Ata Akcil

List of Publications by Citations

97 papers	5,204 citations	34 h-index	71 g-index
109 ext. papers	6,006 ext. citations	5.9 avg, IF	6.2 L-index

#	Paper	IF	Citations
97	Acid Mine Drainage (AMD): causes, treatment and case studies. *Journal of Cleaner Production*, **2006**, 14, 1139-1145	10.3	879
96	Aqueous metal recovery techniques from e-scrap: Hydrometallurgy in recycling. *Minerals Engineering*, **2012**, 25, 28-37	4.9	468
95	A review of approaches and techniques used in aquatic contaminated sediments: metal removal and stabilization by chemical and biotechnological processes. *Journal of Cleaner Production*, **2015**, 86, 24-36	10.3	254
94	Precious metal recovery from waste printed circuit boards using cyanide and non-cyanide lixiviants--A review. *Waste Management*, **2015**, 45, 258-71	8.6	247
93	Destruction of cyanide in gold mill effluents: biological versus chemical treatments. *Biotechnology Advances*, **2003**, 21, 501-11	17.8	192
92	A review of technologies for the recovery of metals from spent alkaline and zinc□arbon batteries. *Hydrometallurgy*, **2009**, 97, 158-166	4	190
91	Cyanide and removal options from effluents in gold mining and metallurgical processes. *Minerals Engineering*, **2013**, 50-51, 13-29	4.9	175
90	A review of metal recovery from spent petroleum catalysts and ash. *Waste Management*, **2015**, 45, 420-38	8.6	159
89	Current scenario of chalcopyrite bioleaching: a review on the recent advances to its heap-leach technology. *Bioresource Technology*, **2015**, 196, 694-706	11	139
88	Biotechnological strategies for the recovery of valuable and critical raw materials from waste electrical and electronic equipment (WEEE) - A review. *Journal of Hazardous Materials*, **2019**, 362, 467-481	12.8	135
87	Recent advances on hydrometallurgical recovery of critical and precious elements from end of life electronic wastes - a review. *Critical Reviews in Environmental Science and Technology*, **2019**, 49, 212-275	11.1	127
86	Microbial destruction of cyanide wastes in gold mining: process review. *Biotechnology Letters*, **2003**, 25, 445-50	3	111
85	Bioleaching of complex zinc sulphides using mesophilic and thermophilic bacteria: comparative importance of pH and iron. *Hydrometallurgy*, **2004**, 73, 293-303	4	111
84	Biohydrometallurgy techniques of low grade ores: A review on black shale. *Hydrometallurgy*, **2012**, 117-118, 1-12	4	98
83	Biohydrometallurgy of secondary metal resources: a potential alternative approach for metal recovery. *Journal of Chemical Technology and Biotechnology*, **2013**, 88, 2115-2132	3.5	95
82	Biological treatment of cyanide by natural isolated bacteria (Pseudomonas sp.). *Minerals Engineering*, **2003**, 16, 643-649	4.9	95
81	Role and contribution of pure and mixed cultures of mesophiles in bioleaching of a pyritic chalcopyrite concentrate. *Minerals Engineering*, **2007**, 20, 310-318	4.9	79

80	Biodegradation of cyanide containing effluents by Scenedesmus obliquus. *Journal of Hazardous Materials*, **2009**, 162, 74-9	12.8	76
79	Overview On Extraction and Separation of Rare Earth Elements from Red Mud: Focus on Scandium. *Mineral Processing and Extractive Metallurgy Review*, **2018**, 39, 145-151	3.1	73
78	Environmentally sustainable acid mine drainage remediation: Research developments with a focus on waste/by-products. *Minerals Engineering*, **2018**, 126, 207-220	4.9	73
77	Heterogeneous catalytic degradation of cyanide using copper-impregnated pumice and hydrogen peroxide. *Water Research*, **2005**, 39, 1652-62	12.5	64
76	A greener approach for resource recycling: Manganese bioleaching. *Chemosphere*, **2016**, 154, 628-639	8.4	57
75	Non-cyanide Leaching Processes in Gold Hydrometallurgy and Iodine-Iodide Applications: A Review. *Mineral Processing and Extractive Metallurgy Review*, **2015**, 36, 198-212	3.1	53
74	Potential bioleaching developments towards commercial reality: Turkish metal mining's future. *Minerals Engineering*, **2004**, 17, 477-480	4.9	50
73	Microbial detoxification of cyanide solutions: a new biotechnological approach using algae. *Hydrometallurgy*, **2004**, 72, 167-176	4	50
72	Metal extraction from spent sulfuric acid catalyst through alkaline and acidic leaching. *Hydrometallurgy*, **2009**, 100, 20-28	4	48
71	Recovery of vanadium from spent catalysts of sulfuric acid plant by using inorganic and organic acids: Laboratory and semi-pilot tests. *Waste Management*, **2016**, 49, 455-461	8.6	47
70	Reductive dissolution by waste newspaper for enhanced meso-acidophilic bioleaching of copper from low grade chalcopyrite: A new concept of biohydrometallurgy. *Hydrometallurgy*, **2015**, 153, 98-105	4	45
69	Effect of biooxidation conditions on cyanide consumption and gold recovery from a refractory gold concentrate. *Hydrometallurgy*, **2010**, 104, 142-149	4	42
68	Reductive leaching of manganese and zinc from spent alkaline and zinc–carbon batteries in acidic media. *Hydrometallurgy*, **2009**, 97, 73-79	4	40
67	Acidophilic bioleaching: A Review on the Process and Effect of Organic–Inorganic Reagents and Materials on its Efficiency. *Mineral Processing and Extractive Metallurgy Review*, **2019**, 40, 87-107	3.1	38
66	Destruction of cyanide by hydrogen peroxide in tailings slurries from low bearing sulphidic gold ores. *Minerals Engineering*, **2005**, 18, 353-362	4.9	37
65	An integrated biological approach for treatment of cyanidation wastewater. *Science of the Total Environment*, **2016**, 571, 711-20	10.2	34
64	Biodegradation of dibenzothiophene and its application in the production of clean coal. *Fuel Processing Technology*, **2016**, 152, 325-342	7.2	34
63	Metals recovery from multimetal sulphide concentrates (CuFeS2–PbS–ZnS): combination of thermal process and pressure leaching. *International Journal of Mineral Processing*, **2003**, 71, 233-246		33

62	Valorization of waste LCD and recovery of critical raw material for circular economy: A review. *Resources, Conservation and Recycling*, **2019**, 149, 622-637	11.9	32
61	First application of cyanidation process in Turkish gold mining and its environmental impacts. *Minerals Engineering*, **2002**, 15, 695-699	4.9	32
60	Bioleaching of high grade ZnPb bearing ore by mixed moderate thermophilic microorganisms. *Separation and Purification Technology*, **2014**, 136, 241-249	8.3	30
59	Synergistic effect of biogenic Fe coupled to S oxidation on simultaneous bioleaching of Cu, Co, Zn and As from hazardous Pyrite Ash Waste. *Journal of Hazardous Materials*, **2017**, 325, 59-70	12.8	28
58	Gallium and vanadium extraction from red mud of Turkish alumina refinery plant: Hydrogarnet process. *Hydrometallurgy*, **2015**, 157, 72-77	4	26
57	Recovery of rare earth metals as critical raw materials from phosphorus slag of long-term storage. *Hydrometallurgy*, **2017**, 173, 271-282	4	25
56	A preliminary research on acid pressure leaching of pyritic copper ore in Kure Copper Mine, Turkey. *Minerals Engineering*, **2002**, 15, 1193-1197	4.9	25
55	Recovery of vanadium and gallium from solid waste by-products of Bayer process. *Minerals Engineering*, **2015**, 74, 91-98	4.9	23
54	Recovery of rare earth metals and precipitated silicon dioxide from phosphorus slag. *Minerals Engineering*, **2015**, 77, 159-166	4.9	21
53	Factorial experiments for iron removal from kaolin by using single and two-step leaching with sulfuric acid. *Hydrometallurgy*, **2013**, 134-135, 80-86	4	21
52	Prediction and optimization studies for bioleaching of molybdenite concentrate using artificial neural networks and genetic algorithm. *Minerals Engineering*, **2019**, 130, 24-35	4.9	21
51	Managing cyanide: health, safety and risk management practices at Turkey's Ovacik gold silver mine. *Journal of Cleaner Production*, **2006**, 14, 727-735	10.3	20
50	Thermodynamic and kinetic of iodine iodide leaching in gold hydrometallurgy. *Transactions of Nonferrous Metals Society of China*, **2015**, 25, 3774-3783	3.3	19
49	COVID-19 disruptions to tech-metals supply are a wake-up call. *Nature*, **2020**, 587, 365-367	50.4	19
48	A New Global Approach of Cyanide Management: International Cyanide Management Code for the Manufacture, Transport, and Use of Cyanide in the Production of Gold. *Mineral Processing and Extractive Metallurgy Review*, **2010**, 31, 135-149	3.1	18
47	Removal of Iron From Quartz Ore Using Different Acids: A Laboratory-Scale Reactor Study. *Mineral Processing and Extractive Metallurgy Review*, **2014**, 35, 217-228	3.1	17
46	Bioremediation of acidic mine effluents and the role of sulfidogenic biosystems: a mini-review. *Euro-Mediterranean Journal for Environmental Integration*, **2016**, 1, 1	1.7	16
45	A Multi-stage Process for Recovery of Neodymium (Nd) and Dysprosium (Dy) from Spent Hard Disc Drives (HDDs). *Mineral Processing and Extractive Metallurgy Review*, **2021**, 42, 90-101	3.1	16

44	Iron removal in production of purified quartz by hydrometallurgical process. *International Journal of Mineral Processing*, **2016**, 153, 44-50		15
43	Kinetic study of gallium electrochemical reduction in alkaline solution. *Hydrometallurgy*, **2013**, 140, 95-101	4	15
42	Effect of parameters on vanadium recovery from by-products of the Bayer process. *Hydrometallurgy*, **2015**, 152, 76-83	4	15
41	Biodesulphurization of Turkish lignite by Leptospirillum ferriphilum: Effect of ferrous iron, Span-80 and ultrasonication. *Hydrometallurgy*, **2018**, 176, 166-175	4	14
40	Intensified acidophilic bioleaching of multi-metals from waste printed circuit boards (WPCBs) of spent mobile phones. *Journal of Chemical Technology and Biotechnology*, **2020**, 95, 2272-2285	3.5	13
39	Effect of Span-80 and ultrasonication on biodesulphurization of lignite by Rhodococcus erythropolis: Lab to semi-pilot scale tests. *Minerals Engineering*, **2018**, 119, 183-190	4.9	13
38	Hydrometallurgical recycling strategies for recovery of rare earth elements from consumer electronic scraps: a review. *Journal of Chemical Technology and Biotechnology*, **2021**, 96, 1785-1797	3.5	12
37	Metal Recovery from Bottom Ash of an Incineration Plant: Laboratory Reactor Tests. *Mineral Processing and Extractive Metallurgy Review*, **2017**, 38, 199-206	3.1	11
36	Experimental process analysis and mathematical modeling for selective gold leaching from slag through wet chlorination. *Hydrometallurgy*, **2014**, 144-145, 170-185	4	11
35	A Potential Alternative for Precious Metal Recovery from E-waste: Iodine Leaching. *Separation Science and Technology*, **2015**, 150629132750004	2.5	11
34	Microbial Dissolution of Zn-Pb Sulfide Minerals Using Mesophilic Iron and Sulfur-Oxidizing Acidophiles. *Mineral Processing and Extractive Metallurgy Review*, **2015**, 36, 112-122	3.1	11
33	Biohydrometallurgy in Turkish gold mining: First shake flask and bioreactor studies. *Minerals Engineering*, **2013**, 46-47, 25-33	4.9	11
32	Coal-Gold Agglomeration: An Alternative Separation Process in Gold Recovery. *Separation and Purification Reviews*, **2009**, 38, 173-201	7.3	11
31	Red mud valorization an industrial waste circular economy challenge; review over processes and their chemistry. *Critical Reviews in Environmental Science and Technology*, **2020**, 1-51	11.1	11
30	A novel bioreactor system for simultaneous mutli-metal leaching from industrial pyrite ash: Effect of agitation and sulphur dosage. *Journal of Hazardous Materials*, **2018**, 342, 454-463	12.8	10
29	Copper and cobalt recovery from pyrite ashes of a sulphuric acid plant. *Waste Management and Research*, **2016**, 34, 527-33	4	10
28	Combined oxidative leaching and electrowinning process for mercury recovery from spent fluorescent lamps. *Waste Management*, **2016**, 57, 215-219	8.6	10
27	Biotechnological trends and market impact on the recovery of rare earth elements from bauxite residue (red mud) A review. *Resources, Conservation and Recycling*, **2021**, 171, 105645	11.9	10

26	Regularities of Rhenium and Uranium Sorption from Mixed Solutions with Weakly Basic Anion Exchange Resin. *Mineral Processing and Extractive Metallurgy Review*, **2015**, 36, 391-398	3.1	9
25	Sequential bioreduction–bioleaching and bioreduction–chemical leaching hybrid tests for enhanced copper recovery from a concentrator ball mill reject sample. *Hydrometallurgy*, **2015**, 157, 171-177	4	9
24	Recovery of rare earth metals (REMs) from primary raw material: sulphatization-leaching-precipitation-extraction. *Mineral Processing and Extractive Metallurgy Review*, **2018**, 39, 319-338	3.1	9
23	A study of the selective leaching of complex sulphides from the Eastern Black Sea Region, Turkey. *Minerals Engineering*, **2002**, 15, 457-459	4.9	9
22	Microalgal potential for nutrient-energy-wastewater nexus: Innovations, current trends and future directions. *Energy and Environment*, **2021**, 32, 604-634	2.4	9
21	Laboratory and Semipilot Bioreactor Feasibility Tests for Desulphurization of Turkish Lignite using Leptospirillum ferriphilum. *Energy & Fuels*, **2018**, 32, 2869-2877	4.1	8
20	A Review on the Use of Constructed Wetlands for the Treatment of Acid Mine Drainage **2018**, 249-262		6
19	Separation of hafnium and zirconium using TBP modified ferromagnetic nanoparticles: Effects of acid and metals concentrations. *Hydrometallurgy*, **2014**, 146, 72-75	4	6
18	A novel approach based on solvent displacement crystallisation for iron removal and copper recovery from solutions of semi-pilot scale bioleaching of WPCBs. *Journal of Cleaner Production*, **2021**, 294, 126346	10.3	6
17	Sulphur-oxidising bacteria isolated from deep caves improve the removal of arsenic from contaminated harbour sediments. *Chemistry and Ecology*, **2017**, 33, 103-113	2.3	4
16	Bioleaching of waste mobile phone printed circuit board in controlled redox potential compared to non-controlled redox potential. *International Journal of Environmental Science and Technology*, **2020**, 17, 3165-3176	3.3	4
15	Recovery of Gallium and Aluminum from Electrofilter Dust of Alumina Calcination Plant in Bayer Process. *Separation Science and Technology*, **2015**, 150629134219000	2.5	3
14	Technological trends, emerging applications and metallurgical strategies in antimony recovery from stibnite. *Minerals Engineering*, **2022**, 175, 107304	4.9	3
13	BIO-MECHANICAL LEACHING OF URANIUM FROM LOW GRADE BLACK SHALE. *Environmental Engineering and Management Journal*, **2015**, 14, 2939-2946	0.6	3
12	Techno-economic Analysis of Boric Acid Production from Colemanite Mineral and Sulfuric Acid. *Mineral Processing and Extractive Metallurgy Review*,1-9	3.1	3
11	Purification of Ammonium Perrhenate Solutions from Potassium by Ion Exchange. *Mineral Processing and Extractive Metallurgy Review*, **2017**, 38, 284-291	3.1	2
10	Processing of Phosphorus Slag with Recovery of Rare Earth Metals and Obtaining Silicon Containing Cake. *IOP Conference Series: Earth and Environmental Science*, **2016**, 44, 052003	0.3	2
9	Direct cyanidation and roasting combination of a semi-refractory massive sulfide ore. *Mining, Metallurgy and Exploration*, **2015**, 32, 161-169	1.1	2

8	A Comparative Assessment on the Effect of Different Supplemental Iron Sources on the Bio-dissolution of Zn, Pb, Cd, and As from a High-grade ZnPb Ore. *Mining, Metallurgy and Exploration*, **2019**, 36, 363-374	1.1	2
7	Indispensable role of coal as an energy source in Turkey with focus on biodesulphurization studies and advances. *Case Studies in Chemical and Environmental Engineering*, **2021**, 4, 100139	7.5	2
6	Acidic Leaching with Chlorate as Oxidizing Agent to Extract Mo and Re from Molybdenite Flotation Concentrate in a Copper Plant. *Separation Science and Technology*, **2015**, 150623140516001	2.5	1
5	Biotechnological Avenues in Mineral Processing: Fundamentals, Applications and Advances in Bioleaching and Bio-beneficiation. *Mineral Processing and Extractive Metallurgy Review*,1-30	3.1	1
4	A Review on Chemical versus Microbial Leaching of Electronic Wastes with Emphasis on Base Metals Dissolution. *Minerals (Basel, Switzerland)*, **2021**, 11, 1255	2.4	1
3	Rare Earth Element Preconcentration from Various Primary and Secondary Sources by Polymeric Ion Exchange Resins. *Separation and Purification Reviews*,1-16	7.3	1
2	Experimental design and process analysis for acidic leaching of metal-rich glass wastes. *Waste Management and Research*, **2010**, 28, 445-54	4	
1	Letter to the Editor | Fuel - Volume 85, Issue 9. *Fuel*, **2006**, 85, 1309-1309	7.1	