Ahmad Ghahreman

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4104407/publications.pdf

Version: 2024-02-01

66 papers	1,748 citations	471509 17 h-index	302126 39 g-index
68 all docs	68 docs citations	68 times ranked	1187 citing authors

#	Article	IF	Citations
1	Review of arsenic metallurgy: Treatment of arsenical minerals and the immobilization of arsenic. Hydrometallurgy, 2017, 174, 258-281.	4.3	296
2	Novel approaches for lithium extraction from salt-lake brines: A review. Hydrometallurgy, 2019, 187, 81-100.	4.3	223
3	Review of Lithium Production and Recovery from Minerals, Brines, and Lithium-Ion Batteries. Mineral Processing and Extractive Metallurgy Review, 2021, 42, 123-141.	5.0	163
4	A review on the cracking, baking and leaching processes of rare earth element concentrates. Journal of Rare Earths, 2017, 35, 739-752.	4.8	98
5	Selective recovery of valuable metals from industrial waste lithium-ion batteries using citric acid under reductive conditions: Leaching optimization and kinetic analysis. Hydrometallurgy, 2020, 191, 105160.	4.3	80
6	Separation and recovery of cobalt and nickel from end of life products via solvent extraction technique: A review. Journal of Cleaner Production, 2021, 297, 126592.	9.3	72
7	Challenges with elemental sulfur removal during the leaching of copper and zinc sulfides, and from the residues; a review. Hydrometallurgy, 2017, 171, 333-343.	4.3	62
8	A sustainable process for selective recovery of lithium as lithium phosphate from spent LiFePO4 batteries. Resources, Conservation and Recycling, 2021, 175, 105883.	10.8	61
9	In-situ oxidative arsenic precipitation as scorodite during carbon catalyzed enargite leaching process. Journal of Hazardous Materials, 2018, 360, 631-638.	12.4	37
10	Novel Extraction Process for Gold Recovery from Thiosulfate Solution Using Phosphonium Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2021, 9, 8179-8185.	6.7	37
11	A review of thiocyanate gold leaching â€“ Chemistry, thermodynamics, kinetics and processing. Minerals Engineering, 2021, 160, 106689.	4.3	35
12	A review of biocyanidation as a sustainable route for gold recovery from primary and secondary low-grade resources. Journal of Cleaner Production, 2021, 296, 126457.	9.3	32
13	Fe(III)/Fe(II) reduction-oxidation mechanism and kinetics studies on pyrite surfaces. Journal of Electroanalytical Chemistry, 2016, 774, 66-75.	3.8	30
14	A comparative study of gold refractoriness by the application of QEMSCAN and diagnostic leach process. International Journal of Mineral Processing, 2017, 169, 35-46.	2.6	25
15	A Green and Sustainable Process for the Recovery of Gold from Low-Grade Sources Using Biogenic Cyanide Generated by Bacillus megaterium: A Comprehensive Study. ACS Sustainable Chemistry and Engineering, 2021, 9, 236-245.	6.7	23
16	A review on adsorption mechanism of gold cyanide complex onto activation carbon. Journal of Industrial and Engineering Chemistry, 2022, 111, 35-42.	5.8	21
17	Selective heavy rare earth element extraction from dilute solutions using ultrasonically synthesized Cyanex 572 oil droplets and Cyanex 572-impregnated resin. Journal of Industrial and Engineering Chemistry, 2018, 59, 388-402.	5.8	20
18	The mechanism of electrochemical dissolution of sphalerite in sulfuric acid media. Electrochimica Acta, 2017, 253, 47-58.	5.2	18

#	Article	IF	Citations
19	Separation and solvent extraction of rare earth elements (Pr, Nd, Sm, Eu, Tb, and Er) using TBP and Cyanex 572 from a chloride medium. Minerals Engineering, 2021, 161, 106694.	4.3	18
20	Kinetics of Fe(III)-Fe(II) redox half-reactions on sphalerite surface. Electrochimica Acta, 2018, 281, 624-637.	5.2	17
21	The effect of ore mineralogy on the electrochemical gold dissolution behavior in various cyanide and oxygen concentrations; Effect of sulfidic ores containing heavy metals. Hydrometallurgy, 2019, 184, 75-87.	4.3	17
22	Green catalytic process for in situ oxidation of Arsenic(III) in concentrated streams using activated carbon and oxygen gas. Chemosphere, 2020, 261, 127688.	8.2	17
23	The effect of calcium sulfate crystallization and the crystal modification on aqueous REE stability in Ca saturated REE-Ca-SO4-H2O systems. Hydrometallurgy, 2018, 182, 82-96.	4.3	16
24	Effect of Ultrasound on the Oxidative Copper Leaching from Chalcopyrite in Acidic Ferric Sulfate Media. Minerals (Basel, Switzerland), 2020, 10, 633.	2.0	15
25	Enhanced Gold Recovery from Alkaline Pressure Oxidized Refractory Gold Ore After its Mechanical Activation Followed by Thiosulfate Leaching. Journal of Sustainable Metallurgy, 2022, 8, 186-196.	2.3	14
26	Lanxess LewatitÂ® AF 5 and activated carbon catalysis of enargite leaching in chloride media; a parameters study. Hydrometallurgy, 2017, 174, 184-194.	4.3	13
27	Atmospheric oxidation of pyrite with a novel catalyst and ultra-high elemental sulphur yield. Hydrometallurgy, 2017, 173, 156-169.	4.3	13
28	The Synergistic Effect of Cu²⁺â€“Fe²⁺â€“Fe³⁺ Acidic System on the Oxidation Kinetics of Ag-Doped Pyrite. Journal of Physical Chemistry C, 2018, 122, 26897-26909.	3.1	13
29	Hydrochloric acid regeneration in hydrometallurgical processes: a review. Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy, 2018, 127, 157-168.	0.2	12
30	Effect of Surface Modification with Different Acids on the Functional Groups of AF 5 Catalyst and Its Catalytic Effect on the Atmospheric Leaching of Enargite. Colloids and Interfaces, 2019, 3, 45.	2.1	12
31	Toward Sustainable Solution for Biooxidation of Waste and Refractory Materials Using Neutrophilic and Alkaliphilic Microorganismsâ€”A Review. ACS Applied Bio Materials, 2021, 4, 2274-2292.	4.6	12
32	Gold Leaching from an Oxide Ore Using Thiocyanate as a Lixiviant: Process Optimization and Kinetics. ACS Omega, 2021, 6, 17183-17193.	3.5	12
33	Evaluation of ozone as an efficient and sustainable reagent for chalcopyrite leaching: Process optimization and oxidative mechanism. Journal of Industrial and Engineering Chemistry, 2021, 104, 333-344.	5.8	12
34	An investigation for biogenic cyanide distillation for gold recovery and cyanide bioremediation by Bacillus megaterium. Journal of Environmental Chemical Engineering, 2021, 9, 106030.	6.7	12
35	Efficient Gold Recovery from Cyanide Solution Using Magnetic Activated Carbon. ACS Applied Materials & Interfaces, 2021, 13, 47642-47649.	8.0	12
36	Oxidative precipitation of cerium in acidic chloride solutions: part I â€“ Fundamentals and thermodynamics. Hydrometallurgy, 2019, 184, 140-150.	4.3	11

#	Article	IF	Citations
37	Novel Continuous Column Process for As(III) Oxidation from Concentrated Acidic Solutions with Activated Carbon Catalysis. Industrial & Engineering Chemistry Research, 2020, 59, 9882-9889.	3.7	11
38	The effect of temperature on the kinetics of the ferric-ferrous redox couple on pyrite. Electrochimica Acta, 2017, 245, 814-828.	5.2	10
39	Improvement of scorodite stability by addition of crystalline polyferric sulfate. Hydrometallurgy, 2019, 185, 162-172.	4.3	10
40	The kinetics of enargite dissolution in chloride media in the presence of activated carbon and AF 5 catalysts. Minerals Engineering, 2019, 143, 106013.	4.3	9
41	Effect of mixing acidic and alkaline pressure oxidation discharges with different ratios on gold thiosulfate leaching efficiency. Hydrometallurgy, 2021, 205, 105744.	4.3	9
42	The Evaluation of Sphalerite Surface Formed During Oxidative Leaching in Acidic Ferric Sulfate Media. Journal of Sustainable Metallurgy, 2021, 7, 1304-1313.	2.3	8
43	Mineral carbonation of ultramafic tailings: A review of reaction mechanisms and kinetics, industry case studies, and modelling. Cleaner Engineering and Technology, 2022, 8, 100491.	4.0	8
44	A parameters study of the novel atmospheric pyrite oxidation process with LewatitÂ® AF 5 catalyst. Hydrometallurgy, 2019, 183, 87-97.	4.3	7
45	Synergistic effects of Ionquest 801 and Cyanex 572 on the solvent extraction of rare earth elements (Pr, Nd, Sm, Eu, Tb, and Er) from a chloride medium. Separation and Purification Technology, 2021, 279, 119797.	7.9	7
46	Regeneration and sulfur recovery of Lanxess Lewatit AF 5 catalyst from the acidic Albion leaching process using toluene and tetrachloroethylene as organic solvents. Journal of Industrial and Engineering Chemistry, 2022, 107, 291-301.	5.8	7
47	Application of Biogenic Thiosulfate Produced by Methylophaga sulfidovorans for Sustainable Gold Extraction. ACS Sustainable Chemistry and Engineering, 2022, 10, 10034-10046.	6.7	7
48	Mechanical and thermal insulation properties of isocyanate crosslinked resorcinol formaldehyde aerogel: Effect of isocyanate structure. Journal of Applied Polymer Science, 2019, 136, 48196.	2.6	6
49	The interaction of Ag+ with synthetic chalcopyrite in the presence of Fe3+ and Cu2+ in sulfuric acid solutions. Electrochimica Acta, 2020, 338, 135875.	5.2	6
50	A mechanism of metastable sulfur speciation and the adsorption on a gold surface in the presence of sulfidic ore and lead in cyanide medium. Hydrometallurgy, 2020, 193, 105294.	4.3	6
51	New insights on the role of lattice-substituted silver in catalytic oxidation of chalcopyrite. Electrochimica Acta, 2021, 369, 137652.	5.2	6
52	Gold Extraction from Refractory Sulfide Gold Concentrates: A Comparison of Bio-oxidation and Neutral Atmospheric Pre-treatment and Economic Implications. Journal of Sustainable Metallurgy, 2021, 7, 1354-1367.	2.3	6
53	Flotation of Carbonaceous Matter from a Double Refractory Gold Ore: The Effect of MIBC on Flotation Performance and Kinetics. Minerals (Basel, Switzerland), 2021, 11, 1021.	2.0	6
54	Substitution of Calcium with Ce, Nd, Er, and Tb in the Structure of Microcrystals of Calcium Sulfates with Controlled Hydration Water: A Proposed Mechanism. Crystal Growth and Design, 2019, 19, 2621-2631.	3.0	5

#	Article	IF	Citations
55	Hydrothermal Monodisperse Microspherulite Pyrite: Novel Synthesis Process and Electrochemical Study of Its Oxidation. ACS Omega, 2020, 5, 24871-24880.	3.5	5
56	The electrochemical catalytic role of Pb2+ in thiosulfate gold oxidation process. Minerals Engineering, 2022, 184, 107676.	4.3	5
57	Behavior of Light and Heavy Rare-Earth Elements in a Two-Step Fe and Al Removal Process from Rare-Earth Pregnant Leach Solutions. Journal of Sustainable Metallurgy, 2021, 7, 1327-1342.	2.3	4
58	Thermal treatment of Lanxess LewatitÂ® AF 5 resin used in the atmospheric chalcopyrite leaching process: Regeneration and sulfur recovery. Chemosphere, 2022, 295, 133890.	8.2	4
59	Oxidative precipitation of cerium in acidic chloride solutions: Part II â€“ oxidation in a mixed REE system. Hydrometallurgy, 2020, 194, 105331.	4.3	3
60	Leaching characteristics and stability assessment of sequestered arsenic in flue dust based glass. Chemosphere, 2021, 276, 130173.	8.2	3
61	The Separation of Carbonaceous Matter from Refractory Gold Ore Using Multi-Stage Flotation: A Case Study. Minerals (Basel, Switzerland), 2021, 11, 1430.	2.0	3
62	Selective Extraction and Recovery of Gold from Complex Thiosulfate Pregnant Leach Liquor Using Cyphos IL 101. Industrial & Engineering Chemistry Research, 2022, 61, 5612-5619.	3.7	3
63	An environmentally friendly method for efficient atmospheric oxidation of pyrrhotite in arsenopyrite/pyrite calcine. Chemical Engineering Journal Advances, 2021, 7, 100122.	5.2	2
64	A mechanism and thermodynamic model for the interaction of silicate minerals with lead-assisted gold electro-oxidation in a dilute cyanide medium. Electrochimica Acta, 2019, 323, 134574.	5.2	1
65	A Study on the Effect of Crystal Habit Modifiers on the Co-precipitation of REE with Gypsum. Minerals, Metals and Materials Series, 2018, , 27-37.	0.4	0
66	In Situ Precipitation of Scorodite in Atmospheric Leaching of Enargite. Minerals, Metals and Materials Series, 2018, , 1621-1629.	0.4	0