in the Presence of Kaolinite Clay. <i>Energy & Fuels</i> , 0, , .	5.1	7
46	Study of Interactions between Interfacial Nanobubbles and Probes of Different Hydrophobicities. <i>ACS Omega</i> , 2020, 5, 20363-20372.	3.5	7
47	Enhancement of oxidized coal flotation by preconditioning with positive-charged microbubbles. <i>International Journal of Coal Preparation and Utilization</i> , 2020, 40, 553-563.	2.1	6
48	Interfacial nanobubbles on different hydrophobic surfaces and their effect on the interaction of inter-particles. <i>Applied Surface Science</i> , 2022, 582, 152184.	6.1	6
49	Effects of energy input on the laboratory column flotation of fine coal. <i>Separation Science and Technology</i> , 0, , 150623131352004.	2.5	5
50	Effect of Comminution Methods on Low-Rank Coal Bubble-Particle Attachment/Detachment: Implications for Flotation. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 452.	2.0	5
51	A New Experimental Approach to Evaluate Coal Particles Floatability: Bubble-Particle Attachment and Detachment Kinetics. <i>ACS Omega</i> , 2020, 5, 16733-16738.	3.5	5
52	Probing the interactions between collector molecules and hydrophobic graphite surfaces using chemical force microscopy. <i>Applied Surface Science</i> , 2022, 597, 153760.	6.1	5
53	The Effect of Power Input on the Fine Coal Flotation Rate Constant. <i>International Journal of Coal Preparation and Utilization</i> , 2015, 35, 176-188.	2.1	4
54	Molecular Dynamics Simulation Study of Bubble Attachment at the Coal Surface with Varying Coalification Degrees. <i>ACS Omega</i> , 2020, 5, 20134-20140.	3.5	4

#	ARTICLE	IF	CITATIONS
55	Characteristics of interfacial nanobubbles and their interaction with solid surfaces. Applied Surface Science, 2021, 550, 149258.	6.1	3
56	Experimental study on the interaction forces between water droplets and mineral surfaces. Chemical Physics, 2022, 559, 111534.	1.9	3
57	Influence of Air Solubility on the Flotation Performance of Low-Rank Coal. Langmuir, 2022, 38, 2467-2477.	3.5	2