Guangyi Liu

List of Publications by Citations

72 papers	2,148 citations	30 h-index	43 g-index
73 ext. papers	2,609 ext. citations	5.8 avg, IF	5.4 L-index

#	Paper	IF	Citations
72	Investigations on reverse cationic flotation of iron ore by using a Gemini surfactant: Ethane-1,2-bis(dimethyl-dodecyl-ammonium bromide). *Chemical Engineering Journal*, **2014**, 257, 218-228	14.7	97
71	Understanding the hydrophobic mechanism of 3-hexyl-4-amino-1, 2,4-triazole-5-thione to malachite by ToF-SIMS, XPS, FTIR, contact angle, zeta potential and micro-flotation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 503, 34-42	5.1	92
70	Investigation on the selectivity of N-((hydroxyamino)-alkyl) alkylamide surfactants for scheelite/calcite flotation separation. *Journal of Industrial and Engineering Chemistry*, **2016**, 33, 131-141	6.3	91
69	The DFT study of cyclohexyl hydroxamic acid as a collector in scheelite flotation. *Minerals Engineering*, **2013**, 49, 54-60	4.9	88
68	Molecular design of flotation collectors: A recent progress. *Advances in Colloid and Interface Science* , **2017**, 246, 181-195	14.3	80
67	Flotation separation of diaspore from kaolinite, pyrophyllite and illite using three cationic collectors. *Minerals Engineering*, **2008**, 21, 1055-1061	4.9	67
66	Flotation behavior and adsorption mechanism of -hydroxyoctyl phosphinic acid to malachite. *Minerals Engineering*, **2015**, 71, 188-193	4.9	65
65	Study of N-isopropoxypropyl-N'-ethoxycarbonyl thiourea adsorption on chalcopyrite using in situ SECM, ToF-SIMS and XPS. *Journal of Colloid and Interface Science*, **2015**, 437, 42-49	9.3	62
64	Flotation separation of the aluminosilicates from diaspore by a Gemini cationic collector. *International Journal of Mineral Processing*, **2009**, 92, 74-83		60
63	The role of cationic polyacrylamide in the reverse flotation of diasporic bauxite. *Minerals Engineering*, **2007**, 20, 1191-1199	4.9	59
62	Adsorption of -hydroxyoctyl phosphonic acid to ilmenite/water interface and its application in flotation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 490, 67-73	5.1	53
61	Adsorption of mercaptobenzoheterocyclic compounds on sulfide mineral surfaces: A density functional theory study of structure-reactivity relations. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 409, 1-9	5.1	51
60	Cu(I)/Cu(II) mixed-valence surface complexes of S-[(2-hydroxyamino)-2-oxoethyl]-N,N-dibutyldithiocarbamate: Hydrophobic mechanism to malachite flotation. *Journal of Colloid and Interface Science*, **2018**, 512, 701-712	9.3	51
59	A novel surfactant S-benzoyl-N,N-diethyldithiocarbamate synthesis and its flotation performance to galena. *Applied Surface Science*, **2016**, 365, 342-351	6.7	48
58	The activation mechanism of Cu(II) to ilmenite and subsequent flotation response to -hydroxyoctyl phosphinic acid. *Journal of Industrial and Engineering Chemistry*, **2016**, 37, 123-130	6.3	48
57	A novel collector 2-ethyl-2-hexenoic hydroxamic acid: Flotation performance and adsorption mechanism to ilmenite. *Applied Surface Science*, **2015**, 353, 882-889	6.7	45
56	The role of HABTC- hydroxamate and dithiocarbamate groups in chalcopyrite flotation. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 359-368	6.3	40

55	Utilization of soluble starch as a depressant for the reverse flotation of diaspore from kaolinite. *Minerals Engineering*, **2009**, 22, 560-565	4.9	40
54	Understanding the roles of high salinity in inhibiting the molybdenite flotation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 509, 123-129	5.1	39
53	N-(6-(hydroxyamino)-6-oxohexyl) decanamide collector: Flotation performance and adsorption mechanism to diaspore. *Applied Surface Science*, **2015**, 347, 79-87	6.7	38
52	Investigation of the effect of N-substituents on performance of thionocarbamates as selective collectors for copper sulfides by ab initio calculations. *Minerals Engineering*, **2008**, 21, 1050-1054	4.9	38
51	A DFT study on the structure□reactivity relationship of aliphatic oxime derivatives as copper chelating agents and malachite flotation collectors. *Journal of Industrial and Engineering Chemistry*, **2017**, 46, 404-415	6.3	37
50	New advances in the understanding and development of flotation collectors: A Chinese experience. *Minerals Engineering*, **2018**, 118, 78-86	4.9	36
49	A novel surfactant N-(6-(hydroxyamino)-6-oxohexyl)octanamide: Synthesis and flotation mechanisms to wolframite. *Separation and Purification Technology*, **2015**, 145, 8-16	8.3	35
48	The interaction of N-butoxypropyl-N?-ethoxycarbonylthiourea with sulfide minerals: Scanning electrochemical microscopy, diffuse reflectance infrared Fourier transform spectroscopy, and thermodynamics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2014**, 456, 203-210	5.1	35
47	A novel surfactant 2-amino-6-decanamidohexanoic acid: Flotation performance and adsorption mechanism to diaspore. *Minerals Engineering*, **2016**, 93, 16-23	4.9	35
46	Flotation performances and adsorption mechanism of □hydroxyoctyl phosphinic acid to cassiterite. *Applied Surface Science*, **2015**, 353, 856-864	6.7	34
45	A DFT study on the structure-reactivity relationship of thiophosphorus acids as flotation collectors with sulfide minerals: Implication of surface adsorption. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 434, 243-252	5.1	33
44	In situ probing the self-assembly of 3-hexyl-4-amino-1,2,4-triazole-5-thione on chalcopyrite surfaces. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 511, 285-293	5.1	32
43	Probing the interactions of hydroxamic acid and mineral surfaces: Molecular mechanism underlying the selective separation. *Chemical Engineering Journal*, **2019**, 374, 123-132	14.7	31
42	Recent experimental advances on hydrophobic interactions at solid/water and fluid/water interfaces. *Biointerphases*, **2015**, 11, 018903	1.8	30
41	Investigation on the flotation behavior and adsorption mechanism of 3-hexyl-4-amino-1,2,4-triazole-5-thione to chalcopyrite. *Minerals Engineering*, **2016**, 89, 10-17	4.9	29
40	Novel chelating surfactant 5-heptyl-1,2,4-triazole-3-thione: Its synthesis and flotation separation of malachite against quartz and calcite. *Minerals Engineering*, **2019**, 131, 342-352	4.9	27
39	Adsorption thermodynamics and kinetics of N,N?-diisopropoxypropyl-N?,N?-oxydiethylenedicarbonyl bis (thiourea) on chalcopyrite surfaces. *Journal of Industrial and Engineering Chemistry*, **2015**, 21, 1306-1313	6.3	26
38	Gemini trisiloxane surfactant: Synthesis and flotation of aluminosilicate minerals. *Minerals Engineering*, **2014**, 56, 145-154	4.9	26

37	Tetrazinan-thione collectors for copper oxide mineral: Synthesis and flotation mechanism. *Applied Surface Science*, **2019**, 491, 624-632	6.7	25
36	A DFT prediction on the chemical reactivity of novel azolethione derivatives as chelating agents: Implications for copper minerals flotation and copper corrosion inhibition. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 93, 109-123	5.3	25
35	5-Heptyl-1,3,4-oxadiazole-2-thione: Synthesis and flotation mechanism to chalcopyrite. *Journal of Industrial and Engineering Chemistry*, **2018**, 61, 331-339	6.3	24
34	A novel surfactant, N,N-diethyl-N?-cyclohexylthiourea: Synthesis, flotation and adsorption on chalcopyrite. *Journal of Industrial and Engineering Chemistry*, **2016**, 37, 107-114	6.3	24
33	The hydrophobic mechanism of di(2-ethylhexyl) phosphoric acid to hemimorphite flotation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 545, 68-77	5.1	20
32	Thiadiazole-thione surfactants: Preparation, flotation performance and adsorption mechanism to malachite. *Journal of Industrial and Engineering Chemistry*, **2018**, 67, 99-108	6.3	20
31	The adsorption mechanism of N-butoxypropyl-S-[2-(hydroxyimino) propyl] dithiocarbamate ester to copper minerals flotation. *International Journal of Mineral Processing*, **2017**, 166, 53-61		20
30	Facile preparation of novel and active 2D nanosheets from non-layered and traditionally non-exfoliable earth-abundant materials. *Journal of Materials Chemistry A*, **2019**, 7, 15411-15419	13	19
29	Hetero-difunctional Reagent with Superior Flotation Performance to Chalcopyrite and the Associated Surface Interaction Mechanism. *Langmuir*, **2019**, 35, 4353-4363	4	19
28	Amino-hydroxamate surfactants: Preparation, and adsorption mechanism in bastnaesite flotation. *Separation and Purification Technology*, **2020**, 240, 116634	8.3	18
27	Synthesis of 2-ethyl-2-hexenal oxime and its flotation performance for copper ore. *Minerals Engineering*, **2014**, 66-68, 173-180	4.9	18
26	Probing the Reversible Fe3+DOPA-Mediated Bridging Interaction in Mussel Foot Protein-1. *Journal of Physical Chemistry C*, **2016**, 120, 21670-21677	3.8	17
25	The collecting performance and interaction mechanism of sodium diisobutyl dithiophosphinate in sulfide minerals flotation. *Journal of Materials Research and Technology*, **2015**, 4, 151-161	5.5	16
24	Probing the hydrophobic mechanism of N-[(3-hydroxyamino)-propoxy]-N-octyl dithiocarbamate toward bastnaesite flotation by in situ AFM, FTIR and XPS. *Journal of Colloid and Interface Science*, **2020**, 572, 179-189	9.3	15
23	The flotation behavior and adsorption mechanism of O-isopropyl-S-[2-(hydroxyimino) propyl] dithiocarbonate ester to chalcopyrite. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 71, 38-46	5.3	14
22	Defect-rich 2D reticulated MoS2 monolayers: Facile hydrothermal preparation and marvellous photoelectric properties. *Journal of the Taiwan Institute of Chemical Engineers*, **2019**, 101, 221-230	5.3	14
21	Synthesis, characterization and properties of 3,3?-diethyl-1,1?-oxydiethylenedicarbonyl bis(thiourea). *Research on Chemical Intermediates*, **2014**, 40, 2025-2038	2.8	14
20	Structure ctivity relationship of xanthates with different hydrophobic groups in the flotation of pyrite. *Minerals Engineering*, **2018**, 125, 155-164	4.9	12

19	Synthesis of Novel Ether Thionocarbamates and Study on Their Flotation Performance for Chalcopyrite. *Minerals (Basel, Switzerland)*, **2016**, 6, 97	2.4	11
18	Separation of pyrite from chalcopyrite and molybdenite by using selective collector of N-isopropoxypropyl-N?-ethoxycarbonyl thiourea in high salinity water. *Minerals Engineering*, **2017**, 100, 93-98	4.9	10
17	A selective flotation of cassiterite with a dithiocarbamate-hydroxamate molecule and its adsorption mechanism. *Applied Surface Science*, **2021**, 538, 147996	6.7	10
16	Investigation into the flotation of malachite, calcite and quartz with three phosphate surfactants. *Journal of Materials Research and Technology*, **2019**, 8, 5140-5148	5.5	9
15	Modulation of the morphology, surface energy and wettability of malachite through a S,O,O-ligand surfactant: Mechanism and hydrophobization. *Applied Surface Science*, **2020**, 505, 144467	6.7	9
14	Separation of chalcopyrite from galena with 3-amyl-4-amino-1, 2, 4-triazole-5-thione collector: Flotation behavior and mechanism. *Journal of Industrial and Engineering Chemistry*, **2020**, 92, 210-217	6.3	9
13	Selective Flotation of Copper Oxide Minerals with A Novel Amino-Triazole-Thione Surfactant: A Comparison to Hydroxamic Acid Collector. *Mineral Processing and Extractive Metallurgy Review*, **2020**, 41, 96-106	3.1	9
12	The ultrafine monolayer 1 T/2H-MoS2: Preparation, characterization and amazing photocatalytic characteristics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 589, 124431	5.1	8
11	Spectral Efficient Frequency Allocation Scheme in Multihop Cellular Network. *Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE*, **2007**,		7
10	Uncovering the hydrophobic mechanism of a novel dithiocarbamate-hydroxamate surfactant towards galena. *Chemical Engineering Science*, **2021**, 245, 116765	4.4	7
9	6-Hexyl-1,2,4,5-tetrazinane-3-thione: Flotation selectivity and mechanism to copper sulfide mineral. *Minerals Engineering*, **2020**, 152, 106345	4.9	6
8	Hemimorphite Flotation with 1-hydroxydodecylidene-1,1-diphosphonic acid and Its Mechanism. *Minerals (Basel, Switzerland)*, **2018**, 8, 38	2.4	5
7	Joint Space-Frequency-Power Scheduling Algorithm for Real Time Service in Cellular MIMO-OFDM System. *IEEE Vehicular Technology Conference*, **2008**,	0.1	3
6	The selective flotation separation of galena from sphalerite with a novel collector of 5-amyl-1, 2, 4-triazole-3-thione. *Journal of Molecular Liquids*, **2021**, 332, 115902	6	3
5	Exploring the electrocatalytic activity of cobalt disulfide nanosheets towards the hydrogen evolution reaction with in situ ECAFM. *Sustainable Energy and Fuels*, **2021**, 5, 4115-4125	5.8	3
4	Understanding the hetero-aggregation mechanism among sulfide and oxide mineral particles driven by bifunctional surfactants: Intensification flotation of oxide minerals. *Minerals Engineering*, **2021**, 169, 106928	4.9	3
3	A comparative investigation into floatability of bastnaesite with three di/trialkyl phosphate surfactants. *Journal of Rare Earths*, **2021**, 39, 1442-1449	3.7	2
2	The flotation separation of sphalerite from pyrite through a novel flotation reagent system of FeCl3-CuSO4-aminotriazolethione. *Journal of Molecular Liquids*, **2021**, 116997	6	1

1 1-Hydroxydodecylidene-1,1-diphosphonic acid flotation of bastnäsite: Performance and mechanism. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 609, 125623 5.1 1