

Mayumi Ito

List of Publications by Year in descending order

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86
papers

3,399
citations

159585

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docs citations

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times ranked

1619
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#	ARTICLE	IF	CITATIONS
1	A review of recent strategies for acid mine drainage prevention and mine tailings recycling. <i>Chemosphere</i> , 2019, 219, 588-606.	8.2	429
2	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
3	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
4	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
5	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
6	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
7	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
8	Hematite-catalysed scorodite formation as a novel arsenic immobilisation strategy under ambient conditions. <i>Chemosphere</i> , 2019, 233, 946-953.	8.2	79
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	Suppressive effects of ferric-catechol complexes on pyrite oxidation. <i>Chemosphere</i> , 2019, 214, 70-78.	8.2	59
17	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
18	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

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19	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
20	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
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	Suppression of arsenopyrite oxidation by microencapsulation using ferric-catechol complexes and phosphate. <i>Chemosphere</i> , 2021, 269, 129413.	8.2	38
29	Suppression of pyrite oxidation by ferric-catechol complexes: An electrochemical study. <i>Minerals Engineering</i> , 2019, 138, 226-237.	4.3	36
30	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
31	Development of a New Gravity Separator for Plastics —a Hybrid-Jig—. <i>Materials Transactions</i> , 2009, 50, 2844-2847.	1.2	31
32	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
33	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
34	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
35	Optimum water pulsation of jig separation for crushed plastic particles. <i>International Journal of Mineral Processing</i> , 2009, 92, 103-108.	2.6	26
36	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

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37	On the Use of Magnetite for Gold Recovery From Chloride Solution. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2010, 31, 201-213.	5.0	25
38	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
39	Development of suitable product recovery systems of continuous hybrid jig for plastic-plastic separation. <i>Minerals Engineering</i> , 2019, 141, 105839.	4.3	23
40	Reverse jig separation of shredded floating plastics " separation of polypropylene and high density polyethylene. <i>International Journal of Mineral Processing</i> , 2010, 97, 96-99.	2.6	22
41	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
42	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
43	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, Switzerland)</i> , 2021, 11, 1432.	2.0	22
44	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
45	Redox potential-dependent chalcopyrite leaching in acidic ferric chloride solutions: Leaching experiments. <i>Hydrometallurgy</i> , 2020, 194, 105299.	4.3	21
46	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
47	Carrier-microencapsulation using Si" catechol complex for suppressing pyrite floatability. <i>Minerals Engineering</i> , 2008, 21, 889-893.	4.3	20
48	Repurposing of aluminum scrap into magnetic AlO/ZVI bimetallic materials: Two-stage mechanical-chemical synthesis and characterization of products. <i>Journal of Cleaner Production</i> , 2021, 317, 128285.	9.3	20
49	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
50	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
51	A novel arsenic immobilization strategy via a two-step process: Arsenic concentration from dilute solution using schwertmannite and immobilization in Ca"Fe"AsO ₄ compounds. <i>Journal of Environmental Management</i> , 2021, 295, 113052.	7.8	19
52	Enhanced cementation of Cd ²⁺ , Co ²⁺ , Ni ²⁺ , and Zn ²⁺ on Al from sulfate solutions by activated carbon addition. <i>Hydrometallurgy</i> , 2021, 201, 105580.	4.3	18
53	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
54	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

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55	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
56	Suppression of floatability of pyrite in coal processing by carrier microencapsulation. <i>Fuel Processing Technology</i> , 2011, 92, 1032-1036.	7.2	15
57	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
58	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
59	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
60	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
61	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
62	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
63	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
64	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
65	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
66	Flotation Separation of Chalcopyrite and Molybdenite Assisted by Microencapsulation Using Ferrous and Phosphate Ions: Part II. Flotation. <i>Metals</i> , 2021, 11, 439.	2.3	10
67	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
68	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
69	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
70	The Recovery of Electrode Compounds from Waste Nickel Metal Hydride Batteries by Physical Separation Techniques. <i>Materials Transactions</i> , 2007, 48, 1089-1094.	1.2	8
71	Enhanced Cementation of Co ²⁺ and Ni ²⁺ 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
72	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

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73	Dispersion-Flocculation Behavior of Fine Lead Particles in an Organic Solvent. <i>Materials Transactions</i> , 2008, 49, 2119-2123.	1.2	7
74	Anode activating agent recovery by magnetic separation from the <0.075mm fraction of crushed nickel metal hydride batteries from hybrid vehicles. <i>Separation and Purification Technology</i> , 2009, 69, 149-152.	7.9	7
75	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. <i>International Journal of Mineral Processing</i> , 2010, 97, 92-95.	2.6	7
76	Evaluation of Dispersion of Lead-Bearing Mine Wastes in Kabwe District, Zambia. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 107-114.	2.0	6
77	A Method to Characterized Flotation Performance of Fine Coal and Estimate its Liberation.. <i>Shigen-to-Sozai</i> , 1998, 114, 421-425.	0.1	6
78	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
79	Removal of Trace Impurity from Limestone Using Flotation Techniques. <i>Materials Transactions</i> , 2009, 50, 171-176.	1.2	5
80	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
81	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 ²⁺ as Zero-Valent Pb by Cementation Using Zero-Valent Fe. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 107-114.	2.0	4
82	Immersion Behavior of Automobile Shredded Residue in Surfactant Solutions and Detachment of Particulate Matter. <i>Materials Transactions</i> , 2008, 49, 2371-2376.	1.2	3
83	Recent Developments in Advanced Coal Cleaning. <i>Journal of MMIJ</i> , 2008, 124, 865-870.	0.3	3
84	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
85	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
86	Basic Study on Separation of Pyrite from Coal by Flotation Using Ferric Solution. <i>Shigen-to-Sozai</i> , 1999, 115, 737-742.	0.1	1