

# Jae-chun Lee

## List of Publications by Year in descending order

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65  
papers

4,155  
citations

109321

35  
h-index

118850

62  
g-index

67  
all docs

67  
docs citations

67  
times ranked

3185  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advance review on the exploitation of the prominent energy-storage element: Lithium. Part I: From mineral and brine resources. Minerals Engineering, 2016, 89, 119-137.	4.3	310
2	Hydrometallurgical recovery/recycling of platinum by the leaching of spent catalysts: A review. Hydrometallurgy, 2013, 133, 23-32.	4.3	272
3	Bio-processing of solid wastes and secondary resources for metal extraction “A review. Waste Management, 2012, 32, 3-18.	7.4	266
4	Hydrometallurgical process for recovery of cobalt from waste cathodic active material generated during manufacturing of lithium ion batteries. Journal of Power Sources, 2007, 167, 536-544.	7.8	252
5	Present status of the recycling of waste electrical and electronic equipment in Korea. Resources, Conservation and Recycling, 2007, 50, 380-397.	10.8	231
6	Advance review on the exploitation of the prominent energy-storage element Lithium. Part II: From sea water and spent lithium ion batteries (LIBs). Minerals Engineering, 2017, 110, 104-121.	4.3	209
7	Thiosulfate leaching of gold from waste mobile phones. Journal of Hazardous Materials, 2010, 178, 1115-1119.	12.4	156
8	Leaching kinetics of copper from waste printed circuit boards by electro-generated chlorine in HCl solution. Hydrometallurgy, 2011, 107, 124-132.	4.3	130
9	Separation of platinum, palladium and rhodium from aqueous solutions using ion exchange resin: A review. Separation and Purification Technology, 2020, 246, 116896.	7.9	118
10	A review on the metallurgical recycling of vanadium from slags: towards a sustainable vanadium production. Journal of Materials Research and Technology, 2021, 12, 343-364.	5.8	105
11	Bioleaching of metals from electronic scrap and its potential for commercial exploitation. Hydrometallurgy, 2013, 131-132, 138-143.	4.3	103
12	Optimizing the thiosulfate leaching of gold from printed circuit boards of discarded mobile phone. Hydrometallurgy, 2014, 149, 118-126.	4.3	100
13	A review on the recycling processes of spent auto-catalysts: Towards the development of sustainable metallurgy. Waste Management, 2020, 114, 148-165.	7.4	92
14	Review on solvent extraction of cadmium from various solutions. Hydrometallurgy, 2012, 111-112, 1-9.	4.3	88
15	Resource recycling of superalloys and hydrometallurgical challenges. Journal of Materials Science, 2014, 49, 4671-4686.	3.7	84
16	Bioremoval of heavy metals from recycling industry electronic waste by a consortium of moderate thermophiles: process development and optimization. Journal of Cleaner Production, 2014, 70, 194-202.	9.3	81
17	Biometallurgical Recovery of Metals from Waste Electrical and Electronic Equipment: a Review. ChemBioEng Reviews, 2014, 1, 148-169.	4.4	76
18	Use of Phosphate Solubilizing Bacteria to Leach Rare Earth Elements from Monazite-Bearing Ore. Minerals (Basel, Switzerland), 2015, 5, 189-202.	2.0	73

#	ARTICLE	IF	CITATIONS
19	Leaching behavior of copper using electro-generated chlorine in hydrochloric acid solution. Hydrometallurgy, 2010, 100, 95-102.	4.3	65
20	Solvent extraction of cadmium from sulfate solution with di-(2-ethylhexyl) phosphoric acid diluted in kerosene. Hydrometallurgy, 2009, 96, 230-234.	4.3	64
21	Liquid-liquid extraction of rhenium(VII) from an acidic chloride solution using Cyanex 923. Hydrometallurgy, 2015, 157, 33-38.	4.3	64
22	Effect of chloride ions on leaching rate of chalcopyrite. Minerals Engineering, 2010, 23, 471-477.	4.3	62
23	Recycling of WC-Co hardmetal sludge by a new hydrometallurgical route. International Journal of Refractory Metals and Hard Materials, 2011, 29, 365-371.	3.8	60
24	Selective recovery of rhenium from molybdenite flue-dust leach liquor using solvent extraction with TBP. Separation and Purification Technology, 2018, 191, 116-121.	7.9	56
25	Selective recovery of cobalt, nickel and lithium from sulfate leachate of cathode scrap of Li-ion batteries using liquid-liquid extraction. Metals and Materials International, 2014, 20, 357-365.	3.4	55
26	Complexation chemistry in liquid-liquid extraction of rhenium. Journal of Chemical Technology and Biotechnology, 2015, 90, 1752-1764.	3.2	54
27	Bioleaching of metals from electronic scrap in a stirred tank reactor. Hydrometallurgy, 2014, 149, 50-62.	4.3	53
28	Novel Aqueous Processing of the Reverted Turbine-Blade Superalloy for Rhenium Recovery. Industrial & Engineering Chemistry Research, 2016, 55, 8191-8199.	3.7	50
29	Highly selective separation of individual platinum group metals (Pd, Pt, Rh) from acidic chloride media using phosphonium-based ionic liquid in aromatic diluent. RSC Advances, 2016, 6, 62717-62728.	3.6	49
30	Eco-threat Minimization in HCl Leaching of PGMs from Spent Automobile Catalysts by Formic Acid Prereduction. ACS Sustainable Chemistry and Engineering, 2017, 5, 7302-7309.	6.7	49
31	Solvent extraction of copper, zinc, cadmium and nickel from sulfate solution in mixer settler unit (MSU). Separation and Purification Technology, 2014, 122, 119-127.	7.9	47
32	Total recycling of all the components from spent auto-catalyst by NaOH roasting-assisted hydrometallurgical route. Journal of Hazardous Materials, 2019, 379, 120772.	12.4	47
33	Bio-Reclamation of Strategic and Energy Critical Metals from Secondary Resources. Metals, 2017, 7, 207.	2.3	42
34	Red mud valorization an industrial waste circular economy challenge; review over processes and their chemistry. Critical Reviews in Environmental Science and Technology, 2022, 52, 520-570.	12.8	38
35	Influence of ammonium salt on electrowinning of copper from ammoniacal alkaline solutions. Electrochimica Acta, 2007, 53, 127-132.	5.2	37
36	Separation of Co(II) and Li(I) by supported liquid membrane using Cyanex 272 as mobile carrier. Journal of Membrane Science, 2007, 297, 253-261.	8.2	35

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37	Simple recycling of copper by the synergistic exploitation of industrial wastes: a step towards sustainability. <i>Green Chemistry</i> , 2016, 18, 3823-3834.	9.0	35
38	Integration of microbial and chemical processing for a sustainable metallurgy. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 320-332.	3.2	34
39	Novel physical separation process for eco-friendly recycling of rare and valuable metals from end-of-life DVD-PCBs. <i>Separation and Purification Technology</i> , 2013, 111, 145-154.	7.9	33
40	Recovery of Platinum and Palladium from the Spent Petroleum Catalysts by Substrate Dissolution in Sulfuric Acid. <i>Materials Transactions</i> , 2010, 51, 1927-1933.	1.2	28
41	A Novel Process for Extracting Precious Metals from Spent Mobile Phone PCBs and Automobile Catalysts. <i>Materials Transactions</i> , 2013, 54, 1045-1048.	1.2	28
42	A novel zero emission concept for electrogenerated chlorine leaching and its application to extraction of platinum group metals from spent automotive catalyst. <i>Hydrometallurgy</i> , 2016, 159, 19-27.	4.3	27
43	The Separation and Recovery of Nickel and Lithium from the Sulfate Leach Liquor of Spent Lithium Ion Batteries using PC-88A. <i>Korean Chemical Engineering Research</i> , 2015, 53, 137-144.	0.2	27
44	Separation of Tungsten from Mo-Rich Leach Liquor by Adsorption onto a Typical Fe-Mn Cake: Kinetics, Equilibrium, Mechanism, and Thermodynamics Studies. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 17591-17597.	3.7	26
45	A multistep leaching of nickel-based superalloy scrap for selective dissolution of its constituent metals in hydrochloric acid solutions. <i>Hydrometallurgy</i> , 2018, 176, 235-242.	4.3	23
46	Dissolution behaviour of platinum by electrogenerated chlorine in hydrochloric acid solution. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 1212-1219.	3.2	22
47	Effect of Mechanical Activation on the Kinetics of Copper Leaching from Copper Sulfide (CuS). <i>Metals</i> , 2018, 8, 150.	2.3	22
48	Reclamation of tungsten from carbide scraps and spent materials. <i>Journal of Materials Science</i> , 2019, 54, 83-107.	3.7	22
49	A study of the electro-assisted reductive leaching of a chalcopyrite concentrate in HCl solutions. Part I: Kinetic behavior and nature of the chalcopyrite reduction. <i>Hydrometallurgy</i> , 2018, 181, 195-205.	4.3	21
50	Liquid-liquid extraction of Cd(II) from pure and Ni/Cd acidic chloride media using Cyanex 921: A selective treatment of hazardous leachate of spent Ni-Cd batteries. <i>Journal of Hazardous Materials</i> , 2014, 278, 258-266.	12.4	18
51	Conversion of chalcopyrite to copper oxide in hypochlorite solution for selective leaching of copper in dilute sulfuric acid solution. <i>Hydrometallurgy</i> , 2018, 178, 224-230.	4.3	17
52	A phenomenological study of the electro-assisted reductive leaching of chalcopyrite. <i>Hydrometallurgy</i> , 2016, 164, 54-63.	4.3	16
53	An electrochemical study of silver recovery in thiosulfate solutions. A window towards the development of a simultaneous electroleaching-electrodeposition process. <i>Hydrometallurgy</i> , 2018, 176, 104-117.	4.3	15
54	Efficient recycling of WC-Co hardmetal sludge by oxidation followed by alkali and sulfuric acid treatments. <i>Metals and Materials International</i> , 2016, 22, 897-906.	3.4	13

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55	Ionic Liquids-Assisted Solvent Extraction of Precious Metals from Chloride Solutions. Separation and Purification Reviews, 2023, 52, 242-261.	5.5	13
56	Recovery of Cerium from Spent Autocatalyst by Sulfatizingâ€“Leachingâ€“Precipitation Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 15630-15639.	6.7	10
57	Selective Recovery of Copper from Industrial Sludge by Integrated Sulfuric Leaching and Electrodeposition. Metals, 2021, 11, 22.	2.3	6
58	Leaching of Gold from the Spent/End-of-Life Mobile Phone-PCBs using â€œGreener Reagentsâ€“, 2016, , 7-56.		5
59	Variation in the determination of platinum group metals using ICP OES induced by the effect of complex matrices and the correction method based on multivariate calibration. Journal of Analytical Atomic Spectrometry, 2022, 37, 330-337.	3.0	5
60	A kinetic-mechanistic study of silver oxidation with the NaNO <sub>2</sub> â€“CuSO <sub>4</sub> alternative novel system. Electrochimica Acta, 2020, 337, 135792.	5.2	4
61	A Review on Recycling of Spent Autocatalyst in Korea. Journal of the Korean Institute of Resources Recycling, 2014, 23, 3-16.	0.4	4
62	Valuable Metal Recycling. Metals, 2018, 8, 345.	2.3	3
63	Leaching Kinetics of Selenium, Tellurium and Silver from Copper Anode Slime by Sulfuric Acid Leaching in the Presence of Manganese(IV) Oxide and Graphite. Materials Proceedings, 2021, 3, 16.	0.2	1
64	Electrochemical Behavior of Tin and Silver during the Electrorecycling of Pb-free Solder (Sn-Ag-Cu) Waste. , 2022, 31, 61-72.		1
65	Introduction to Electrochemical Quartz Crystal Microbalance Technique for Leaching Study of Metals. Journal of the Korean Institute of Resources Recycling, 2020, 29, 25-34.	0.4	0