

# Mayumi Ito

## List of Publications by Year in descending order

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86  
papers

3,399  
citations

159585

30  
h-index

155660

55  
g-index

87  
all docs

87  
docs citations

87  
times ranked

1619  
citing authors

#	ARTICLE	IF	CITATIONS
1	A simple and efficient recovery technique for gold ions from ammonium thiosulfate medium by galvanic interactions of zero-valent aluminum and activated carbon: A parametric and mechanistic study of cementation. <i>Hydrometallurgy</i> , 2022, 208, 105815.	4.3	15
2	A Kinetic Study on Enhanced Cementation of Gold Ions by Galvanic Interactions between Aluminum (Al) as an Electron Donor and Activated Carbon (AC) as an Electron Mediator in Ammonium Thiosulfate System. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 91.	2.0	6
3	Alkaline Leaching and Concurrent Cementation of Dissolved Pb and Zn from Zinc Plant Leach Residues. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 393.	2.0	5
4	Impacts of Surface Water on Windborne Lead Dispersion from the Zinc Plant Leach Residue in Kabwe, Zambia. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 535.	2.0	2
5	Development of a Sustainable Process for Complex Sulfide Ores Containing Anglesite: Effect of Anglesite on Sphalerite Floatability, Enhanced Depression of Sphalerite by Extracting Anglesite, and Recovery of Extracted Pb <sup>2+</sup> as Zero-Valent Pb by Cementation Using Zero-Valent Fe. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 414.	2.0	4
6	Flotation of Seafloor Massive Sulfide Ores: Combination of Surface Cleaning and Deactivation of Lead-Activated Sphalerite to Improve the Separation Efficiency of Chalcopyrite and Sphalerite. <i>Metals</i> , 2021, 11, 253.	2.3	12
7	Enhanced Cementation of Co <sup>2+</sup> and Ni <sup>2+</sup> from Sulfate and Chloride Solutions Using Aluminum as an Electron Donor and Conductive Particles as an Electron Pathway. <i>Metals</i> , 2021, 11, 248.	2.3	8
8	Flotation Separation of Chalcopyrite and Molybdenite Assisted by Microencapsulation Using Ferrous and Phosphate Ions: Part II. <i>Flotation. Metals</i> , 2021, 11, 439.	2.3	10
9	Suppression of arsenopyrite oxidation by microencapsulation using ferric-catecholate complexes and phosphate. <i>Chemosphere</i> , 2021, 269, 129413.	8.2	38
10	Enhanced cementation of Cd <sup>2+</sup> , Co <sup>2+</sup> , Ni <sup>2+</sup> , and Zn <sup>2+</sup> on Al from sulfate solutions by activated carbon addition. <i>Hydrometallurgy</i> , 2021, 201, 105580.	4.3	18
11	Development of a restraining wall and screw-extractor discharge system for continuous jig separation of mixed plastics. <i>Minerals Engineering</i> , 2021, 168, 106918.	4.3	9
12	Copper and critical metals production from porphyry ores and E-wastes: A review of resource availability, processing/recycling challenges, socio-environmental aspects, and sustainability issues. <i>Resources, Conservation and Recycling</i> , 2021, 170, 105610.	10.8	144
13	Evaluation of Dispersion of Lead-Bearing Mine Wastes in Kabwe District, Zambia. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 414.	2.0	6
14	Enhanced pyrite passivation by carrier-microencapsulation using Fe-catechol and Ti-catechol complexes. <i>Journal of Hazardous Materials</i> , 2021, 416, 126089.	12.4	28
15	The Effects of Coexisting Copper, Iron, Cobalt, Nickel, and Zinc Ions on Gold Recovery by Enhanced Cementation via Galvanic Interactions between Zero-Valent Aluminum and Activated Carbon in Ammonium Thiosulfate Systems. <i>Metals</i> , 2021, 11, 1352.	2.3	10
16	A novel arsenic immobilization strategy via a two-step process: Arsenic concentration from dilute solution using schwertmannite and immobilization in Ca-Fe-AsO <sub>4</sub> compounds. <i>Journal of Environmental Management</i> , 2021, 295, 113052.	7.8	19
17	Repurposing of aluminum scrap into magnetic Al <sub>0</sub> /ZVI bimetallic materials: Two-stage mechanical-chemical synthesis and characterization of products. <i>Journal of Cleaner Production</i> , 2021, 317, 128285.	9.3	20
18	Simultaneous extraction and recovery of lead using citrate and micro-scale zero-valent iron for decontamination of polluted shooting range soils. <i>Environmental Advances</i> , 2021, 5, 100115.	4.8	11

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19	Solid-Phase Partitioning and Leaching Behavior of Pb and Zn from Playground Soils in Kabwe, Zambia. <i>Toxics</i> , 2021, 9, 248.	3.7	9
20	Development of the reverse hybrid jig: Separation of polyethylene and cross-linked polyethylene from eco-cable wire. <i>Minerals Engineering</i> , 2021, 174, 107241.	4.3	8
21	Beneficiation of Low-Grade Rare Earth Ore from Khalzan Buregtei Deposit (Mongolia) by Magnetic Separation. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1432.	2.0	20
22	Improved pyrolysis behavior of ammonium polyphosphate-melamine-expandable (APP-MEL-EG) intumescent fire retardant coating system using ceria and dolomite as additives for I-beam steel application. <i>Heliyon</i> , 2020, 6, e03119.	3.2	15
23	Ammonium thiosulfate extraction of gold from printed circuit boards (PCBs) of end-of-life mobile phones and its recovery from pregnant leach solution by cementation. <i>Hydrometallurgy</i> , 2020, 191, 105214.	4.3	62
24	Jig separation of crushed plastics: the effects of particle geometry on separation efficiency. <i>Journal of Material Cycles and Waste Management</i> , 2020, 22, 787-800.	3.0	19
25	Enhanced cementation of gold via galvanic interactions using activated carbon and zero-valent aluminum: A novel approach to recover gold ions from ammonium thiosulfate medium. <i>Hydrometallurgy</i> , 2020, 191, 105165.	4.3	42
26	A Review of Recent Advances in Depression Techniques for Flotation Separation of Cu-Mo Sulfides in Porphyry Copper Deposits. <i>Metals</i> , 2020, 10, 1269.	2.3	34
27	Solid-phase partitioning and release-retention mechanisms of copper, lead, zinc and arsenic in soils impacted by artisanal and small-scale gold mining (ASGM) activities. <i>Chemosphere</i> , 2020, 260, 127574.	8.2	86
28	Biosorption of Pb (II) and Zn (II) from aqueous solution by <i>Oceanobacillus profundus</i> isolated from an abandoned mine. <i>Scientific Reports</i> , 2020, 10, 21189.	3.3	56
29	Estimation of hybrid jig separation efficiency using a modified concentration criterion based on apparent densities of plastic particles with attached bubbles. <i>Journal of Material Cycles and Waste Management</i> , 2020, 22, 2071-2080.	3.0	17
30	Agglomeration-Flotation of Finely Ground Chalcopyrite Using Emulsified Oil Stabilized by Emulsifiers: Implications for Porphyry Copper Ore Flotation. <i>Metals</i> , 2020, 10, 912.	2.3	22
31	Immobilization of Lead and Zinc Leached from Mining Residual Materials in Kabwe, Zambia: Possibility of Chemical Immobilization by Dolomite, Calcined Dolomite, and Magnesium Oxide. <i>Minerals (Basel)</i> , 2021, 11, 1432.	2.0	20
32	Flotation Separation of Chalcopyrite and Molybdenite Assisted by Microencapsulation Using Ferrous and Phosphate Ions: Part I. Selective Coating Formation. <i>Metals</i> , 2020, 10, 1667.	2.3	13
33	Acid mine drainage formation and arsenic mobility under strongly acidic conditions: Importance of soluble phases, iron oxyhydroxides/oxides and nature of oxidation layer on pyrite. <i>Journal of Hazardous Materials</i> , 2020, 399, 122844.	12.4	163
34	Redox potential-dependent chalcopyrite leaching in acidic ferric chloride solutions: Leaching experiments. <i>Hydrometallurgy</i> , 2020, 194, 105299.	4.3	21
35	Detoxification of lead-bearing zinc plant leach residues from Kabwe, Zambia by coupled extraction-cementation method. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104197.	6.7	49
36	Carrier-microencapsulation of arsenopyrite using Al-catechol complex: nature of oxidation products, effects on anodic and cathodic reactions, and coating stability under simulated weathering conditions. <i>Heliyon</i> , 2020, 6, e03189.	3.2	50

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37	Recovery of Lead and Zinc from Zinc Plant Leach Residues by Concurrent Dissolution-Cementation Using Zero-Valent Aluminum in Chloride Medium. <i>Metals</i> , 2020, 10, 531.	2.3	43
38	Agglomeration-Flotation of Finely Ground Chalcopyrite and Quartz: Effects of Agitation Strength during Agglomeration Using Emulsified Oil on Chalcopyrite. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 380.	2.0	26
39	Depression of lead-activated sphalerite by pyrite via galvanic interactions: Implications to the selective flotation of complex sulfide ores. <i>Minerals Engineering</i> , 2020, 152, 106367.	4.3	59
40	Kinetic Analysis for Agglomeration-Flotation of Finely Ground Chalcopyrite: Comparison of First Order Kinetic Model and Experimental Results. <i>Materials Transactions</i> , 2020, 61, 1940-1948.	1.2	21
41	Improvement of flotation and suppression of pyrite oxidation using phosphate-enhanced galvanic microencapsulation (GME) in a ball mill with steel ball media. <i>Minerals Engineering</i> , 2019, 143, 105931.	4.3	27
42	Improvement of hybrid jig separation efficiency using wetting agents for the recycling of mixed-plastic wastes. <i>Journal of Material Cycles and Waste Management</i> , 2019, 21, 1376-1383.	3.0	21
43	Development of suitable product recovery systems of continuous hybrid jig for plastic-plastic separation. <i>Minerals Engineering</i> , 2019, 141, 105839.	4.3	23
44	Suppression of pyrite oxidation by ferric-catecholate complexes: An electrochemical study. <i>Minerals Engineering</i> , 2019, 138, 226-237.	4.3	36
45	Hematite-catalysed scorodite formation as a novel arsenic immobilisation strategy under ambient conditions. <i>Chemosphere</i> , 2019, 233, 946-953.	8.2	79
46	A physical separation scheme to improve ammonium thiosulfate leaching of gold by separation of base metals in crushed mobile phones. <i>Minerals Engineering</i> , 2019, 138, 168-177.	4.3	49
47	Solidification of sand by Pb(II)-tolerant bacteria for capping mine waste to control metallic dust: Case of the abandoned Kabwe Mine, Zambia. <i>Chemosphere</i> , 2019, 228, 17-25.	8.2	27
48	Prediction of acid mine drainage formation and zinc migration in the tailings dam of a closed mine, and possible countermeasures. <i>MATEC Web of Conferences</i> , 2019, 268, 06003.	0.2	14
49	Efficacy of biocementation of lead mine waste from the Kabwe Mine site evaluated using <i>Pararhodobacter</i> sp.. <i>Environmental Science and Pollution Research</i> , 2019, 26, 15653-15664.	5.3	22
50	Galvanic Microencapsulation (GME) Using Zero-Valent Aluminum and Zero-Valent Iron to Suppress Pyrite Oxidation. <i>Materials Transactions</i> , 2019, 60, 277-286.	1.2	42
51	A review of recent strategies for acid mine drainage prevention and mine tailings recycling. <i>Chemosphere</i> , 2019, 219, 588-606.	8.2	429
52	Suppressive effects of ferric-catecholate complexes on pyrite oxidation. <i>Chemosphere</i> , 2019, 214, 70-78.	8.2	59
53	Suppression of the release of arsenic from arsenopyrite by carrier-microencapsulation using Ti-catechol complex. <i>Journal of Hazardous Materials</i> , 2018, 344, 322-332.	12.4	65
54	Improvement of jig efficiency by shape separation, and a novel method to estimate the separation efficiency of metal wires in crushed electronic wastes using bending behavior and "entanglement factor". <i>Minerals Engineering</i> , 2018, 129, 54-62.	4.3	39

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55	Interference of coexisting copper and aluminum on the ammonium thiosulfate leaching of gold from printed circuit boards of waste mobile phones. <i>Waste Management</i> , 2018, 81, 148-156.	7.4	48
56	Gold recovery from shredder light fraction of E-waste recycling plant by flotation-ammonium thiosulfate leaching. <i>Waste Management</i> , 2018, 77, 195-202.	7.4	70
57	Arsenic, selenium, boron, lead, cadmium, copper, and zinc in naturally contaminated rocks: A review of their sources, modes of enrichment, mechanisms of release, and mitigation strategies. <i>Science of the Total Environment</i> , 2018, 645, 1522-1553.	8.0	321
58	Simultaneous suppression of acid mine drainage formation and arsenic release by Carrier-microencapsulation using aluminum-catechol complexes. <i>Chemosphere</i> , 2018, 205, 414-425.	8.2	72
59	Pyrite oxidation in the presence of hematite and alumina: II. Effects on the cathodic and anodic half-cell reactions. <i>Science of the Total Environment</i> , 2017, 581-582, 126-135.	8.0	72
60	Pyrite oxidation in the presence of hematite and alumina: I. Batch leaching experiments and kinetic modeling calculations. <i>Science of the Total Environment</i> , 2017, 580, 687-698.	8.0	115
61	Simultaneous leaching of arsenite, arsenate, selenite and selenate, and their migration in tunnel-excavated sedimentary rocks: II. Kinetic and reactive transport modeling. <i>Chemosphere</i> , 2017, 188, 444-454.	8.2	60
62	Simultaneous leaching of arsenite, arsenate, selenite and selenate, and their migration in tunnel-excavated sedimentary rocks: I. Column experiments under intermittent and unsaturated flow. <i>Chemosphere</i> , 2017, 186, 558-569.	8.2	86
63	A Study on the Utilization of Magnetite for the Recovery of Platinum Group Metals from Chloride Solution. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2016, 37, 246-254.	5.0	16
64	Electrochemical Investigation of Gold Uptake From Chloride Solution by Magnetite. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2015, 36, 332-339.	5.0	10
65	Short and long term release mechanisms of arsenic, selenium and boron from a tunnel-excavated sedimentary rock under in situ conditions. <i>Journal of Contaminant Hydrology</i> , 2015, 175-176, 60-71.	3.3	78
66	Electrical disintegration and micro-focus X-ray CT observations of cement paste samples with dispersed mineral particles. <i>Minerals Engineering</i> , 2014, 57, 79-85.	4.3	45
67	Newly developed discharge device for jig separation of plastics to recover higher grade bottom layer product. <i>International Journal of Mineral Processing</i> , 2012, 114-117, 27-29.	2.6	11
68	Suppression of Pyrite Oxidation by Carrier Microencapsulation Using Silicon and Catechol. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2012, 33, 89-98.	5.0	23
69	Evaluation of entanglement properties of crushed automobile shredded residue and detachment of entrapped particles. <i>Journal of Material Cycles and Waste Management</i> , 2011, 13, 156-163.	3.0	2
70	Jig separation of crushed automobile shredded residue and its evaluation by float and sink analysis. <i>Journal of Material Cycles and Waste Management</i> , 2011, 13, 240-246.	3.0	16
71	Suppression of floatability of pyrite in coal processing by carrier microencapsulation. <i>Fuel Processing Technology</i> , 2011, 92, 1032-1036.	7.2	15
72	Removal of lead compounds from polyvinylchloride in electric wires and cables using cation-exchange resin. <i>Journal of Hazardous Materials</i> , 2011, 191, 388-392.	12.4	13

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73	Reverse jig separation of shredded floating plastics “ separation of polypropylene and high density polyethylene. International Journal of Mineral Processing, 2010, 97, 96-99.	2.6	22
74	Estimating the size distribution of anode and cathode activating agents in the crushed products of nickel metal hydride batteries from hybrid vehicles and its classification. International Journal of Mineral Processing, 2010, 97, 92-95.	2.6	7
75	On the Use of Magnetite for Gold Recovery From Chloride Solution. Mineral Processing and Extractive Metallurgy Review, 2010, 31, 201-213.	5.0	25
76	Anode activating agent recovery by magnetic separation from the <0.075mm fraction of crushed nickel metal hydride batteries from hybrid vehicles. Separation and Purification Technology, 2009, 69, 149-152.	7.9	7
77	Optimum water pulsation of jig separation for crushed plastic particles. International Journal of Mineral Processing, 2009, 92, 103-108.	2.6	26
78	Development of a New Gravity Separator for Plastics &mdash;a Hybrid-Jig&mdash;. Materials Transactions, 2009, 50, 2844-2847.	1.2	31
79	Removal of Trace Impurity from Limestone Using Flotation Techniques. Materials Transactions, 2009, 50, 171-176.	1.2	5
80	Carrier-microencapsulation using Si&acirc“catechol complex for suppressing pyrite floatability. Minerals Engineering, 2008, 21, 889-893.	4.3	20
81	Immersion Behavior of Automobile Shredded Residue in Surfactant Solutions and Detachment of Particulate Matter. Materials Transactions, 2008, 49, 2371-2376.	1.2	3
82	Dispersion-Flocculation Behavior of Fine Lead Particles in an Organic Solvent. Materials Transactions, 2008, 49, 2119-2123.	1.2	7
83	Recent Developments in Advanced Coal Cleaning. Journal of MMIJ, 2008, 124, 865-870.	0.3	3
84	The Recovery of Electrode Compounds from Waste Nickel Metal Hydride Batteries by Physical Separation Techniques. Materials Transactions, 2007, 48, 1089-1094.	1.2	8
85	Basic Study on Separation of Pyrite from Coal by Flotation Using Ferric Solution. Shigen-to-Sozai, 1999, 115, 737-742.	0.1	1
86	A Method to Characterized Flotation Performance of Fine Coal and Estimate its Liberation.. Shigen-to-Sozai, 1998, 114, 421-425.	0.1	6