

Pankaj Parhi

List of Publications by Year in descending order

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89
papers

3,429
citations

147566

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92
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docs citations

92
times ranked

2841
citing authors

#	ARTICLE	IF	CITATIONS
1	Waste Printed Circuit Boards recycling: an extensive assessment of current status. <i>Journal of Cleaner Production</i> , 2015, 94, 5-19.	4.6	439
2	Review of rare earth elements recovery from secondary resources for clean energy technologies: Grand opportunities to create wealth from waste. <i>Journal of Cleaner Production</i> , 2020, 267, 122048.	4.6	161
3	Supported Liquid Membrane Principle and Its Practices: A Short Review. <i>Journal of Chemistry</i> , 2013, 2013, 1-11.	0.9	160
4	Bioleaching approach for extraction of metal values from secondary solid wastes: A critical review. <i>Hydrometallurgy</i> , 2019, 189, 105122.	1.8	131
5	Active and passive biosorption of Pb(II) using live and dead biomass of marine bacterium <i>Bacillus xiamenensis</i> PbRPSD202: Kinetics and isotherm studies. <i>Journal of Environmental Management</i> , 2019, 247, 121-134.	3.8	126
6	Leaching kinetics study of neodymium from the scrap magnet using acetic acid. <i>Separation and Purification Technology</i> , 2016, 160, 59-66.	3.9	102
7	Therapeutic prospective of plant-induced silver nanoparticles: application as antimicrobial and anticancer agent. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2018, 46, 38-51.	1.9	97
8	Separation of copper, zinc, cobalt and nickel ions by supported liquid membrane technique using LIX 84I, TOPS-99 and Cyanex 272. <i>Separation and Purification Technology</i> , 2008, 59, 169-174.	3.9	92
9	Separation of iron(III), copper(II) and zinc(II) from a mixed sulphate/chloride solution using TBP, LIX 84I and Cyanex 923. <i>Separation and Purification Technology</i> , 2007, 55, 44-49.	3.9	87
10	Recovery of molybdenum from the sea nodule leach liquor by solvent extraction using Alamine 304-I. <i>Hydrometallurgy</i> , 2011, 105, 195-200.	1.8	72
11	Direct leaching of molybdenum and cobalt from spent hydrodesulphurization catalyst with sulphuric acid. <i>Hydrometallurgy</i> , 2012, 111-112, 46-51.	1.8	70
12	Influence of Mg doping on ZnO NPs for enhanced adsorption activity of Congo Red dye. <i>Applied Surface Science</i> , 2019, 491, 256-266.	3.1	70
13	A kinetic study on hydrochloric acid leaching of nickel from Ni-Al ₂ O ₃ spent catalyst. <i>Journal of Industrial and Engineering Chemistry</i> , 2013, 19, 589-594.	2.9	68
14	Two step meso-acidophilic bioleaching of chalcopyrite containing ball mill spillage and removal of the surface passivation layer. <i>Bioresource Technology</i> , 2013, 130, 332-338.	4.8	63
15	Recovery of molybdenum from spent catalyst leach solutions by solvent extraction with LIX 84-I. <i>Separation and Purification Technology</i> , 2010, 74, 294-299.	3.9	57
16	Extraction of scandium(III) from acidic solutions using organo-phosphoric acid reagents: A comparative study. <i>Separation and Purification Technology</i> , 2018, 202, 248-258.	3.9	57
17	Separation of cobalt and nickel from ammoniacal sulphate solution using Cyanex 272. <i>Separation and Purification Technology</i> , 2008, 59, 310-317.	3.9	56
18	A study on extraction of copper using LIX 84-I and LIX 622N. <i>Separation and Purification Technology</i> , 2009, 70, 58-62.	3.9	52

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19	Liquid-liquid extraction and separation of total rare earth (RE) metals from polymetallic manganese nodule leaching solution. <i>Journal of Rare Earths</i> , 2015, 33, 207-213.	2.5	51
20	Biosynthesized gold nanoparticles as photocatalysts for selective degradation of cationic dye and their antimicrobial activity. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 400, 112704.	2.0	51
21	Extraction of metal values from waste spent petroleum catalyst using acidic solutions. <i>Separation and Purification Technology</i> , 2012, 101, 85-90.	3.9	48
22	Effect of calcination temperature on morphology and phase transformation of MnO ₂ nanoparticles: A step towards green synthesis for reactive dye adsorption. <i>Chemosphere</i> , 2022, 288, 132472.	4.2	48
23	Removal of Congo Red dye from aqueous solution using Amberlite IRA-400 in batch and fixed bed reactors. <i>Chemical Engineering Communications</i> , 2018, 205, 432-444.	1.5	46
24	Bioreduction of hexavalent chromium by <i>Exiguobacterium indicum</i> strain MW1 isolated from marine water of Paradip Port, Odisha, India. <i>Chemistry and Ecology</i> , 2017, 33, 114-130.	0.6	42
25	Extraction of metals from Mo-Ni/Al ₂ O ₃ spent catalyst using H ₂ SO ₄ baking-leaching-solvent extraction technique. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 2036-2045.	2.9	39
26	Extraction of rare earth metals from deep sea nodule using H ₂ SO ₄ solution. <i>International Journal of Mineral Processing</i> , 2013, 119, 89-92.	2.6	38
27	Separation and recovery of neodymium and praseodymium from permanent magnet scrap through the hydrometallurgical route. <i>Separation Science and Technology</i> , 2016, 51, 2232-2241.	1.3	38
28	Recent Advances in Urea- and Thiourea-Based Metal Complexes: Biological, Sensor, Optical, and Corrosion Inhibition Studies. <i>Comments on Inorganic Chemistry</i> , 2019, 39, 127-187.	3.0	38
29	Recovery of Rhenium and Molybdenum from Molybdenite Roasting Dust Leaching Solution by Ion Exchange Resins. <i>Materials Transactions</i> , 2012, 53, 2034-2037.	0.4	36
30	Green strategies in formulating, stabilizing and pipeline transportation of coal water slurry in the framework of WATER-ENERGY NEXUS: A state of the art review. <i>Energy Nexus</i> , 2021, 4, 100025.	3.3	36
31	Ultrasound and Microwave assisted leaching of neodymium from waste magnet using organic solvent. <i>Hydrometallurgy</i> , 2019, 185, 61-70.	1.8	35
32	Application of sequential leaching, risk indices and multivariate statistics to evaluate heavy metal contamination of estuarine sediments: Dhamara Estuary, East Coast of India. <i>Environmental Monitoring and Assessment</i> , 2013, 185, 6719-6737.	1.3	33
33	Stabilization and Rheological Behavior of Fly Ash-Water Slurry Using a Natural Dispersant in Pipeline Transportation. <i>ACS Omega</i> , 2019, 4, 21604-21611.	1.6	33
34	Combined effect of natural dispersant and a stabilizer in formulation of high concentration coal water slurry: Experimental and rheological modeling. <i>Journal of Molecular Liquids</i> , 2020, 320, 114441.	2.3	33
35	Extraction of cadmium from dilute solution using supported liquid membrane. <i>Journal of Hazardous Materials</i> , 2009, 172, 773-779.	6.5	32
36	Extraction of copper from bacterial leach liquor of a low grade chalcopyrite test heap using LIX 984N-C. <i>Hydrometallurgy</i> , 2012, 121-124, 116-119.	1.8	32

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37	Column bioleaching applications, process development, mechanism, parametric effect and modelling: A review. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 90, 1-16.	2.9	30
38	Kinetics, thermodynamics and isotherm studies on adsorption of methyl orange from aqueous solution using ion exchange resin Amberlite IRA-400. , 0, 60, 249-260.		30
39	Rapid colorimetric sensing of gadolinium by EGCG-derived AgNPs: the development of a nanohybrid bioimaging probe. <i>Chemical Communications</i> , 2018, 54, 3981-3984.	2.2	29
40	Sustainable Transportation, Leaching, Stabilization, and Disposal of Fly Ash Using a Mixture of Natural Surfactant and Sodium Silicate. <i>ACS Omega</i> , 2021, 6, 22820-22830.	1.6	29
41	Separation of Co (II) and Ni (II) from the mixed sulphate/chloride solution using NaPC-88A. <i>Desalination</i> , 2011, 267, 201-208.	4.0	27
42	Acacia concinna: A natural dispersant for stabilization and transportation of fly ash-water slurry. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 99, 193-200.	2.7	27
43	pH triggered green synthesized silver nanoparticles toward selective colorimetric detection of kanamycin and hazardous sulfide ions. <i>Journal of Molecular Liquids</i> , 2018, 269, 269-277.	2.3	26
44	Environmentally friendly approach to recover vanadium and tungsten from spent SCR catalyst leach liquors using Aliquat 336. <i>RSC Advances</i> , 2020, 10, 19736-19746.	1.7	26
45	Enhancing the rheology and leachability of fly ash slurry using natural “ synthetic mixed surfactant system for hydraulic stowing in underground mines. <i>International Journal of Coal Preparation and Utilization</i> , 2022, 42, 3724-3744.	1.2	25
46	Extraction of Silk Fibroin with Several Sericin Removal Processes and its Importance in Tissue Engineering: A Review. <i>Journal of Polymers and the Environment</i> , 2022, 30, 2222-2253.	2.4	24
47	Sonochemically synthesized Ag/CaCO ₃ nanocomposites: A highly efficient reusable catalyst for reduction of 4-nitrophenol. <i>Materials Chemistry and Physics</i> , 2018, 220, 409-416.	2.0	23
48	A study on removal of Cr(III) from aqueous solution using biomass of <i>Cymbopogon flexuosus</i> immobilized in sodium alginate beads and its use as hydrogenation catalyst. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 102, 118-132.	2.7	23
49	Synthesis, structural investigations and antimicrobial studies of hydrazone based ternary complexes with Cr(III), Fe(III) and La(III) ions. <i>Journal of Saudi Chemical Society</i> , 2020, 24, 492-503.	2.4	23
50	A novel approach on leaching study for removal of toxic elements from thermal power plant-based fly ash using natural bio-surfactant. <i>Case Studies in Chemical and Environmental Engineering</i> , 2021, 4, 100156.	2.9	23
51	Behavior of Extraction, Stripping, and Separation Possibilities of Rhenium and Molybdenum from Molybdenite Roasting Dust Leaching Solution Using Amine Based Extractant Tri-Otyl-Amine (TOA). <i>Materials Transactions</i> , 2013, 54, 1209-1212.	0.4	22
52	Biochemistry, Synthesis, and Applications of Bacterial Cellulose: A Review. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 780409.	2.0	22
53	Characterization, stabilization, and study of mechanism of coal-water slurry using Sapindus Mukorossi as an additive. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2018, 40, 2502-2509.	1.2	21
54	Sustainable and Efficient Route for the Regeneration of Carbonyl Compounds from Oximes Using Aqueous Extract of <i>Sapindus laurifolia</i> under Microwave Radiation. <i>ACS Omega</i> , 2020, 5, 7716-7721.	1.6	21

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55	Citric acid mediated leaching kinetics study and comprehensive investigation on extraction of vanadium (V) from the spent catalyst. Separation and Purification Technology, 2021, 276, 119377.	3.9	21
56	Studies on Removal of Low Content Copper from the Sea Nodule Aqueous Solution using the Cationic Resin TP 207. Separation Science and Technology, 2012, 47, 1531-1541.	1.3	19
57	Aqueous extract of Shikakai; a green solvent for deoximation reaction: Mechanistic approach from experimental to theoretical. Journal of Molecular Liquids, 2020, 309, 113133.	2.3	19
58	Potential application of bacterial biofilm for bioremediation of toxic heavy metals and dye-contaminated environments. , 2020, , 267-281.		17
59	Environmental friendly approach for selective extraction and recovery of molybdenum (Mo) from a sulphate mediated spent Ni ²⁺ /Mo/Al ₂ O ₃ catalyst baked leach liquor. Journal of Environmental Management, 2022, 306, 114474.	3.8	17
60	Microwave assisted leaching investigation for the extraction of copper(II) and chromium(III) from spent catalyst. Separation and Purification Technology, 2020, 244, 116842.	3.9	16
61	Mixed-ligand complexes of ampicillin derived Schiff base ligand and Nicotinamide: Synthesis, physico-chemical studies, DFT calculation, antibacterial study and molecular docking analysis. Journal of Molecular Structure, 2021, 1229, 129832.	1.8	16
62	Molecular mechanisms of the lipopeptides from Bacillus subtilis in the apoptosis of cancer cells - A review on its Current Status in different cancer cell lines. Advances in Cancer Biology Metastasis, 2021, 3, 100019.	1.1	16
63	Environmentally friendly comprehensive hydrometallurgical method development for neodymium recovery from mixed rare earth aqueous solutions using organo-phosphorus derivatives. Scientific Reports, 2020, 10, 16911.	1.6	14
64	Kinetics, Thermodynamics and Isotherm studies on Adsorption of Eriochrome Black-T from aqueous solution using Rutile TiO ₂ . IOP Conference Series: Materials Science and Engineering, 2018, 310, 012051.	0.3	13
65	Separation and recovery of Sc(III) from Mg-Sc alloy scrap solution through hollow fiber supported liquid membrane (HFLM) process supported by Bi-functional ionic liquid as carrier. Separation Science and Technology, 2019, 54, 1478-1488.	1.3	13
66	Selective dissolution of copper from copper-chromium spent catalyst by baking-leaching process. Journal of Industrial and Engineering Chemistry, 2015, 21, 604-609.	2.9	12
67	Aqueous and chemical extraction of saponin of Acacia concinna (Willd.) Dc.: An effective Bio-surfactant solution to extract silk fibroin from muga silk cocoons. Journal of Molecular Liquids, 2022, 360, 119547.	2.3	12
68	Separation and Recovery of Molybdenum from Acidic Solution using LIX 973. Separation Science and Technology, 2014, 49, 647-655.	1.3	11
69	Biodetoxification of Toxic Heavy Metals by Marine Metal Resistant Bacteria- A Novel Approach for Bioremediation of the Polluted Saline Environment. , 2017, , 343-376.		11
70	Nanoceria: A rare-earth nanoparticle as a promising anti-cancer therapeutic agent in colon cancer. Materials Science in Semiconductor Processing, 2019, 104, 104669.	1.9	9
71	Prospective Utilization of Coal Fly Ash for Making Advanced Materials. , 2021, , 511-531.		9
72	An efficient synthesis towards the core of Crinipellin: TD-DFT and docking studies. Journal of Saudi Chemical Society, 2021, 25, 101193.	2.4	9

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73	Adsorptive removal of Congo Red dye from aqueous solution using TiO ₂ nanoparticles: Kinetics, thermodynamics and isothermal insights. AIP Conference Proceedings, 2019, , .	0.3	8
74	Characterization and Utilization of Coal Ash for Synthesis of Building Materials. , 2021, , 487-509.		7
75	Effect of Particle Size Distribution and Selective Alcohol Additives for Preparation of High Concentration Coal-Water Slurry. Micro and Nanosystems, 2020, 12, 102-111.	0.3	7
76	Adsorption of xylenol orange dye on nano ZnO: Kinetics, thermodynamics and isotherm study. AIP Conference Proceedings, 2017, , .	0.3	6
77	EXPERIMENTAL STUDIES AND PARAMETER OPTIMIZATION OF SEPARATION OF COPPER USING HOLLOW FIBER-SUPPORTED LIQUID MEMBRANE. Chemical Engineering Communications, 2013, 200, 1237-1250.	1.5	5
78	Sour beer production in India using a coculture of <i>Saccharomyces pastorianus</i> and <i>Lactobacillus plantarum</i> : optimization, microbiological, and biochemical profiling. Brazilian Journal of Microbiology, 2022, 53, 947-958.	0.8	5
79	Process optimization and extraction of nickel by hollow fiber membrane using response surface methodology. Mining, Metallurgy and Exploration, 2012, 29, 225-230.	0.4	2
80	Natural Dispersant in Coal Water Slurry Stabilization. , 2021, , 39-57.		2
81	Fundamental Principle and Practices of Solvent Extraction (SX) and Supported Liquid Membrane (SLM) Process for Extraction and Separation of Rare Earth Metal(s). , 2020, , 57-85.		2
82	Processing of manganese nodule leach liquor for the separation of cobalt and nickel using PC 88A. Mining, Metallurgy and Exploration, 2009, 26, 133-140.	0.4	1
83	Room Temperature Magnetic Behavior In Nanocrystalline Ni-Doped ZrO ₂ By Microwave-Assisted Polyol Synthesis. IOP Conference Series: Materials Science and Engineering, 2017, 225, 012007.	0.3	1
84	Oxidation-Precipitation of Cobalt (II) in Aqueous Sulphate Solution Using Sodium Persulfate. Journal of Korean Institute of Metals and Materials, 2013, 51, 865-871.	0.4	1
85	Sustainable environmentally friendly approaches to the recycling of spent selective catalytic reduction (SCR) catalysts. , 2022, , 765-787.		1
86	Spent SCR Catalyst Leach Liquor Processed for Valuable Metals Extraction by Solvent Extraction Technique#. Journal of the Korean Institute of Resources Recycling, 2020, 29, 55-61.	0.4	1
87	Application of Biotechnological Approach for Making Coal an Environmentally Friendly Fuel. , 2021, , 59-69.		0
88	Multi-Elemental Profiling of In Vitro Calli clones vis-à-vis In Vitro and In Vivo Leaf Samples of a Medicinal Herb <i>Hybanthus enneaspermus</i> (L.) F. Muell. Using Energy Dispersive X-Ray Fluorescence Technique. Advanced Science Letters, 2014, 20, 769-777.	0.2	0
89	Introduction of Rare Earth Metal Recovery for Green and Clean Energy Technologies. , 2020, , 1-8.		0