Rajiv R Srivastava

List of Publications by Year
in descending order

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62 papers	3,442 citations	147786 31 h-index	144002 57 g-index
65 all docs	65 docs citations	65 times ranked	2683 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	Disinfection technology and strategies for COVID-19 hospital and bio-medical waste management. Science of the Total Environment, 2020, 749, 141652.	8.0	278
3	Hydrometallurgical recovery/recycling of platinum by the leaching of spent catalysts: A review. Hydrometallurgy, 2013, 133, 23-32.	4.3	272
4	Present status of the recycling of waste electrical and electronic equipment in Korea. Resources, Conservation and Recycling, 2007, 50, 380-397.	10.8	231
5	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
6	Selective recovery of gold from waste mobile phone PCBs by hydrometallurgical process. Journal of Hazardous Materials, 2011, 198, 206-215.	12.4	177
7	Assessment of legislation and practices for the sustainable management of waste electrical and electronic equipment in India. Renewable and Sustainable Energy Reviews, 2017, 78, 220-232.	16.4	132
8	Leaching of lead from solder material of waste printed circuit boards (PCBs). Hydrometallurgy, 2012, 121-124, 28-34.	4.3	106
9	Copper Leaching Behavior from Waste Printed Circuit Board in Ammoniacal Alkaline Solution. Materials Transactions, 2006, 47, 1788-1792.	1.2	102
10	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
11	Resource recycling of superalloys and hydrometallurgical challenges. Journal of Materials Science, 2014, 49, 4671-4686.	3.7	84
12	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
13	Liquidâ€“liquid extraction of rhenium(VII) from an acidic chloride solution using Cyanex 923. Hydrometallurgy, 2015, 157, 33-38.	4.3	64
14	Recycling of WCâ€“Co hardmetal sludge by a new hydrometallurgical route. International Journal of Refractory Metals and Hard Materials, 2011, 29, 365-371.	3.8	60
15	Extraction of nickel and cobalt from a laterite ore using the carbothermic reduction roasting-ammoniacal leaching process. Separation and Purification Technology, 2020, 232, 115971.	7.9	60
16	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
17	Complexation chemistry in liquidâ€“liquid extraction of rhenium. Journal of Chemical Technology and Biotechnology, 2015, 90, 1752-1764.	3.2	54
18	Bioleaching of metals from electronic scrap in a stirred tank reactor. Hydrometallurgy, 2014, 149, 50-62.	4.3	53

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19	Two-step leaching process and kinetics for an eco-friendly recycling of critical metals from spent Li-ion batteries. Journal of Environmental Chemical Engineering, 2021, 9, 105232.	6.7	51
20	Novel Aqueous Processing of the Reverted Turbine-Blade Superalloy for Rhenium Recovery. Industrial & Engineering Chemistry Research, 2016, 55, 8191-8199.	3.7	50
21	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
22	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
23	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
24	Circular bioeconomy and environmental benignness through microbial recycling of e-waste: A case study on copper and gold restoration. Waste Management, 2021, 121, 175-185.	7.4	46
25	Hydrometallurgical recycling of palladium and platinum from exhausted diesel oxidation catalysts. Separation and Purification Technology, 2020, 248, 117029.	7.9	45
26	Leaching of exhausted <scp>LNCM</scp> cathode batteries in ascorbic acid lixiviant: a green recycling approach, reaction kinetics and process mechanism. Journal of Chemical Technology and Biotechnology, 2020, 95, 2286-2294.	3.2	44
27	Bio-Reclamation of Strategic and Energy Critical Metals from Secondary Resources. Metals, 2017, 7, 207.	2.3	42
28	Biotechnological recycling of critical metals from waste printed circuit boards. Journal of Chemical Technology and Biotechnology, 2020, 95, 2796-2810.	3.2	42
29	Leaching studies for tin recovery from waste e-scrap. Waste Management, 2012, 32, 1919-1925.	7.4	40
30	Simple recycling of copper by the synergistic exploitation of industrial wastes: a step towards sustainability. Green Chemistry, 2016, 18, 3823-3834.	9.0	35
31	Biotechnological recycling of hazardous waste PCBs using Sulfobacillus thermosulfidooxidans through pretreatment of toxicant metals: Process optimization and kinetic studies. Chemosphere, 2022, 286, 131978.	8.2	34
32	Gold recovery from secondary waste of PCBs by electro-Cl2 leaching in brine solution and solvo-chemical separation with tri-butyl phosphate. Journal of Cleaner Production, 2021, 295, 126389.	9.3	33
33	Extraction equilibria of cerium(IV) with Cyanex 923 followed by precipitation kinetics of cerium(III) oxalate from sulfate solution. Separation and Purification Technology, 2021, 254, 117634.	7.9	29
34	O2-enriched microbial activity with pH-sensitive solvo-chemical and electro-chlorination strategy to reclaim critical metals from the hazardous waste printed circuit boards. Journal of Hazardous Materials, 2021, 416, 125769.	12.4	29
35	A novel zero emission concept for electrogenerated chlorine leaching and its application to extraction of platinum group metals from spent automotive catalyst. Hydrometallurgy, 2016, 159, 19-27.	4.3	27
36	Separation of Tungsten from Mo-Rich Leach Liquor by Adsorption onto a Typical Feâ€“Mn Cake: Kinetics, Equilibrium, Mechanism, and Thermodynamics Studies. Industrial & Engineering Chemistry Research, 2013, 52, 17591-17597.	3.7	26

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37	Mobilization of platinum and palladium from exhausted catalytic converters using bio-cyanide and an ionic-liquid as mass transport carriers. Green Chemistry, 2022, 24, 5204-5218.	9.0	26
38	Cleaner production of rare earth elements from phosphorus-bearing sulfuric acid solution of vein deposit monazite. Journal of Cleaner Production, 2021, 278, 123435.	9.3	25
39	Liquidâ€“Liquid Extraction and Reductive Stripping of Chromium to Valorize Industrial Effluent. Jom, 2020, 72, 839-846.	1.9	23
40	Reclamation of tungsten from carbide scraps and spent materials. Journal of Materials Science, 2019, 54, 83-107.	3.7	22
41	Policy issues for efficient management of E-waste in developing countries. , 2020, , 81-99.		22
42	Growth projections against set-target of renewable energy and resultant impact on emissions reduction in India. Environmental Engineering Research, 2021, 26, 200083-0.	2.5	20
43	Hydrometallurgical Recycling of Rare Earth Metalâ€“Cerium from Bio-processed Residual Waste of Exhausted Automobile Catalysts. Jom, 2021, 73, 19-26.	1.9	19
44	Separation of platinum group metals from model chloride solution using phosphonium-based ionic liquid. Separation and Purification Technology, 2021, 278, 119577.	7.9	19
45	Environmental Management of E-waste. , 2019, , 103-132.		16
46	Hydrometallurgical recycling of surface-coated metals from automobile-discarded ABS plastic waste. Waste Management, 2018, 80, 414-422.	7.4	15
47	Efficient recycling of WC-Co hardmetal sludge by oxidation followed by alkali and sulfuric acid treatments. Metals and Materials International, 2016, 22, 897-906.	3.4	13
48	Ionic Liquids-Assisted Solvent Extraction of Precious Metals from Chloride Solutions. Separation and Purification Reviews, 2023, 52, 242-261.	5.5	13
49	Simple and complete separation of copper from nickel in the ammoniacal leach solutions of metal coated ABS plastic waste by antagonistic extraction using a mixture of LIX 84-I and TBP. Separation and Purification Technology, 2021, 255, 117712.	7.9	10
50	Recovery of Cerium from Spent Autocatalyst by Sulfatizingâ€“Leachingâ€“Precipitation Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 15630-15639.	6.7	10
51	Liquid-liquid extraction of phosphorus from sulfuric acid solution using benzyl dimethyl amine. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 367-372.	4.9	9
52	Assessment of the Alkaline Earth Metals (Ca, Sr, Ba) and Their Associated Health Impacts. Handbook of Environmental Chemistry, 2020, , 227-243.	0.4	8
53	Biosorption of Strontium from Aqueous Solutions. Handbook of Environmental Chemistry, 2020, , 65-83.	0.4	6
54	Dissolution of molybdenite roasting flue dust in sulfuric acid: kinetics and mechanism for molybdenum and rhenium leaching. Chemical Papers, 2022, 76, 4049-4058.	2.2	6

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55	Leaching of Gold from the Spent/End-of-Life Mobile Phone-PCBs using â€œGreener Reagentsâ€•, 2016, , 7-56.		5
56	Electrical and electronic waste in Pakistan: the management practices and perspectives. , 2020, , 263-281.		5
57	Strontium Extraction from the Geo-environment. Handbook of Environmental Chemistry, 2020, , 43-63.	0.4	4
58	Carbothermic Reduction Roasting of a Low-Grade Nickel Laterite Ore in the Modified Caron Process. Minerals, Metals and Materials Series, 2021, , 317-328.	0.4	3
59	Role of Chemistry in Alternative Energy: The Thermodynamics and Electrochemical Approach. Handbook of Environmental Chemistry, 2020, , 293-315.	0.4	2
60	Solvo-Chemical Recovery of Cerium from Sulfate Solution Using Cyanex 923 and Oxalate Precipitation. Minerals, Metals and Materials Series, 2021, , 303-310.	0.4	1
61	Resource Recovery of Cerium from Spent Catalytic Converter Using Aqueous Metallurgy. Minerals, Metals and Materials Series, 2021, , 1055-1062.	0.4	1
62	Potential and Transformational Needs of Alternative Energy in Developing Countries. Handbook of Environmental Chemistry, 2020, , 1-24.	0.4	0