

# Qi Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1605672/publications.pdf>

Version: 2024-02-01

178  
papers

6,151  
citations

57631

44  
h-index

95083

68  
g-index

184  
all docs

184  
docs citations

184  
times ranked

4172  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shape-Dependent Electrocatalytic Reduction of CO <sub>2</sub> to CO on Triangular Silver Nanoplates. <i>Journal of the American Chemical Society</i> , 2017, 139, 2160-2163.	6.6	551
2	The adsorption of polysaccharides onto mineral surfaces: an acid/base interaction. <i>International Journal of Mineral Processing</i> , 2000, 60, 229-245.	2.6	248
3	Current understanding of the mechanism of polysaccharide adsorption at the mineral/aqueous solution interface. <i>International Journal of Mineral Processing</i> , 2007, 84, 59-68.	2.6	160
4	Stabilization mechanism and chemical demulsification of water-in-oil and oil-in-water emulsions in petroleum industry: A review. <i>Fuel</i> , 2021, 286, 119390.	3.4	143
5	Slime coatings in froth flotation: A review. <i>Minerals Engineering</i> , 2017, 114, 26-36.	1.8	137
6	Ultrathin 5-fold twinned sub-25 nm silver nanowires enable highly selective electroreduction of CO <sub>2</sub> to CO. <i>Nano Energy</i> , 2018, 45, 456-462.	8.2	115
7	Froth Treatment in Athabasca Oil Sands Bitumen Recovery Process: A Review. <i>Energy &amp; Fuels</i> , 2013, 27, 7199-7207.	2.5	109
8	The role of metal hydroxides at mineral surfaces in dextrin adsorption, II. Chalcopyrite-galena separations in the presence of dextrin. <i>International Journal of Mineral Processing</i> , 1989, 27, 147-155.	2.6	103
9	The interactions between dextrin and metal hydroxides in aqueous solutions. <i>Journal of Colloid and Interface Science</i> , 1989, 130, 101-111.	5.0	102
10	Effect of calcium ions and citric acid on the flotation separation of chalcopyrite from galena using dextrin. <i>Minerals Engineering</i> , 2000, 13, 1405-1416.	1.8	97
11	The role of metal hydroxides at mineral surfaces in dextrin adsorption, I. Studies on modified quartz samples. <i>International Journal of Mineral Processing</i> , 1989, 26, 297-316.	2.6	93
12	Geopolymerization and Its Potential Application in Mine Tailings Consolidation: A Review. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2015, 36, 399-409.	2.6	89
13	Reexamining the functions of zinc sulfate as a selective depressant in differential sulfide flotation—The role of coagulation. <i>Journal of Colloid and Interface Science</i> , 2006, 301, 523-531.	5.0	85
14	Recent advances in reverse flotation of diasporic ores—A Chinese experience. <i>Minerals Engineering</i> , 2004, 17, 1007-1015.	1.8	80
15	Rational Design of Silver Sulfide Nanowires for Efficient CO <sub>2</sub> Electroreduction in Ionic Liquid. <i>ACS Catalysis</i> , 2018, 8, 1469-1475.	5.5	76
16	Sphalerite activation: Flotation and electrokinetic studies. <i>Minerals Engineering</i> , 1997, 10, 787-802.	1.8	71
17	Electrodeposition of tin: a simple approach. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 553-562.	1.1	70
18	Interaction Mechanisms between Air Bubble and Molybdenite Surface: Impact of Solution Salinity and Polymer Adsorption. <i>Langmuir</i> , 2017, 33, 2353-2361.	1.6	67

#	ARTICLE	IF	CITATIONS
19	Solvent screening for non-aqueous extraction of Alberta oil sands. Canadian Journal of Chemical Engineering, 2013, 91, 1153-1160.	0.9	65
20	Adsorption characteristics and mechanisms of O-Carboxymethyl chitosan on chalcopyrite and molybdenite. Journal of Colloid and Interface Science, 2019, 552, 659-670.	5.0	65
21	Chemical structure analyses of phosphorylated chitosan. Carbohydrate Research, 2014, 386, 48-56.	1.1	64
22	Room temperature interfacial reactions in electrodeposited Au/Sn couples. Acta Materialia, 2008, 56, 5818-5827.	3.8	63
23	Modulation of Hydrophobic Interaction by Mediating Surface Nanoscale Structure and Chemistry, not Monotonically by Hydrophobicity. Angewandte Chemie - International Edition, 2018, 57, 11903-11908.	7.2	62
24	Using chitosan as a selective depressant in the differential flotation of Cu-Pb sulfides. International Journal of Mineral Processing, 2012, 106-109, 8-15.	2.6	61
25	Clay minerals in nonaqueous extraction of bitumen from Alberta oil sands. Fuel Processing Technology, 2012, 94, 80-85.	3.7	60
26	Flotation separation of copper-molybdenum sulfides using chitosan as a selective depressant. Minerals Engineering, 2015, 83, 217-222.	1.8	60
27	New insights into the slime coating caused by montmorillonite in the flotation of coal. Journal of Cleaner Production, 2020, 242, 118540.	4.6	60
28	Exploiting the dual functions of polymer depressants in fine particle flotation. International Journal of Mineral Processing, 2006, 80, 244-254.	2.6	59
29	Solid state interfacial reactions in electrodeposited Cu/Sn couples. Transactions of Nonferrous Metals Society of China, 2010, 20, 90-96.	1.7	58
30	Distribution of Pb(II) species in aqueous solutions. Journal of Colloid and Interface Science, 2003, 268, 266-269.	5.0	55
31	Mapping the Nanoscale Heterogeneity of Surface Hydrophobicity on the Sphalerite Mineral. Journal of Physical Chemistry C, 2017, 121, 5620-5628.	1.5	55
32	Reducing quartz gangue entrainment in sulphide ore flotation by high molecular weight polyethylene oxide. International Journal of Mineral Processing, 2010, 97, 44-51.	2.6	54
33	Adsorption of chitosan on chalcopyrite and galena from aqueous suspensions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 409, 167-175.	2.3	54
34	Kinetics of Sn electrodeposition from Sn(II)-citrate solutions. Electrochimica Acta, 2008, 53, 8332-8340.	2.6	53
35	Study of Asphaltene Adsorption on Kaolinite by X-ray Photoelectron Spectroscopy and Time-of-Flight Secondary Ion Mass Spectroscopy. Energy & Fuels, 2013, 27, 2465-2473.	2.5	53
36	Magnetic properties of ilmenite, hematite and oilsand minerals after roasting. Minerals Engineering, 2002, 15, 1121-1129.	1.8	52

#	ARTICLE	IF	CITATIONS
37	Nucleation of Sn and Sn-Cu alloys on Pt during electrodeposition from Sn-citrate and Sn-Cu-citrate solutions. <i>Electrochimica Acta</i> , 2009, 54, 3419-3427.	2.6	50
38	Selective depression of pyrite with chitosan in Pb-Fe sulfide flotation. <i>Minerals Engineering</i> , 2013, 46-47, 45-51.	1.8	50
39	Depressant function of high molecular weight polyacrylamide in the xanthate flotation of chalcopyrite and galena. <i>International Journal of Mineral Processing</i> , 2014, 128, 6-15.	2.6	50
40	Probing the Interaction Mechanism between Air Bubbles and Bitumen Surfaces in Aqueous Media Using Bubble Probe Atomic Force Microscopy. <i>Langmuir</i> , 2018, 34, 729-738.	1.6	49
41	Probing Surface Interactions of Electrochemically Active Galena Mineral Surface Using Atomic Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22433-22442.	1.5	48
42	Surface interaction mechanisms in mineral flotation: Fundamentals, measurements, and perspectives. <i>Advances in Colloid and Interface Science</i> , 2021, 295, 102491.	7.0	47
43	Hydrodynamics of froth flotation and its effects on fine and ultrafine mineral particle flotation: A literature review. <i>Minerals Engineering</i> , 2021, 173, 107220.	1.8	47
44	Polysaccharides in flotation of sulphides. Part I. Adsorption of polysaccharides onto mineral surfaces. <i>International Journal of Mineral Processing</i> , 1991, 33, 223-234.	2.6	46
45	Performance of Solvent Mixtures for Non-aqueous Extraction of Alberta Oil Sands. <i>Energy &amp; Fuels</i> , 2015, 29, 2261-2267.	2.5	46
46	Selective flotation separation of molybdenite and talc by humic substances. <i>Minerals Engineering</i> , 2018, 117, 34-41.	1.8	46
47	Mineralogical and chemical composition of petrologic end members of Alberta oil sands. <i>Fuel</i> , 2013, 113, 148-157.	3.4	45
48	Interactions between fine and coarse hematite particles in aqueous suspension and their implications for flotation. <i>Minerals Engineering</i> , 2017, 114, 74-81.	1.8	45
49	Synergistic effect of mineral surface constituents in dextrin adsorption. <i>International Journal of Mineral Processing</i> , 1994, 42, 251-266.	2.6	42
50	Clay minerals in nonaqueous extraction of bitumen from Alberta oil sands. <i>Fuel Processing Technology</i> , 2012, 96, 183-194.	3.7	42
51	The development of a composite collector for the flotation of rutile. <i>Minerals Engineering</i> , 1999, 12, 1419-1430.	1.8	41
52	Sulfuric acid leaching of ocean manganese nodules using phenols as reducing agents. <i>Minerals Engineering</i> , 2001, 14, 525-537.	1.8	41
53	The adsorption and configuration of octyl hydroxamic acid on pyrochlore and calcite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 411, 80-86.	2.3	41
54	Adsorption of phosphorylated chitosan on mineral surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 436, 656-663.	2.3	41

#	ARTICLE	IF	CITATIONS
55	Descriptor of catalytic activity of metal sulfides for oxygen reduction reaction: a potential indicator for mineral flotation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9650-9656.	5.2	41
56	Adsorption of asphaltenes on kaolinite as an irreversible process. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 504, 280-286.	2.3	40
57	The effect of non-polar oil on fine hematite flocculation and flotation using sodium oleate or hydroxamic acids as a collector. <i>Minerals Engineering</i> , 2018, 119, 105-115.	1.8	40
58	Coagulation of bitumen with kaolinite in aqueous solutions containing Ca <sup>2+</sup> , Mg <sup>2+</sup> and Fe <sup>3+</sup> : Effect of citric acid. <i>Journal of Colloid and Interface Science</i> , 2008, 324, 85-91.	5.0	38
59	Developing flotation reagents for niobium oxide recovery from carbonatite Nb ores. <i>Minerals Engineering</i> , 2012, 36-38, 111-118.	1.8	37
60	Migration of Fine Solids into Product Bitumen from Solvent Extraction of Alberta Oilsands. <i>Energy &amp; Fuels</i> , 2014, 28, 2925-2932.	2.5	37
61	Flotation separation of carbonate from sulfide minerals, II: mechanisms of flotation depression of sulfide minerals by thioglycolic acid and citric acid. <i>Minerals Engineering</i> , 2004, 17, 865-878.	1.8	36
62	Selective depression of sphalerite by chitosan in differential PbZn flotation. <i>International Journal of Mineral Processing</i> , 2013, 122, 29-35.	2.6	35
63	Flotation separation of Cu-Mo sulfides by O-Carboxymethyl chitosan. <i>Minerals Engineering</i> , 2019, 134, 202-205.	1.8	35
64	Influence of Nonswelling Clay Minerals (Illite, Kaolinite, and Chlorite) on Nonaqueous Solvent Extraction of Bitumen. <i>Energy &amp; Fuels</i> , 2015, 29, 4150-4159.	2.5	34
65	Dual polymer flocculants for mature fine tailings dewatering. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 3-10.	0.9	34
66	Separation of talc and molybdenite: challenges and opportunities. <i>Minerals Engineering</i> , 2019, 143, 105923.	1.8	34
67	Flotation of coarse and fine pyrochlore using octyl hydroxamic acid and sodium oleate. <i>Minerals Engineering</i> , 2019, 132, 191-201.	1.8	34
68	Selective separation of copper-molybdenum sulfides using humic acids. <i>Minerals Engineering</i> , 2019, 133, 43-46.	1.8	33
69	Interfacial behavior and interaction mechanism of pentol/water interface stabilized with asphaltenes. <i>Journal of Colloid and Interface Science</i> , 2019, 553, 341-349.	5.0	31
70	Flotation separation of carbonate from sulfide minerals, I: flotation of single minerals and mineral mixtures. <i>Minerals Engineering</i> , 2004, 17, 855-863.	1.8	30
71	Electrochemical composite deposition of Sn-Ag-Cu alloys. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009, 164, 172-179.	1.7	30
72	Understanding the stabilization mechanism of bitumen-coated fine solids in organic media from non-aqueous extraction of oil sands. <i>Fuel</i> , 2019, 242, 255-264.	3.4	30

#	ARTICLE	IF	CITATIONS
73	Solution chemistry of carbonate minerals and its effects on the flotation of hematite with sodium oleate. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2017, 24, 736-744.	2.4	29
74	Anisotropic Polymer Adsorption on Molybdenite Basal and Edge Surfaces and Interaction Mechanism With Air Bubbles. <i>Frontiers in Chemistry</i> , 2018, 6, 361.	1.8	29
75	Effect of citric acid on inhibiting hexadecane-quartz coagulation in aqueous solutions containing Ca <sup>2+</sup> , Mg <sup>2+</sup> and Fe <sup>3+</sup> ions. <i>International Journal of Mineral Processing</i> , 2009, 92, 84-91.	2.6	28
76	Effect of Swelling Clay Minerals (Montmorillonite and Illite-Smectite) on Nonaqueous Bitumen Extraction from Alberta Oil Sands. <i>Energy &amp; Fuels</i> , 2016, 30, 8083-8090.	2.5	27
77	Techniques for treating slop oil in oil and gas industry: A short review. <i>Fuel</i> , 2020, 279, 118482.	3.4	26
78	Development of stable, non-cyanide solutions for electroplating Au-Sn alloy films. <i>Journal of Materials Science: Materials in Electronics</i> , 2006, 17, 63-70.	1.1	25
79	Xanthation-modified polyacrylamide and spectroscopic investigation of its adsorption onto mineral surfaces. <i>Minerals Engineering</i> , 2012, 39, 1-8.	1.8	25
80	Removal of iron from synthetic copper leach solution using a hydroxy-oxime chelating resin. <i>Hydrometallurgy</i> , 2016, 164, 154-158.	1.8	25
81	The acidity of caustic digested starch and its role in starch adsorption on mineral surfaces. <i>International Journal of Mineral Processing</i> , 2012, 112-113, 94-100.	2.6	24
82	Spatially resolved organic coating on clay minerals in bitumen froth revealed by atomic force microscopy adhesion mapping. <i>Fuel</i> , 2017, 191, 283-289.	3.4	23
83	Heterogeneous Distribution of Adsorbed Bitumen on Fine Solids from Solvent-Based Extraction of Oil Sands Probed by AFM. <i>Energy &amp; Fuels</i> , 2017, 31, 8833-8842.	2.5	23
84	Development of online soft sensors and dynamic fundamental model-based process monitoring for complex sulfide ore flotation. <i>Minerals Engineering</i> , 2018, 124, 10-27.	1.8	23
85	Upgrading a rutile concentrate produced from Athabasca oil sands tailings. <i>Fuel</i> , 2003, 82, 929-942.	3.4	22
86	Characterization of Athabasca oil sands froth treatment tailings for heavy mineral recovery. <i>Fuel</i> , 2006, 85, 807-814.	3.4	22
87	Influence of aggregation/dispersion state of hydrophilic particles on their entrainment in fine mineral particle flotation. <i>Minerals Engineering</i> , 2021, 166, 106835.	1.8	22
88	Dewatering of Oil Sands Mature Fine Tailings by Dual Polymer Flocculation and Pressure Plate Filtration. <i>Energy &amp; Fuels</i> , 2017, 31, 6986-6995.	2.5	21
89	Probing interactions between sphalerite and hydrophobic/hydrophilic surfaces: Effect of water chemistry. <i>Powder Technology</i> , 2017, 320, 511-518.	2.1	21
90	Mitigating the negative effects of clay minerals on gold flotation by a lignosulfonate-based biopolymer. <i>Minerals Engineering</i> , 2018, 126, 9-15.	1.8	21

#	ARTICLE	IF	CITATIONS
91	Bitumen Coating on Oil Sands Clay Minerals: A Review. <i>Energy &amp; Fuels</i> , 2019, 33, 5933-5943.	2.5	21
92	High resolution transmission electron microscopy study of clay mineral particles from streams of simulated water based bitumen extraction of Athabasca oil sands. <i>Applied Clay Science</i> , 2010, 48, 466-474.	2.6	20
93	Separation of ultra-fine hematite and quartz particles using asynchronous flocculation flotation. <i>Minerals Engineering</i> , 2021, 164, 106817.	1.8	20
94	Solid state interfacial reactions in electrodeposited Ni/Sn couples. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2010, 17, 459-463.	2.4	19
95	Surface Electrical Behaviors of Apatite, Dolomite, Quartz, and Phosphate Ore. <i>Frontiers in Materials</i> , 2020, 7, .	1.2	19
96	Adsorption behaviour of sodium hexametaphosphate on pyrochlore and calcite. <i>Canadian Metallurgical Quarterly</i> , 2013, 52, 473-478.	0.4	18
97	Comparison of Different Methods To Determine the Surface Wettability of Fine Solids Isolated from Alberta Oil Sands. <i>Energy &amp; Fuels</i> , 2015, 29, 3556-3565.	2.5	18
98	Influence of hydrothermal treatment on filterability of fine solids in bitumen froth. <i>Fuel</i> , 2016, 180, 314-323.	3.4	18
99	Characterisation of petrologic end members of oil sands from the athabasca region, Alberta, Canada. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1402-1415.	0.9	17
100	Irreversible Adsorption of Asphaltenes on Kaolinite: Influence of Dehydroxylation. <i>Energy &amp; Fuels</i> , 2017, 31, 9328-9336.	2.5	17
101	Rapid Dewatering and Consolidation of Concentrated Colloidal Suspensions: Mature Fine Tailings via Self-Healing Composite Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 21610-21618.	4.0	17
102	Sulfuric acid leaching of ocean manganese nodules using aromatic amines as reducing agents. <i>Minerals Engineering</i> , 2001, 14, 539-542.	1.8	16
103	Fabrication and microstructures of sequentially electroplated Au-rich, eutectic Au/Sn alloy solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 1176-1183.	1.1	16
104	Fabrication and Microstructures of Sequentially Electroplated Sn-Rich Au-Sn Alloy Solders. <i>Journal of Electronic Materials</i> , 2008, 37, 837-844.	1.0	16
105	Dynamic Modeling and Real-Time Monitoring of Froth Flotation. <i>Minerals (Basel, Switzerland)</i> , 2015, 5, 570-591.	0.8	16
106	Solvent removal from cyclohexane-extracted oil sands gangue. <i>Canadian Journal of Chemical Engineering</i> , 2016, 94, 408-414.	0.9	16
107	Modulation of Hydrophobic Interaction by Mediating Surface Nanoscale Structure and Chemistry, not Monotonically by Hydrophobicity. <i>Angewandte Chemie</i> , 2018, 130, 12079-12084.	1.6	16
108	Destabilization of fine solids suspended in oil media through wettability modification and water-assisted agglomeration. <i>Fuel</i> , 2019, 254, 115623.	3.4	16

#	ARTICLE	IF	CITATIONS
109	Formation, breakage, and re-growth of quartz flocs generated by non-ionic high molecular weight polyacrylamide. <i>Minerals Engineering</i> , 2020, 157, 106546.	1.8	16
110	Development of a vision-based online soft sensor for oil sands flotation using support vector regression and its application in the dynamic monitoring of bitumen extraction. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 1532-1540.	0.9	15
111	Pre-concentration and residual bitumen removal from Athabasca oilsands froth treatment tailings by a Falcon centrifugal concentrator. <i>International Journal of Mineral Processing</i> , 2006, 78, 220-230.	2.6	14
112	Aggregation of silica particles in non-aqueous media. <i>Fuel</i> , 2011, 90, 2592-2597.	3.4	14
113	Surface Properties of Petrologic End-Members from Alberta Oil Sands and Their Relationship with Mineralogical and Chemical Composition. <i>Energy &amp; Fuels</i> , 2014, 28, 934-944.	2.5	14
114	Influence of hydrophobicity distribution of particle mixtures on emulsion stabilization. <i>Journal of Colloid and Interface Science</i> , 2017, 491, 179-189.	5.0	14
115	Flocculation of quartz by a dual polymer system containing tannic acid and poly(ethylene oxide): Effect of polymer chemistry and hydrodynamic conditions. <i>Chemical Engineering Journal</i> , 2022, 446, 137403.	6.6	14
116	Electroplating of gold from a solution containing tri-ammonium citrate and sodium sulphite. <i>Journal of Materials Science: Materials in Electronics</i> , 2009, 20, 543-550.	1.1	13
117	Role of water and fine solids in onset of coke formation during bitumen cracking. <i>Fuel</i> , 2016, 166, 152-156.	3.4	13
118	Characterization of Fine Solids in Athabasca Bitumen Froth before and after Hydrothermal Treatment. <i>Energy &amp; Fuels</i> , 2016, 30, 1965-1971.	2.5	13
119	New insights into the interfacial behavior and swelling of polymer inclusion membrane (PIM) during Zn (II) extraction process. <i>Chemical Engineering Science</i> , 2020, 220, 115620.	1.9	13
120	A Janus facilitated transport membrane with asymmetric surface wettability and dense/porous structure: Enabling high stability and separation efficiency. <i>Journal of Membrane Science</i> , 2021, 626, 119183.	4.1	13
121	Thermal and electrical stability of TaN x diffusion barriers for Cu metallization. <i>Journal of Materials Science</i> , 2013, 48, 489-501.	1.7	12
122	Study of Cyclohexane Diffusion in Athabasca Asphaltenes. <i>Energy &amp; Fuels</i> , 2014, 28, 1004-1011.	2.5	12
123	Facile and scalable surface functionalization approach with small silane molecules for oil/water separation and demulsification of surfactant/asphaltenes-stabilized emulsions. <i>Separation and Purification Technology</i> , 2022, 285, 120382.	3.9	12
124	The filterability of different types of minerals and the role of swelling clays in the filtration of oil sands tailings. <i>Fuel</i> , 2022, 316, 123395.	3.4	12
125	Effect of hydrolyzable metal cations on the coagulation between hexadecane and mineral particles. <i>Journal of Colloid and Interface Science</i> , 2007, 310, 489-497.	5.0	11
126	Eutectic and solid-state wafer bonding of silicon with gold. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 1748-1758.	1.7	11



#	ARTICLE	IF	CITATIONS
127	Sorption equilibrium and kinetics for cyclohexane, toluene, and water on Athabasca oil sands solids. Canadian Journal of Chemical Engineering, 2016, 94, 220-230.	0.9	11
128	Molecular dynamics study of the dissolution mechanism of kaolinite basal surfaces in alkali media. Applied Clay Science, 2018, 152, 29-37.	2.6	11
129	Real-time monitoring of entrainment using fundamental models and froth images. Minerals Engineering, 2018, 124, 44-62.	1.8	11
130	Effect of Charge Density of Reverse Emulsion Breaker on Demulsification Performance for Steam-Assisted Gravity Drainage (SAGD) Emulsions under High Temperature and High Pressure. Energy & Fuels, 2020, 34, 13893-13902.	2.5	11
131	Fine solids removal from non-aqueous extraction bitumen: A literature review. Fuel, 2021, 288, 119727.	3.4	11
132	Selective aggregation of fine quartz by polyaluminum chloride to mitigate its entrainment during fine and ultrafine mineral flotation. Separation and Purification Technology, 2021, 279, 119606.	3.9	11
133	Sample Preparation Method for Characterization of Fine Solids in Athabasca Oil Sands by Electron Microscopy. Energy & Fuels, 2011, 25, 5158-5164.	2.5	9
134	Bi-wetting property of oil sands fine solids determined by film flotation and water vapor adsorption. Fuel, 2017, 197, 326-333.	3.4	9
135	Mineralogy and Surface Chemistry of Alberta Oil Sands: Relevance to Nonaqueous Solvent Bitumen Extraction. Energy & Fuels, 2017, 31, 8910-8924.	2.5	9
136	A lattice defect-inspired leaching strategy toward simultaneous recovery and separation of value metals from spent cathode materials. Waste Management, 2021, 135, 40-46.	3.7	9
137	HEAVY MINERALS IN THE ATHABASCA OIL SANDS TAILINGS – POTENTIAL AND RECOVERY PROCESSES. Canadian Metallurgical Quarterly, 2003, 42, 383-392.	0.4	8
138	Probing the Interactions between Pickering Emulsion Droplets Stabilized with pH-Responsive Nanoparticles. Journal of Physical Chemistry B, 2021, 125, 7320-7331.	1.2	8
139	High-efficiency and durable removal of water-in-heavy oil emulsions enabled by delignified and carboxylated basswood with zwitterionic nanohydrogel coatings. Journal of Colloid and Interface Science, 2022, 612, 445-458.	5.0	8
140	Formation and transformation of metastable phases during electrodeposition and annealing of cobalt-iron alloy films. Journal of Materials Science: Materials in Electronics, 2011, 22, 614-625.	1.1	7
141	Effect of Inorganic Salt Contaminants on the Dissolution of Kaolinite Basal Surfaces in Alkali Media: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2018, 122, 4937-4944.	1.5	7
142	Characterization of four petrologic end members from Alberta oil sands and comparison between different mines and sampling times. Canadian Journal of Chemical Engineering, 2018, 96, 49-61.	0.9	7
143	High molecular weight guar gum assisted settling of fine solids in diluted bitumen: Effect of solvents. Petroleum Science, 2021, 18, 1877-1886.	2.4	7
144	Roles of the hydrophobic and hydrophilic groups of collectors in the flotation of different-sized mineral particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 637, 128262.	2.3	7

#	ARTICLE	IF	CITATIONS
145	Ta–Rh binary alloys as a potential diffusion barrier between Cu and Si: Stability and failure mechanism of the Ta–Rh amorphous structures. <i>Acta Materialia</i> , 2013, 61, 5365-5374.	3.8	6
146	Influence of structural Al and Si vacancies on the interaction of kaolinite basal surfaces with alkali cations: A molecular dynamics study. <i>Computational Materials Science</i> , 2017, 140, 267-274.	1.4	6
147	Effect of particle size on the flocculation of sub-micron titanium dioxide by polyacrylic acid. <i>Minerals Engineering</i> , 2020, 149, 106253.	1.8	6
148	Characterization of Iron-Bearing Particles in Athabasca Oil Sands. <i>Energy &amp; Fuels</i> , 2012, 26, 5036-5047.	2.5	5
149	In situ TEM study of stability of TaRh <sub>x</sub> diffusion barriers using a novel sample preparation method. <i>Micron</i> , 2014, 58, 25-31.	1.1	5
150	Transport and removal of a solvent in porous media in the presence of bitumen, a highly viscous solute. <i>Chemical Engineering Science</i> , 2017, 165, 229-239.	1.9	5
151	Effect of Carbon Dioxide on Asphaltene Precipitation from Bitumen–Heptane Mixtures. <i>Energy &amp; Fuels</i> , 2020, 34, 9483-9491.	2.5	5
152	Destabilization of bitumen-coated fine solids in oil through water-assisted flocculation using biomolecules extracted from guar beans. <i>Petroleum Science</i> , 2020, 17, 1726-1736.	2.4	5
153	Influence of molecular weight on polyacrylic acid flocculation of sub-micron titanium dioxide. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 603, 125195.	2.3	5
154	Entrainment of Gangue Minerals in Froth Flotation: Mechanisms, Models, Controlling Factors, and Abatement Techniques—a Review. <i>Mining, Metallurgy and Exploration</i> , 2021, 38, 673-692.	0.4	5
155	Correlation between reducing power and electronic structure of organic reducing agents used in sulfuric acid leaching of polymetallic nodules. <i>International Journal of Mineral Processing</i> , 2002, 65, 191-202.	2.6	4
156	Electrodeposition of an Iron-Cobalt Phase Isostructural to $\text{Fe-Mn}$ . <i>ECS Transactions</i> , 2009, 16, 141-153.	0.3	4
157	Chemical Functionalization of ZnS: A Perspective from the Ligand–ZnS Bond Character. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6054-6061.	1.5	4
158	Probing Hydrophobic Interactions between Polymer Surfaces and Air Bubbles or Oil Droplets: Effects of Molecular Weight and Surfactants. <i>Langmuir</i> , 2022, 38, 5257-5268.	1.6	4
159	Electrodeposition of bitumen-, asphaltene-, or maltene-coated kaolinite from cyclohexane suspensions. <i>Fuel</i> , 2022, 311, 122582.	3.4	4
160	Effects of mineral surface silanization and bitumen coating on its filtration from an aqueous slurry. <i>Fuel</i> , 2022, 325, 124921.	3.4	4
161	A simple process for electrodeposition of Sn-rich, Au–Sn solder films. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 827-837.	1.1	3
162	Notes on the adsorption of octyl hydroxamic acid on pyrochlore and calcite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 430, 91-94.	2.3	3

#	ARTICLE	IF	CITATIONS
163	Vacuum drying of cyclohexane from solvent-extracted oil sands gangue. Canadian Journal of Chemical Engineering, 2017, 95, 459-466.	0.9	3
164	Effect of Carbon Dioxide on Paraffinic Bitumen Froth Treatment: Asphaltene Precipitation from a Commercial Bitumen Froth Sample. ACS Omega, 2021, 6, 11918-11924.	1.6	3
165	Understanding the Properties of Bitumen Froth from Oil Sands Surface Mining and Treatment of Water-in-Oil Emulsions. Energy & Fuels, 2021, 35, 20079-20091.	2.5	3
166	Water-mediated adhesion of oil sands on solid surfaces at low temperature. Fuel, 2022, 320, 123778.	3.4	3
167	A Cryo-XPS Study of Triammonium Citrate-KAuCl <sub>4</sub> -Na <sub>2</sub> SO <sub>3</sub> Electroplating Solutions for Pb-Free Solder Packaging. Journal of Electronic Materials, 2010, 39, 1554-1561.	1.0	2
168	Selective Aggregation of Hydrophilic Gangue Minerals in Froth Flotation. Materials Research Society Symposia Proceedings, 2012, 1380, 1.	0.1	2
169	Using surface geopolymerization reactions to strengthen Athabasca oil sands mature fine tailings. Canadian Journal of Chemical Engineering, 2016, 94, 1640-1647.	0.9	2
170	Revelation of the Nature of the Ligand-PbS Bond and Its Implication on Chemical Functionalization of PbS. Journal of Physical Chemistry C, 2019, 123, 22981-22988.	1.5	2
171	General mechanism and mitigation for strong adhesion of frozen oil sands on solid substrates. Fuel, 2022, 325, 124797.	3.4	2
172	Beneficiation Studies of the Low-Grade Skarn Phosphate from Mactung Tungsten Deposit, Yukon, Canada. Minerals (Basel, Switzerland), 2021, 11, 421.	0.8	1
173	Development of Simple Electrolytes for the Electrodeposition of Pb-Free, Sn-Based Alloy Solder Films. Materials Research Society Symposia Proceedings, 2007, 993, 1.	0.1	0
174	Electrodeposition of Tin-Rich, Tin-Gold Eutectic Solders for Optoelectronic and MEMS Applications. ECS Transactions, 2009, 16, 41-48.	0.3	0
175	Response to Comments on "Room temperature interfacial reactions in electrodeposited Au/Sn couples". Scripta Materialia, 2009, 61, 1095-1096.	2.6	0
176	Amorphous Ta-N as a Diffusion Barrier for Cu Metallization. Materials Research Society Symposia Proceedings, 2011, 1335, 35.	0.1	0
177	Polysaccharide Applications in Mineral Processing. , 0, , 5989-6010.		0
178	Influence of Oil Sands Composition on Bitumen Quality During Non-Aqueous Bitumen Extraction from the Athabasca Deposit. Canadian Journal of Chemical Engineering, 2019, 97, 268-280.	0.9	0