

# Kristian Waters

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/6485204/kristian-waters-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	Justifying size-by-size flotation rate distributions from size-by-association kinetic responses. <i>Powder Technology</i> , <b>2022</b> , 395, 168-182	5.2	
113	Using Top-of-Froth Conductivity to Infer Water Overflow Rate in a Two-Phase Lab-Scale Flotation Column. <i>Minerals (Basel, Switzerland)</i> , <b>2022</b> , 12, 454	2.4	
112	Investigating the use of an ionic liquid for rare earth mineral flotation. <i>Journal of Rare Earths</i> , <b>2021</b> , 39, 866-874	3.7	4
111	Representation of Kinetics Models in Batch Flotation as Distributed First-Order Reactions. <i>Minerals (Basel, Switzerland)</i> , <b>2020</b> , 10, 913	2.4	3
110	Vertical water content profiles of two-phase flotation froths measured through conductivity. <i>Minerals Engineering</i> , <b>2020</b> , 154, 106399	4.9	1
109	A review of reagents applied to rare-earth mineral flotation. <i>Advances in Colloid and Interface Science</i> , <b>2020</b> , 279, 102142	14.3	27
108	Analysis of flotation rate distributions to assess erratic performances from size-by-size kinetic tests. <i>Minerals Engineering</i> , <b>2020</b> , 149, 106229	4.9	6
107	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> , <b>2020</b> , 31, 035110 <sup>2</sup>		
106	Assessment of two automated image processing methods to estimate bubble size in industrial flotation machines. <i>Minerals Engineering</i> , <b>2020</b> , 159, 106636	4.9	3
105	Transition of Sulphide Self-Heating from Stage A to Stage B. <i>Minerals (Basel, Switzerland)</i> , <b>2020</b> , 10, 1133	2.4	1
104	An inversion approach to characterize batch flotation kinetics. <i>Minerals Engineering</i> , <b>2019</b> , 143, 105944	4.9	2
103	Pyrrhotite depression studies with DETA and SMBS on a Ni-Cu sulphide ore. <i>Canadian Journal of Chemical Engineering</i> , <b>2019</b> , 97, 2121-2130	2.3	4
102	Examination of the United Nations self-heating test for sulphides. <i>Canadian Metallurgical Quarterly</i> , <b>2019</b> , 58, 438-444	0.9	3
101	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> , <b>2019</b> , 97, 1881-1893	2.3	5
100	Concentrator operational modes in response to geological variation. <i>Minerals Engineering</i> , <b>2019</b> , 134, 356-364	4.9	12
99	Selective removal of copper and nickel ions from synthetic process water using predispersed solvent extraction. <i>Canadian Journal of Chemical Engineering</i> , <b>2019</b> , 97, 247-255	2.3	2
98	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> , <b>2019</b> , 37, 101-112	3.7	24

97	Contribution of cellulosic fibre filter on atmosphere moisture content in laser powder bed fusion additive manufacturing. <i>Scientific Reports</i> , <b>2019</b> , 9, 13794	4.9	2
96	The use of enrichment ratios to support kinetic studies in flotation. <i>Minerals Engineering</i> , <b>2019</b> , 144, 1060-1064	4.9	6
95	Materials characterization of advanced fillers for composites engineering applications. <i>Nanotechnology Reviews</i> , <b>2019</b> , 8, 503-512	6.3	14
94	A design of experiments investigation into the processing of fine low specific gravity minerals using a laboratory Knelson Concentrator. <i>Minerals Engineering</i> , <b>2019</b> , 135, 139-155	4.9	8
93	Flotation recovery by size comparison of pyrrhotite superstructures with and without depressants. <i>Minerals Engineering</i> , <b>2019</b> , 130, 92-100	4.9	5
92	Comparison of different methodologies to estimate the flotation rate distribution. <i>Minerals Engineering</i> , <b>2019</b> , 130, 67-75	4.9	7
91	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> , <b>2018</b> , 141, 92-99	10	26
90	The effect of dissolved mineral species on bastnäsite, monazite and dolomite flotation using benzohydroxamate collector. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2018</b> , 539, 319-334	5.1	49
89	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> , <b>2018</b> , 551, 108-116	5.1	23
88	The extraction of nickel by emulsion liquid membranes using Cyanex 301 as extractant. <i>Canadian Journal of Chemical Engineering</i> , <b>2018</b> , 96, 1585-1596	2.3	7
87	A mineralogical investigation into the pre-concentration of the Nechalacho deposit by gravity separation. <i>Minerals Engineering</i> , <b>2018</b> , 121, 1-13	4.9	7
86	Incorporating the covariance effect in modelling batch flotation kinetics. <i>Minerals Engineering</i> , <b>2018</b> , 122, 26-37	4.9	5
85	Incorporation of geometallurgical modelling into long-term production planning. <i>Minerals Engineering</i> , <b>2018</b> , 120, 118-126	4.9	16
84	A review of the physicochemical properties and flotation of pyrrhotite superstructures (4C [Fe7S8]/5C [Fe9S10]) in Ni-Cu sulphide mineral processing. <i>Canadian Journal of Chemical Engineering</i> , <b>2018</b> , 96, 1185-1206	2.3	21
83	Flotation studies of monazite and dolomite. <i>Minerals Engineering</i> , <b>2018</b> , 116, 101-106	4.9	27
82	The use of radioactive tracers to measure mixing regime in semi-autogenous grinding mills. <i>Minerals Engineering</i> , <b>2018</b> , 115, 41-43	4.9	7
81	Surface characterization of microwave-treated chalcopyrite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2018</b> , 555, 407-417	5.1	15
80	An image analysis approach to determine average bubble sizes using one-dimensional Fourier analysis. <i>Minerals Engineering</i> , <b>2018</b> , 126, 160-166	4.9	7

79	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> , <b>2018</b> , 24, 238-248	8.5	6
78	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> , <b>2018</b> , 59, 388-402	6.3	14
77	Surface Properties and Reactivity of Phosphate-based Glasses by Inverse Gas Chromatography and Dynamic Vapour Sorption. <i>Biomedical Glasses</i> , <b>2018</b> , 4, 131-142	2.7	1
76	A Comprehensive Approach to Powder Feedstock Characterization for Powder Bed Fusion Additive Manufacturing: A Case Study on AlSi7Mg. <i>Materials</i> , <b>2018</b> , 11,	3.5	48
75	The effects of microwave irradiation on the floatability of chalcopyrite, pentlandite and pyrrhotite. <i>Advanced Powder Technology</i> , <b>2018</b> , 29, 3049-3061	4.6	9
74	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> , <b>2018</b> , 546, 254-265	5.1	47
73	The potential for dense medium separation of mineral fines using a laboratory Falcon Concentrator. <i>Minerals Engineering</i> , <b>2017</b> , 105, 7-9	4.9	16
72	An investigation into predispersed solvent extraction of nickel (II) ions from dilute aqueous solutions. <i>Separation and Purification Technology</i> , <b>2017</b> , 174, 396-407	8.3	4
71	An evaluation of hydroxamate collectors for malachite flotation. <i>Separation and Purification Technology</i> , <b>2017</b> , 183, 258-269	8.3	65
70	Strategic evaluation of concentrator operational modes under geological uncertainty. <i>International Journal of Mineral Processing</i> , <b>2017</b> , 164, 45-55		6
69	A systems approach to mineral processing based on mathematical programming. <i>Canadian Metallurgical Quarterly</i> , <b>2017</b> , 56, 35-44	0.9	10
68	A review on the cracking, baking and leaching processes of rare earth element concentrates. <i>Journal of Rare Earths</i> , <b>2017</b> , 35, 739-752	3.7	68
67	The use of the emulsion liquid membrane technique to remove copper ions from aqueous systems using statistical experimental design. <i>Minerals Engineering</i> , <b>2017</b> , 107, 88-99	4.9	28
66	Reducing the self-heating of sulphides by chemical treatment with lignosulfonates. <i>Minerals Engineering</i> , <b>2017</b> , 107, 78-80	4.9	3
65	Direct mineral tracer activation in positron emission particle tracking of a flotation cell. <i>Minerals Engineering</i> , <b>2017</b> , 100, 155-165	4.9	12
64	Speed analysis of quartz and hematite particles in a spiral concentrator by PEPT. <i>Minerals Engineering</i> , <b>2016</b> , 91, 86-91	4.9	9
63	45S5 bioactive glass reactivity by dynamic vapour sorption. <i>Journal of Non-Crystalline Solids</i> , <b>2016</b> , 432, 47-52	3.9	10
62	Concentrator utilisation under geological uncertainty. <i>Canadian Metallurgical Quarterly</i> , <b>2016</b> , 55, 470-478	9	2

61	Gas holdup estimation in flotation machines using image techniques and superficial gas velocity. <i>Minerals Engineering</i> , <b>2016</b> , 96-97, 26-32	4.9	12
60	Gas dispersion properties of collector/frother blends. <i>Minerals Engineering</i> , <b>2016</b> , 96-97, 20-25	4.9	7
59	Break-up in formation of small bubbles: Break-up in a confined volume. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2016</b> , 503, 88-93	5.1	9
58	Break-up in formation of small bubbles: Comparison between low and high frother concentrations. <i>Minerals Engineering</i> , <b>2016</b> , 96-97, 15-19	4.9	5
57	Inverse gas chromatography analysis of minerals: Pyrite wettability. <i>Minerals Engineering</i> , <b>2016</b> , 96-97, 130-134	4.9	8
56	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> , <b>2016</b> , 140, 217-232	4.4	11
55	Zeta potential study of pentlandite in the presence of serpentine and dissolved mineral species. <i>Minerals Engineering</i> , <b>2016</b> , 85, 66-71	4.9	24
54	Size-by-size analysis of dry gravity separation using a 3-in. Knelson Concentrator. <i>Minerals Engineering</i> , <b>2016</b> , 91, 42-54	4.9	23
53	X-ray Microanalysis Phase Map on Rare Earth Minerals with a Conventional and an Annular Silicon Drift Detector. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 96-97	0.5	1
52	Beneficiation of the Nechalacho rare earth deposit. Part 1: Gravity and magnetic separation. <i>Minerals Engineering</i> , <b>2016</b> , 99, 111-122	4.9	19
51	Beneficiation of the Nechalacho rare earth deposit. Part 2: Characterisation of products from gravity and magnetic separation. <i>Minerals Engineering</i> , <b>2016</b> , 99, 96-110	4.9	15
50	Effect of microwave radiation on the processing of a Cu-Ni sulphide ore. <i>Canadian Journal of Chemical Engineering</i> , <b>2016</b> , 94, 117-127	2.3	11
49	Effect of gas rate and impeller speed on bubble size in frother-electrolyte solutions. <i>Minerals Engineering</i> , <b>2016</b> , 99, 133-141	4.9	16
48	A comparison of the predictability of batch flotation kinetic models. <i>Minerals Engineering</i> , <b>2016</b> , 99, 142-150	4.9	15
47	Beneficiation of the Nechalacho rare earth deposit: Flotation response using benzohydroxamic acid. <i>Minerals Engineering</i> , <b>2016</b> , 99, 158-169	4.9	24
46	Understanding the effect of mineralogy on muscovite flotation using QEMSCAN. <i>International Journal of Mineral Processing</i> , <b>2016</b> , 155, 6-12		20
45	Biosorptive flotation of copper ions from dilute solution using BSA-coated bubbles. <i>Minerals Engineering</i> , <b>2015</b> , 75, 140-145	4.9	9
44	Copper and nickel ion removal from synthesized process water using BSA-coated bubbles. <i>Separation and Purification Technology</i> , <b>2015</b> , 156, 459-464	8.3	5

43	Copper ion removal from dilute solutions using colloidal liquid aphrons. <i>Separation and Purification Technology</i> , <b>2015</b> , 152, 115-122	8.3	5
42	Aphron applications--a review of recent and current research. <i>Advances in Colloid and Interface Science</i> , <b>2015</b> , 216, 36-54	14.3	40
41	PEPT Validation of a CFD-DEM Model of a Fine Quartz Particle (60 $\mu$ m) Behaviour in Stirred Water. <i>Procedia Engineering</i> , <b>2015</b> , 102, 1305-1315		4
40	Effect of ionic strength on bubble coalescence in inorganic salt and seawater solutions. <i>AIChE Journal</i> , <b>2015</b> , 61, 2489-2496	3.6	25
39	An investigation into the flotation of muscovite with an amine collector and calcium lignin sulfonate depressant. <i>Separation and Purification Technology</i> , <b>2015</b> , 149, 216-227	8.3	26
38	A design of experiments investigation into dry separation using a Knelson Concentrator. <i>Minerals Engineering</i> , <b>2015</b> , 72, 73-86	4.9	31
37	Critical coalescence concentration of inorganic salt solutions. <i>Minerals Engineering</i> , <b>2014</b> , 58, 1-6	4.9	50
36	Processing a rare earth mineral deposit using gravity and magnetic separation. <i>Minerals Engineering</i> , <b>2014</b> , 62, 9-18	4.9	57
35	The adjustable synergistic effects between acidBase coupling bifunctional ionic liquid extractants for rare earth separation. <i>AIChE Journal</i> , <b>2014</b> , 60, 3859-3868	3.6	34
34	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> , <b>2014</b> , 77, 225-35	2.8	8
33	Development of Industrial Extractants into Functional Ionic Liquids for Environmentally Friendly Rare Earth Separation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 1910-1917	8.3	64
32	Biosorption of copper, nickel and cobalt ions from dilute solutions using BSA-coated air bubbles. <i>Journal of Water Process Engineering</i> , <b>2014</b> , 3, 10-17	6.7	14
31	Inverse gas chromatography applications: a review. <i>Advances in Colloid and Interface Science</i> , <b>2014</b> , 212, 21-44	14.3	167
30	Physicochemical aspects of allanite flotation. <i>Journal of Rare Earths</i> , <b>2014</b> , 32, 476-486	3.7	19
29	Characterization of aqueous interactions of copper-doped phosphate-based glasses by vapour sorption. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 3317-26	10.8	21
28	Surface chemistry considerations in the flotation of bastn�ite. <i>Minerals Engineering</i> , <b>2014</b> , 66-68, 119-129	4.9	64
27	Copper ion removal from dilute solutions using ultrasonically synthesised BSA- and EWP-coated air bubbles. <i>Separation and Purification Technology</i> , <b>2014</b> , 132, 218-225	8.3	12
26	Surface energy of minerals [Applications to flotation. <i>Minerals Engineering</i> , <b>2014</b> , 66-68, 112-118	4.9	24

25	Characterization of Rare Earth Element Ores with High Spatial Resolution Scanning Electron Microscopy. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 648-649	0.5	
24	Synergistic Effect between Bifunctional Ionic Liquids and a Molecular Extractant for Lanthanide Separation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 2758-2764	8.3	49
23	Particle flow visualization in quartz slurry inside a hydrocyclone using the positron emission particle tracking technique. <i>Minerals Engineering</i> , <b>2014</b> , 62, 142-145	4.9	9
22	Determining frother-like properties of process water in bitumen flotation. <i>Minerals Engineering</i> , <b>2014</b> , 56, 121-128	4.9	6
21	PEPT studies of heavy particle flow within a spiral concentrator. <i>Minerals Engineering</i> , <b>2014</b> , 62, 120-128	4.9	21
20	Developing critical coalescence concentration curves for industrial process waters using dilution. <i>Minerals Engineering</i> , <b>2013</b> , 50-51, 64-68	4.9	8
19	Introducing inverse gas chromatography as a method of determining the surface heterogeneity of minerals for flotation. <i>Powder Technology</i> , <b>2013</b> , 249, 373-377	5.2	38
18	A review of the beneficiation of rare earth element bearing minerals. <i>Minerals Engineering</i> , <b>2013</b> , 41, 97-114	4.9	466
17	The potential for dry processing using a Knelson Concentrator. <i>Minerals Engineering</i> , <b>2013</b> , 45, 44-46	4.9	15
16	Characterisation of rare earth minerals with field emission scanning electron microscopy. <i>Canadian Metallurgical Quarterly</i> , <b>2013</b> , 52, 329-334	0.9	4
15	Surface characterisation of fergusonite. <i>Canadian Metallurgical Quarterly</i> , <b>2013</b> , 52, 278-284	0.9	3
14	Effect of Low Temperature Air Plasma Treatment on Wetting and Flow Properties of Kaolinite Powders. <i>Plasma Chemistry and Plasma Processing</i> , <b>2012</b> , 32, 845-858	3.6	11
13	X-Ray Microanalysis of Rare Earth-Bearing Minerals for Processing of the Nechalacho Ore. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 1732-1733	0.5	
12	Microwave assisted mechanical rock breaking <b>2011</b> , 2075-2080		12
11	The reactive stabilization of Al <sub>2</sub> O <sub>3</sub> foams using a powder metallurgy approach. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6497-6503	5.3	5
10	Combining Positron Emission Particle Tracking and image analysis to interpret particle motion in froths. <i>Minerals Engineering</i> , <b>2010</b> , 23, 1036-1044	4.9	11
9	PEPT combined with high speed digital imaging for particle tracking in dynamic foams. <i>Chemical Engineering Science</i> , <b>2010</b> , 65, 1887-1890	4.4	16
8	Modification of ilmenite surface chemistry for enhancing surfactants adsorption and bubble attachment. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 329, 167-72	9.3	75

7	Measurements of interactions between particles and charged microbubbles using a combined micro- and macroscopic strategy. <i>Langmuir</i> , <b>2009</b> , 25, 4880-5	4	23
6	The effect of heat treatment on the magnetic properties of pyrite. <i>Minerals Engineering</i> , <b>2008</b> , 21, 679-682	4.9	22
5	Positron emission particle tracking as a method to map the movement of particles in the pulp and froth phases. <i>Minerals Engineering</i> , <b>2008</b> , 21, 877-882	4.9	31
4	The flotation of fine particles using charged microbubbles. <i>Minerals Engineering</i> , <b>2008</b> , 21, 918-923	4.9	42
3	The use of positron emission particle tracking as a method for tracking particles in flotation froths. <i>Philosophical Magazine Letters</i> , <b>2008</b> , 88, 735-739	1	5
2	Characterising the effect of microwave radiation on the magnetic properties of pyrite. <i>Separation and Purification Technology</i> , <b>2007</b> , 56, 9-17	8.3	51
1	The zeta potential of kaolin suspensions measured by electrophoresis and electroacoustics. <i>Chemical Papers</i> , <b>2007</b> , 61,	1.9	28