

Kristian Waters

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114
papers

2,557
citations

26
h-index

46
g-index

114
ext. papers

2,970
ext. citations

4.8
avg, IF

5.77
L-index

#	Paper	IF	Citations
114	A review of the beneficiation of rare earth element bearing minerals. <i>Minerals Engineering</i> , 2013 , 41, 97-114	4.9	466
113	Inverse gas chromatography applications: a review. <i>Advances in Colloid and Interface Science</i> , 2014 , 212, 21-44	14.3	167
112	Modification of ilmenite surface chemistry for enhancing surfactants adsorption and bubble attachment. <i>Journal of Colloid and Interface Science</i> , 2009 , 329, 167-72	9.3	75
111	A review on the cracking, baking and leaching processes of rare earth element concentrates. <i>Journal of Rare Earths</i> , 2017 , 35, 739-752	3.7	68
110	An evaluation of hydroxamate collectors for malachite flotation. <i>Separation and Purification Technology</i> , 2017 , 183, 258-269	8.3	65
109	Development of Industrial Extractants into Functional Ionic Liquids for Environmentally Friendly Rare Earth Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2014 , 2, 1910-1917	8.3	64
108	Surface chemistry considerations in the flotation of bastn�ite. <i>Minerals Engineering</i> , 2014 , 66-68, 119-129	4.9	64
107	Processing a rare earth mineral deposit using gravity and magnetic separation. <i>Minerals Engineering</i> , 2014 , 62, 9-18	4.9	57
106	Characterising the effect of microwave radiation on the magnetic properties of pyrite. <i>Separation and Purification Technology</i> , 2007 , 56, 9-17	8.3	51
105	Critical coalescence concentration of inorganic salt solutions. <i>Minerals Engineering</i> , 2014 , 58, 1-6	4.9	50
104	The effect of dissolved mineral species on bastn�ite, monazite and dolomite flotation using benzohydroxamate collector. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 539, 319-334	5.1	49
103	Synergistic Effect between Bifunctional Ionic Liquids and a Molecular Extractant for Lanthanide Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2014 , 2, 2758-2764	8.3	49
102	A Comprehensive Approach to Powder Feedstock Characterization for Powder Bed Fusion Additive Manufacturing: A Case Study on AlSi7Mg. <i>Materials</i> , 2018 , 11,	3.5	48
101	Surface chemistry and flotation behavior of dolomite, monazite and bastn�ite in the presence of benzohydroxamate, sodium oleate and phosphoric acid ester collectors. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 546, 254-265	5.1	47
100	The flotation of fine particles using charged microbubbles. <i>Minerals Engineering</i> , 2008 , 21, 918-923	4.9	42
99	Aphron applications--a review of recent and current research. <i>Advances in Colloid and Interface Science</i> , 2015 , 216, 36-54	14.3	40
98	Introducing inverse gas chromatography as a method of determining the surface heterogeneity of minerals for flotation. <i>Powder Technology</i> , 2013 , 249, 373-377	5.2	38

97	The adjustable synergistic effects between acid-base coupling bifunctional ionic liquid extractants for rare earth separation. <i>AIChE Journal</i> , 2014 , 60, 3859-3868	3.6	34
96	A design of experiments investigation into dry separation using a Knelson Concentrator. <i>Minerals Engineering</i> , 2015 , 72, 73-86	4.9	31
95	Positron emission particle tracking as a method to map the movement of particles in the pulp and froth phases. <i>Minerals Engineering</i> , 2008 , 21, 877-882	4.9	31
94	The use of the emulsion liquid membrane technique to remove copper ions from aqueous systems using statistical experimental design. <i>Minerals Engineering</i> , 2017 , 107, 88-99	4.9	28
93	The zeta potential of kaolin suspensions measured by electrophoresis and electroacoustics. <i>Chemical Papers</i> , 2007 , 61,	1.9	28
92	A review of reagents applied to rare-earth mineral flotation. <i>Advances in Colloid and Interface Science</i> , 2020 , 279, 102142	14.3	27
91	Flotation studies of monazite and dolomite. <i>Minerals Engineering</i> , 2018 , 116, 101-106	4.9	27
90	Effect of filler particle shape on plastic-elastic mechanical behavior of high density poly(ethylene)/mica and poly(ethylene)/wollastonite composites. <i>Composites Part B: Engineering</i> , 2018 , 141, 92-99	10	26
89	An investigation into the flotation of muscovite with an amine collector and calcium lignin sulfonate depressant. <i>Separation and Purification Technology</i> , 2015 , 149, 216-227	8.3	26
88	Effect of ionic strength on bubble coalescence in inorganic salt and seawater solutions. <i>AIChE Journal</i> , 2015 , 61, 2489-2496	3.6	25
87	Zeta potential study of pentlandite in the presence of serpentine and dissolved mineral species. <i>Minerals Engineering</i> , 2016 , 85, 66-71	4.9	24
86	Flotation behavior and electronic simulations of rare earth minerals in the presence of dolomite supernatant using sodium oleate collector. <i>Journal of Rare Earths</i> , 2019 , 37, 101-112	3.7	24
85	Surface energy of minerals [Applications to flotation]. <i>Minerals Engineering</i> , 2014 , 66-68, 112-118	4.9	24
84	Beneficiation of the Nechalacho rare earth deposit: Flotation response using benzohydroxamic acid. <i>Minerals Engineering</i> , 2016 , 99, 158-169	4.9	24
83	The effect of superstructure on the zeta potential, xanthate adsorption, and flotation response of pyrrhotite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 551, 108-116	5.1	23
82	Size-by-size analysis of dry gravity separation using a 3-in. Knelson Concentrator. <i>Minerals Engineering</i> , 2016 , 91, 42-54	4.9	23
81	Measurements of interactions between particles and charged microbubbles using a combined micro- and macroscopic strategy. <i>Langmuir</i> , 2009 , 25, 4880-5	4	23
80	The effect of heat treatment on the magnetic properties of pyrite. <i>Minerals Engineering</i> , 2008 , 21, 679-682	2.2	22

79	A review of the physicochemical properties and flotation of pyrrhotite superstructures (4C [Fe ₇ S ₈]/5C [Fe ₉ S ₁₀]) in Ni-Cu sulphide mineral processing. <i>Canadian Journal of Chemical Engineering</i> , 2018 , 96, 1185-1206	2.3	21
78	Characterization of aqueous interactions of copper-doped phosphate-based glasses by vapour sorption. <i>Acta Biomaterialia</i> , 2014 , 10, 3317-26	10.8	21
77	PEPT studies of heavy particle flow within a spiral concentrator. <i>Minerals Engineering</i> , 2014 , 62, 120-128	4.9	21
76	Understanding the effect of mineralogy on muscovite flotation using QEMSCAN. <i>International Journal of Mineral Processing</i> , 2016 , 155, 6-12		20
75	Physicochemical aspects of allanite flotation. <i>Journal of Rare Earths</i> , 2014 , 32, 476-486	3.7	19
74	Beneficiation of the Nechalacho rare earth deposit. Part 1: Gravity and magnetic separation. <i>Minerals Engineering</i> , 2016 , 99, 111-122	4.9	19
73	The potential for dense medium separation of mineral fines using a laboratory Falcon Concentrator. <i>Minerals Engineering</i> , 2017 , 105, 7-9	4.9	16
72	Incorporation of geometallurgical modelling into long-term production planning. <i>Minerals Engineering</i> , 2018 , 120, 118-126	4.9	16
71	PEPT combined with high speed digital imaging for particle tracking in dynamic foams. <i>Chemical Engineering Science</i> , 2010 , 65, 1887-1890	4.4	16
70	Effect of gas rate and impeller speed on bubble size in frother-electrolyte solutions. <i>Minerals Engineering</i> , 2016 , 99, 133-141	4.9	16
69	Surface characterization of microwave-treated chalcopyrite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 555, 407-417	5.1	15
68	The potential for dry processing using a Knelson Concentrator. <i>Minerals Engineering</i> , 2013 , 45, 44-46	4.9	15
67	Beneficiation of the Nechalacho rare earth deposit. Part 2: Characterisation of products from gravity and magnetic separation. <i>Minerals Engineering</i> , 2016 , 99, 96-110	4.9	15
66	A comparison of the predictability of batch flotation kinetic models. <i>Minerals Engineering</i> , 2016 , 99, 142-150	4.9	15
65	Biosorption of copper, nickel and cobalt ions from dilute solutions using BSA-coated air bubbles. <i>Journal of Water Process Engineering</i> , 2014 , 3, 10-17	6.7	14
64	Materials characterization of advanced fillers for composites engineering applications. <i>Nanotechnology Reviews</i> , 2019 , 8, 503-512	6.3	14
63	Selective heavy rare earth element extraction from dilute solutions using ultrasonically synthesized Cyanex 572 oil droplets and Cyanex 572-impregnated resin. <i>Journal of Industrial and Engineering Chemistry</i> , 2018 , 59, 388-402	6.3	14
62	Concentrator operational modes in response to geological variation. <i>Minerals Engineering</i> , 2019 , 134, 356-364	4.9	12

61	Gas holdup estimation in flotation machines using image techniques and superficial gas velocity. <i>Minerals Engineering</i> , 2016 , 96-97, 26-32	4.9	12
60	Copper ion removal from dilute solutions using ultrasonically synthesised BSA- and EWP-coated air bubbles. <i>Separation and Purification Technology</i> , 2014 , 132, 218-225	8.3	12
59	Direct mineral tracer activation in positron emission particle tracking of a flotation cell. <i>Minerals Engineering</i> , 2017 , 100, 155-165	4.9	12
58	Microwave assisted mechanical rock breaking 2011 , 2075-2080		12
57	Observation of iron ore beneficiation within a spiral concentrator by positron emission particle tracking of large (ϕ1440µm) and small (ϕ58µm) hematite and quartz tracers. <i>Chemical Engineering Science</i> , 2016 , 140, 217-232	4.4	11
56	Effect of Low Temperature Air Plasma Treatment on Wetting and Flow Properties of Kaolinite Powders. <i>Plasma Chemistry and Plasma Processing</i> , 2012 , 32, 845-858	3.6	11
55	Combining Positron Emission Particle Tracking and image analysis to interpret particle motion in froths. <i>Minerals Engineering</i> , 2010 , 23, 1036-1044	4.9	11
54	Effect of microwave radiation on the processing of a Cu-Ni sulphide ore. <i>Canadian Journal of Chemical Engineering</i> , 2016 , 94, 117-127	2.3	11
53	45S5 bioactive glass reactivity by dynamic vapour sorption. <i>Journal of Non-Crystalline Solids</i> , 2016 , 432, 47-52	3.9	10
52	A systems approach to mineral processing based on mathematical programming. <i>Canadian Metallurgical Quarterly</i> , 2017 , 56, 35-44	0.9	10
51	Speed analysis of quartz and hematite particles in a spiral concentrator by PEPT. <i>Minerals Engineering</i> , 2016 , 91, 86-91	4.9	9
50	Biosorptive flotation of copper ions from dilute solution using BSA-coated bubbles. <i>Minerals Engineering</i> , 2015 , 75, 140-145	4.9	9
49	Break-up in formation of small bubbles: Break-up in a confined volume. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016 , 503, 88-93	5.1	9
48	Particle flow visualization in quartz slurry inside a hydrocyclone using the positron emission particle tracking technique. <i>Minerals Engineering</i> , 2014 , 62, 142-145	4.9	9
47	The effects of microwave irradiation on the floatability of chalcopyrite, pentlandite and pyrrhotite. <i>Advanced Powder Technology</i> , 2018 , 29, 3049-3061	4.6	9
46	Inverse gas chromatography analysis of minerals: Pyrite wettability. <i>Minerals Engineering</i> , 2016 , 96-97, 130-134	4.9	8
45	Ionic liquid-based observation technique for nonconductive materials in the scanning electron microscope: Application to the characterization of a rare earth ore. <i>Microscopy Research and Technique</i> , 2014 , 77, 225-35	2.8	8
44	Developing critical coalescence concentration curves for industrial process waters using dilution. <i>Minerals Engineering</i> , 2013 , 50-51, 64-68	4.9	8

43	A design of experiments investigation into the processing of fine low specific gravity minerals using a laboratory Knelson Concentrator. <i>Minerals Engineering</i> , 2019 , 135, 139-155	4.9	8
42	The extraction of nickel by emulsion liquid membranes using Cyanex 301 as extractant. <i>Canadian Journal of Chemical Engineering</i> , 2018 , 96, 1585-1596	2.3	7
41	A mineralogical investigation into the pre-concentration of the Nechalacho deposit by gravity separation. <i>Minerals Engineering</i> , 2018 , 121, 1-13	4.9	7
40	The use of radioactive tracers to measure mixing regime in semi-autogenous grinding mills. <i>Minerals Engineering</i> , 2018 , 115, 41-43	4.9	7
39	Gas dispersion properties of collector/frother blends. <i>Minerals Engineering</i> , 2016 , 96-97, 20-25	4.9	7
38	An image analysis approach to determine average bubble sizes using one-dimensional Fourier analysis. <i>Minerals Engineering</i> , 2018 , 126, 160-166	4.9	7
37	Comparison of different methodologies to estimate the flotation rate distribution. <i>Minerals Engineering</i> , 2019 , 130, 67-75	4.9	7
36	Strategic evaluation of concentrator operational modes under geological uncertainty. <i>International Journal of Mineral Processing</i> , 2017 , 164, 45-55		6
35	Analysis of flotation rate distributions to assess erratic performances from size-by-size kinetic tests. <i>Minerals Engineering</i> , 2020 , 149, 106229	4.9	6
34	Use of an Annular Silicon Drift Detector (SDD) Versus a Conventional SDD Makes Phase Mapping a Practical Solution for Rare Earth Mineral Characterization. <i>Microscopy and Microanalysis</i> , 2018 , 24, 238-248	8.5	6
33	The use of enrichment ratios to support kinetic studies in flotation. <i>Minerals Engineering</i> , 2019 , 144, 106054	4.9	6
32	Determining frother-like properties of process water in bitumen flotation. <i>Minerals Engineering</i> , 2014 , 56, 121-128	4.9	6
31	Selective separation of copper and nickel ions from aqueous solutions containing calcium by emulsion liquid membranes using central composite design. <i>Canadian Journal of Chemical Engineering</i> , 2019 , 97, 1881-1893	2.3	5
30	Copper and nickel ion removal from synthesized process water using BSA-coated bubbles. <i>Separation and Purification Technology</i> , 2015 , 156, 459-464	8.3	5
29	Copper ion removal from dilute solutions using colloidal liquid aphrons. <i>Separation and Purification Technology</i> , 2015 , 152, 115-122	8.3	5
28	Incorporating the covariance effect in modelling batch flotation kinetics. <i>Minerals Engineering</i> , 2018 , 122, 26-37	4.9	5
27	Break-up in formation of small bubbles: Comparison between low and high frother concentrations. <i>Minerals Engineering</i> , 2016 , 96-97, 15-19	4.9	5
26	The reactive stabilization of Al ₂ O ₃ foams using a powder metallurgy approach. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 6497-6503	5.3	5

25	The use of positron emission particle tracking as a method for tracking particles in flotation froths. <i>Philosophical Magazine Letters</i> , 2008 , 88, 735-739	1	5
24	Flotation recovery by size comparison of pyrrhotite superstructures with and without depressants. <i>Minerals Engineering</i> , 2019 , 130, 92-100	4.9	5
23	An investigation into predispersed solvent extraction of nickel (II) ions from dilute aqueous solutions. <i>Separation and Purification Technology</i> , 2017 , 174, 396-407	8.3	4
22	Pyrrhotite depression studies with DETA and SMBS on a Ni-Cu sulphide ore. <i>Canadian Journal of Chemical Engineering</i> , 2019 , 97, 2121-2130	2.3	4
21	PEPT Validation of a CFD-DEM Model of a Fine Quartz Particle (60µm) Behaviour in Stirred Water. <i>Procedia Engineering</i> , 2015 , 102, 1305-1315		4
20	Characterisation of rare earth minerals with field emission scanning electron microscopy. <i>Canadian Metallurgical Quarterly</i> , 2013 , 52, 329-334	0.9	4
19	Investigating the use of an ionic liquid for rare earth mineral flotation. <i>Journal of Rare Earths</i> , 2021 , 39, 866-874	3.7	4
18	Examination of the United Nations self-heating test for sulphides. <i>Canadian Metallurgical Quarterly</i> , 2019 , 58, 438-444	0.9	3
17	Representation of Kinetics Models in Batch Flotation as Distributed First-Order Reactions. <i>Minerals (Basel, Switzerland)</i> , 2020 , 10, 913	2.4	3
16	Reducing the self-heating of sulphides by chemical treatment with lignosulfonates. <i>Minerals Engineering</i> , 2017 , 107, 78-80	4.9	3
15	Surface characterisation of fergusonite. <i>Canadian Metallurgical Quarterly</i> , 2013 , 52, 278-284	0.9	3
14	Assessment of two automated image processing methods to estimate bubble size in industrial flotation machines. <i>Minerals Engineering</i> , 2020 , 159, 106636	4.9	3
13	An inversion approach to characterize batch flotation kinetics. <i>Minerals Engineering</i> , 2019 , 143, 105944	4.9	2
12	Concentrator utilisation under geological uncertainty. <i>Canadian Metallurgical Quarterly</i> , 2016 , 55, 470-478	2.9	2
11	Selective removal of copper and nickel ions from synthetic process water using predispersed solvent extraction. <i>Canadian Journal of Chemical Engineering</i> , 2019 , 97, 247-255	2.3	2
10	Contribution of cellulosic fibre filter on atmosphere moisture content in laser powder bed fusion additive manufacturing. <i>Scientific Reports</i> , 2019 , 9, 13794	4.9	2
9	Vertical water content profiles of two-phase flotation froths measured through conductivity. <i>Minerals Engineering</i> , 2020 , 154, 106399	4.9	1
8	Transition of Sulphide Self-Heating from Stage A to Stage B. <i>Minerals (Basel, Switzerland)</i> , 2020 , 10, 1133	2.4	1

7	X-ray Microanalysis Phase Map on Rare Earth Minerals with a Conventional and an Annular Silicon Drift Detector. <i>Microscopy and Microanalysis</i> , 2016 , 22, 96-97	0.5	1
6	Surface Properties and Reactivity of Phosphate-based Glasses by Inverse Gas Chromatography and Dynamic Vapour Sorption. <i>Biomedical Glasses</i> , 2018 , 4, 131-142	2.7	1
5	Characterization of Rare Earth Element Ores with High Spatial Resolution Scanning Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2014 , 20, 648-649	0.5	
4	X-Ray Microanalysis of Rare Earth-Bearing Minerals for Processing of the Nechalacho Ore. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1732-1733	0.5	
3	Characterization and development of an electrical conductivity flow cell for the axial continuous phase fraction profiling of bulk multiphase flow. <i>Measurement Science and Technology</i> , 2020 , 31, 035110 ²		
2	Justifying size-by-size flotation rate distributions from size-by-association kinetic responses. <i>Powder Technology</i> , 2022 , 395, 168-182	5.2	
1	Using Top-of-Froth Conductivity to Infer Water Overflow Rate in a Two-Phase Lab-Scale Flotation Column. <i>Minerals (Basel, Switzerland)</i> , 2022 , 12, 454	2.4	