

# Wengang Liu

## List of Publications by Year in descending order

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52  
papers

2,392  
citations

159585

30  
h-index

206112

48  
g-index

52  
all docs

52  
docs citations

52  
times ranked

1486  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of Au@WO <sub>3</sub> core-shell structured nanospheres for ppb-level NO <sub>2</sub> sensing. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 917-926.	7.8	181
2	Complex-surfactant-assisted hydrothermal synthesis of one-dimensional ZnO nanorods for high-performance ethanol gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 501-511.	7.8	179
3	NO <sub>2</sub> sensing properties of one-pot-synthesized ZnO nanowires with Pd functionalization. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 151-161.	7.8	151
4	Low-temperature and highly enhanced NO <sub>2</sub> sensing performance of Au-functionalized WO <sub>3</sub> microspheres with a hierarchical nanostructure. <i>Applied Surface Science</i> , 2018, 434, 922-931.	6.1	101
5	Fabrication, characterization and n-propanol sensing properties of perovskite-type ZnSnO <sub>3</sub> nanospheres based gas sensor. <i>Applied Surface Science</i> , 2020, 509, 145335.	6.1	97
6	Nitrogen dioxide sensing using tungsten oxide microspheres with hierarchical nanorod-assembled architectures by a complexing surfactant-mediated hydrothermal route. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1345-1352.	10.3	91
7	Synthesis of N,N-Bis(2-hydroxypropyl)laurylamine and its flotation on quartz. <i>Chemical Engineering Journal</i> , 2017, 309, 63-69.	12.7	91
8	Highly selective NO <sub>2</sub> sensor based on p-type nanocrystalline NiO thin films prepared by sol-gel dip coating. <i>Ceramics International</i> , 2018, 44, 753-759.	4.8	89
9	Effect mechanism of the iso-propanol substituent on amine collectors in the flotation of quartz and magnesite. <i>Powder Technology</i> , 2020, 360, 1117-1125.	4.2	80
10	Effect of copper ions on the flotation separation of chalcopyrite and molybdenite using sodium sulfide as a depressant. <i>Minerals Engineering</i> , 2018, 115, 44-52.	4.3	79
11	The adsorption mechanism of calcium ion on quartz (101) surface: A DFT study. <i>Powder Technology</i> , 2018, 329, 158-166.	4.2	73
12	In-situ growth of mesoporous In <sub>2</sub> O <sub>3</sub> nanorod arrays on a porous ceramic substrate for ppb-level NO <sub>2</sub> detection at room temperature. <i>Applied Surface Science</i> , 2019, 498, 143873.	6.1	69
13	Novel hydroxy polyamine surfactant N-(2-hydroxyethyl)-N-dodecyl-ethanediamine: Its synthesis and flotation performance study to quartz. <i>Minerals Engineering</i> , 2019, 142, 105894.	4.3	69
14	Utilization of novel surfactant N-dodecyl-isopropanolamine as collector for efficient separation of quartz from hematite. <i>Separation and Purification Technology</i> , 2016, 162, 188-194.	7.9	66
15	Synthesis and utilization of a gemini surfactant as a collector for the flotation of hemimorphite from quartz. <i>Minerals Engineering</i> , 2019, 134, 394-401.	4.3	44
16	An ion-tolerance collector AESNa for effective flotation of magnesite from dolomite. <i>Minerals Engineering</i> , 2021, 170, 106991.	4.3	44
17	Effect of Tween 80 on flotation separation of magnesite and dolomite using NaOL as the collector. <i>Journal of Molecular Liquids</i> , 2020, 315, 113712.	4.9	43
18	Effects of monohydric alcohols on the flotation of magnesite and dolomite by sodium oleate. <i>Journal of Molecular Liquids</i> , 2018, 249, 1060-1067.	4.9	42

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19	Adsorption of bis(2-hydroxy-3-chloropropyl) dodecylamine on quartz surface and its implication on flotation. Results in Physics, 2018, 9, 1096-1101.	4.1	40
20	A new collector used for flotation of oxide minerals. Transactions of Nonferrous Metals Society of China, 2009, 19, 1326-1330.	4.2	39
21	Enhancing the purity of magnesite ore powder using an ethanolamine-based collector: Insights from experiment and theory. Journal of Molecular Liquids, 2018, 268, 215-222.	4.9	39
22	Low-temperature H <sub>2</sub> S sensing performance of Cu-doped ZnFe <sub>2</sub> O <sub>4</sub> nanoparticles with spinel structure. Applied Surface Science, 2019, 470, 581-590.	6.1	37
23	Complexing surfactants-mediated hydrothermal synthesis of WO <sub>3</sub> microspheres for gas sensing applications. Materials Letters, 2016, 163, 150-153.	2.6	36
24	Molecular-level insights into the adsorption of a hydroxy-containing tertiary amine collector on the surface of magnesite ore. Powder Technology, 2019, 355, 700-707.	4.2	36
25	Investigation on flotation separation of bastnaesite from calcite and barite with a novel surfactant: Octylamino-bis-(butanohydroxamic acid). Separation and Purification Technology, 2021, 256, 117792.	7.9	35
26	Design and application of highly responsive and selective rGO-SnO <sub>2</sub> nanocomposites for NO <sub>2</sub> monitoring. Materials Characterization, 2020, 163, 110284.	4.4	34
27	Intensify dodecylamine adsorption on magnesite and dolomite surfaces by monohydric alcohols. Applied Surface Science, 2018, 444, 729-738.	6.1	33
28	Investigating the performance of a novel polyamine derivative for separation of quartz and hematite based on theoretical prediction and experiment. Separation and Purification Technology, 2020, 237, 116370.	7.9	33
29	Novel insights into the adsorption mechanism of the isopropanol amine collector on magnesite ore: A combined experimental and theoretical computational study. Powder Technology, 2019, 343, 366-374.	4.2	32
30	Design and flotation performance of a novel hydroxy polyamine surfactant based on hematite reverse flotation desilication system. Journal of Molecular Liquids, 2020, 301, 112428.	4.9	32
31	A low-temperature n-propanol gas sensor based on TeO <sub>2</sub> nanowires as the sensing layer. RSC Advances, 2015, 5, 29126-29130.	3.6	31
32	Effect of secondary amino on the adsorption of N-Dodecylethylenediamine on quartz surface: A molecular dynamics study. Powder Technology, 2019, 351, 46-53.	4.2	29
33	Preparation of a novel bis hydroxamic collector and its impact on bastnaesite flotation. Minerals Engineering, 2020, 156, 106496.	4.3	29
34	Flotation separation of bastnaesite from calcite using novel octylmalon dihydroxamic acid as collector. Journal of Molecular Liquids, 2020, 312, 113484.	4.9	26
35	Sodium carbonate effects on the flotation separation of smithsonite from quartz using N,N'-dilauroyl ethylenediamine dipropionate as a collector. Minerals Engineering, 2018, 126, 1-8.	4.3	25
36	Stability of diethyl dithiocarbamate chelates with Cu(II), Zn(II) and Mn(II). Journal of Molecular Structure, 2019, 1184, 375-381.	3.6	22

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37	Quantitative structure-activity relationship between the toxicity of amine surfactant and its molecular structure. <i>Science of the Total Environment</i> , 2020, 702, 134593.	8.0	22
38	The chain length and isomeric effects of monohydric alcohols on the flotation of magnesite and dolomite by sodium oleate. <i>Journal of Molecular Liquids</i> , 2019, 276, 471-479.	4.9	21
39	Inserting EO groups to improve the performance of fatty acid collectors: Flotation and adsorption study performed with calcite, dolomite, and quartz. <i>Separation and Purification Technology</i> , 2021, 272, 118952.	7.9	21
40	Effect of noble metal elements on ethanol sensing properties of ZnSnO <sub>3</sub> nanocubes. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161409.	5.5	21
41	Effect of Ca(II) on anionic/cationic flotation of magnesite ore. <i>Minerals Engineering</i> , 2021, 163, 106778.	4.3	18
42	Effect of butanol on flotation separation of quartz from hematite with N-dodecyl ethylenediamine. <i>International Journal of Mining Science and Technology</i> , 2016, 26, 1059-1063.	10.3	17
43	Effects of monohydric alcohols of varying chain lengths and isomeric structures on magnesite and dolomite flotation by dodecylamine. <i>Powder Technology</i> , 2020, 374, 233-240.	4.2	17
44	Flotation performance and selective adsorption mechanism of novel hydroxamic acid on the separation of fluorite from barite. <i>Minerals Engineering</i> , 2021, 171, 107101.	4.3	14
45	A cost-effective approach to recycle serpentine tailings: Destruction of stable layered structure and solvent displacement crystallization. <i>International Journal of Mining Science and Technology</i> , 2022, 32, 595-603.	10.3	14
46	Fluorite enhanced magnesium recovery from serpentine tailings: Kinetics and reaction mechanisms. <i>Hydrometallurgy</i> , 2021, 201, 105571.	4.3	12
47	Effect of TIPA/TEA combined grinding aid on the behavior of quartz flotation in DDA system. <i>Powder Technology</i> , 2022, 406, 117570.	4.2	10
48	High response and moisture resistance hydrogen sensors based on sandwich-structured PtSn <sub>x</sub> -rGO-SnO <sub>2</sub> nanocomposites. <i>Sensors and Actuators B: Chemical</i> , 2022, 368, 132146.	7.8	9
49	Study on quantitative structure-biodegradability relationships of amine collectors by GFA-ANN method. <i>Journal of Hazardous Materials</i> , 2021, 415, 125628.	12.4	6
50	Adsorption mechanism of N-laurel-1,3-diaminopropane in a hematite-quartz flotation system. <i>Mining Science and Technology</i> , 2011, 21, 213-215.	0.3	5
51	Enhanced detection of ppb-level NO <sub>2</sub> by uniform Pt-doped ZnSnO <sub>3</sub> nanocubes. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 1295-1303.	4.9	5
52	Study on the Degradation of Sodium Diethyldithiocarbamate (DDTC) in Artificially Prepared Beneficiation Wastewater with Sodium Hypochlorite. <i>Journal of Chemistry</i> , 2019, 2019, 1-8.	1.9	3