

Palanivelu kandasamy

List of Publications by Year in descending order

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120
papers

5,907
citations

81900

39
h-index

74163

75
g-index

124
all docs

124
docs citations

124
times ranked

6307
citing authors

#	ARTICLE	IF	CITATIONS
1	Biosorption of nickel(II) ions onto <i>Sargassum wightii</i> : Application of two-parameter and three-parameter isotherm models. <i>Journal of Hazardous Materials</i> , 2006, 133, 304-308.	12.4	729
2	The role of ferrous ion in Fenton and photo-Fenton processes for the degradation of phenol. <i>Chemosphere</i> , 2004, 55, 1235-1243.	8.2	468
3	Electrochemical treatment of industrial wastewater. <i>Journal of Hazardous Materials</i> , 2004, 113, 123-129.	12.4	302
4	Biosorption of copper(II) and cobalt(II) from aqueous solutions by crab shell particles. <i>Bioresource Technology</i> , 2006, 97, 1411-1419.	9.6	289
5	Destruction of cresols by Fenton oxidation process. <i>Water Research</i> , 2005, 39, 3062-3072.	11.3	231
6	Adsorptive removal of chlorophenols from aqueous solution by low cost adsorbent Kinetics and isotherm analysis. <i>Journal of Hazardous Materials</i> , 2006, 138, 116-124.	12.4	212
7	Removal of nickel(II) ions from aqueous solution using crab shell particles in a packed bed up-flow column. <i>Journal of Hazardous Materials</i> , 2004, 113, 223-230.	12.4	179
8	Degradation of nitrophenols by Fenton and photo-Fenton processes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005, 170, 83-95.	3.9	176
9	Biosorption of cobalt(II) and nickel(II) by seaweeds: batch and column studies. <i>Separation and Purification Technology</i> , 2005, 44, 53-59.	7.9	164
10	Batch and column removal of copper from aqueous solution using a brown marine alga <i>Turbinaria ornata</i> . <i>Chemical Engineering Journal</i> , 2005, 106, 177-184.	12.7	153
11	Biosorption of copper, cobalt and nickel by marine green alga <i>Ulva reticulata</i> in a packed column. <i>Chemosphere</i> , 2005, 60, 419-426.	8.2	144
12	Preconcentration and separation of copper, nickel and zinc in aqueous samples by flame atomic absorption spectrometry after column solid-phase extraction onto MWCNTs impregnated with D2EHPA-TOPO mixture. <i>Journal of Hazardous Materials</i> , 2011, 185, 1131-1139.	12.4	137
13	Direct mineral carbonation of coal fly ash for CO ₂ sequestration. <i>Journal of Cleaner Production</i> , 2016, 112, 4173-4182.	9.3	137
14	Indirect Electrochemical Oxidation of Phenol in the Presence of Chloride for Wastewater Treatment. <i>Chemical Engineering and Technology</i> , 2005, 28, 98-105.	1.5	125
15	Recovery of phenol from aqueous solution by supported liquid membrane using vegetable oils as liquid membrane. <i>Journal of Hazardous Materials</i> , 2006, 131, 146-152.	12.4	94
16	Transport of textile dye in vegetable oils based supported liquid membrane. <i>Dyes and Pigments</i> , 2006, 70, 99-104.	3.7	87
17	Solvent extraction of hexavalent chromium with tetrabutyl ammonium bromide from aqueous solution. <i>Separation and Purification Technology</i> , 2004, 40, 279-284.	7.9	86
18	Studies on recovery of hexavalent chromium from plating wastewater by supported liquid membrane using tri-n-butyl phosphate as carrier. <i>Hydrometallurgy</i> , 2005, 78, 107-115.	4.3	83

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19	Biochar from biomass waste as a renewable carbon material for climate change mitigation in reducing greenhouse gas emissions—a review. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 2247-2267.	4.6	83
20	Sonochemical degradation of textile dyes in aqueous solution using sulphate radicals activated by immobilized cobalt ions. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 566-571.	8.2	82
21	Carbon Doping of TiO ₂ for Visible Light Photo Catalysis - A review. <i>Carbon Letters</i> , 2007, 8, 214-224.	5.9	75
22	Electrochemical Degradation of Cresols for Wastewater Treatment. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 1833-1839.	3.7	73
23	Recovery of 1-butanol from a model pharmaceutical aqueous waste by pervaporation. <i>Chemical Engineering Science</i> , 2007, 62, 2905-2914.	3.8	72
24	Di(2-ethylhexyl)phosphoric acid-coconut oil supported liquid membrane for the separation of copper ions from copper plating wastewater. <i>Journal of Environmental Sciences</i> , 2007, 19, 1446-1453.	6.1	64
25	Speciation of heavy metals in electroplating industry sludge and wastewater residue using inductively coupled plasma. <i>International Journal of Environmental Science and Technology</i> , 2007, 4, 497-504.	3.5	61
26	Treatment of nickel containing electroplating effluents with <i>Sargassum wightii</i> biomass. <i>Process Biochemistry</i> , 2006, 41, 853-859.	3.7	57
27	Selective extraction and separation of textile anionic dyes from aqueous solution by tetrabutyl ammonium bromide. <i>Dyes and Pigments</i> , 2005, 64, 251-257.	3.7	54
28	Degradation of 2,4-dichlorophenol in aqueous solution by sono-Fenton method. <i>Korean Journal of Chemical Engineering</i> , 2008, 25, 112-117.	2.7	50
29	Studies on thermoplastic polyurethane toughened poly(butylene terephthalate) blends. <i>Polymer Testing</i> , 2002, 21, 345-351.	4.8	49
30	Removal and recovery of copper from aqueous solution by eggshell in a packed column. <i>Minerals Engineering</i> , 2005, 18, 545-547.	4.3	49
31	Recovery of copper(II) through polymer inclusion membrane with di (2-ethylhexyl) phosphoric acid as carrier from e-waste. <i>Journal of Membrane Science</i> , 2012, 415-416, 663-669.	8.2	49
32	Combined electrochemical degradation and activated carbon adsorption treatments for wastewater containing mixed phenolic compounds. <i>Journal of Environmental Engineering and Science</i> , 2005, 4, 1-9.	0.8	48
33	Dechlorination of chlorophenols by zero valent iron impregnated silica. <i>Journal of Environmental Sciences</i> , 2012, 24, 765-773.	6.1	48
34	Thermoplastic polyurethane toughened polyacetal blends. <i>Polymer Testing</i> , 2000, 19, 75-83.	4.8	47
35	Crab shell-based biosorption technology for the treatment of nickel-bearing electroplating industrial effluents. <i>Journal of Hazardous Materials</i> , 2005, 119, 251-254.	12.4	47
36	Degradation of 2,4,6-trichlorophenol by photo Fenton™s like method using nano heterogeneous catalytic ferric ion. <i>Solar Energy</i> , 2010, 84, 1613-1618.	6.1	45

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37	Carbon Dioxide Capture and Utilization by Alkanolamines in Deep Eutectic Solvent Medium. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 11383-11392.	3.7	42
38	Degradation of 2-Chlorophenol by Fenton and Photo-Fenton Processes—A Comparative Study. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2003, 38, 1215-1231.	1.7	41
39	Direct mineral carbonation of steelmaking slag for CO ₂ sequestration at room temperature. <i>Environmental Science and Pollution Research</i> , 2016, 23, 7349-7359.	5.3	41
40	Synergistic effect of silane modified nanocomposites for active corrosion protection. <i>Ceramics International</i> , 2013, 39, 7619-7625.	4.8	39
41	Assessment of heavy metal species in decomposed municipal solid waste. <i>Chemical Speciation and Bioavailability</i> , 2005, 17, 95-102.	2.0	38
42	Performance of urban storm drainage network under changing climate scenarios: Flood mitigation in Indian coastal city. <i>Scientific Reports</i> , 2019, 9, 7783.	3.3	38
43	Facilitated transport of cationic dyes through a supported liquid membrane with D2EHPA as carrier. <i>Desalination</i> , 2009, 245, 19-27.	8.2	34
44	Preparation and characterization of carbon covered TiO ₂ using sucrose for solar photodegradation. <i>Journal of Industrial and Engineering Chemistry</i> , 2008, 14, 667-671.	5.8	33
45	Continuous Sorption of Copper and Cobalt By Crab Shell Particles in a Packed Column. <i>Environmental Technology (United Kingdom)</i> , 2005, 26, 267-276.	2.2	32
46	Sunlight-Induced Photocatalytic Degradation of Organic Pollutants by Carbon-Modified Nanotitania with Vegetable Oil as Precursor. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 3130-3138.	3.7	31
47	Climate change projections over India by a downscaling approach using PRECIS. <i>Asia-Pacific Journal of Atmospheric Sciences</i> , 2016, 52, 353-369.	2.3	31
48	Projection of climate change-induced sea-level rise for the coasts of Tamil Nadu and Puducherry, India using SimCLIM: a first step towards planning adaptation policies. <i>Journal of Coastal Conservation</i> , 2017, 21, 731-742.	1.6	29
49	Facile fabrication of core-shell Pr ₆ O ₁₁ -ZnO modified silane coatings for anti-corrosion applications. <i>Applied Surface Science</i> , 2014, 288, 60-68.	6.1	26
50	Nickel Recovery from Aqueous Solution Using Crab Shell Particles. <i>Adsorption Science and Technology</i> , 2005, 23, 303-312.	3.2	24
51	Recovery of Chromium from Electroplating Wastewater Using DI-(Ethylhexyl) Phosphoric Acid. <i>Separation Science and Technology</i> , 2005, 40, 2125-2137.	2.5	24
52	ELECTROCHEMICAL OXIDATION OF RESORCINOL FOR WASTEWATER TREATMENT USING Ti/TiO ₂ -RuO ₂ -IrO ₂ ELECTRODE. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2001, 36, 1997-2010.	1.7	23
53	Absorption of carbon dioxide in alkanolamine and vegetable oil mixture and isolation of 2-amino-2-methyl-1-propanol carbamate. <i>Journal of CO₂ Utilization</i> , 2014, 6, 45-52.	6.8	23
54	Degradation of phenol and trichlorophenol by heterogeneous photo-Fenton process using Granular Ferric Hydroxide®: comparison with homogeneous system. <i>International Journal of Environmental Science and Technology</i> , 2016, 13, 927-936.	3.5	23

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55	Spatiotemporal analysis of projected impacts of climate change on the major C3 and C4 crop yield under representative concentration pathway 4.5: Insight from the coasts of Tamil Nadu, South India. PLoS ONE, 2017, 12, e0180706.	2.5	22
56	A Self-Supported Direct Borohydride-Hydrogen Peroxide Fuel Cell System. Energies, 2009, 2, 190-201.	3.1	20
57	Treatability studies on textile effluent for total dissolved solids reduction using electrodialysis. Desalination, 2006, 201, 164-174.	8.2	18
58	Electrolytic Recovery of Nickel from Spent Electroless Nickel Bath Solution. E-Journal of Chemistry, 2010, 7, 1412-1420.	0.5	18
59	Climate change impact on fluvial flooding in the Indian sub-basin: A case study on the Adyar sub-basin. PLoS ONE, 2019, 14, e0216461.	2.5	18
60	Effect of Exo- and Endothermic Blowing and Wetting Agents on Morphology, Density and Hardness of Thermoplastic Polyurethanes Foams. Journal of Cellular Plastics, 2008, 44, 277-292.	2.4	16
61	Transport of cationic dye by supported liquid membrane using D2EHPA as the carrier. Coloration Technology, 2010, 126, 97-102.	1.5	15
62	Projected and Observed Aridity and Climate Change in the East Coast of South India under RCP 4.5. Scientific World Journal, The, 2015, 2015, 1-11.	2.1	15
63	Polymeric composite membranes in carbon dioxide capture process: a review. Environmental Science and Pollution Research, 2022, 29, 38735-38767.	5.3	15
64	A chemical enhancement method for the spectrophotometric determination of trace amounts of arsenic. Talanta, 1992, 39, 555-561.	5.5	14
65	Removal of CI Reactive Yellow 125, CI Reactive Red 158 and CI Reactive Red 159 dyes from aqueous solution with a supported liquid membrane containing tributylphosphate as carrier. Journal of the Textile Institute, 2006, 97, 341-348.	1.9	14
66	Investigation on the Structural and Magnetic Properties of a Polymer Composite: Polyaniline/Cr ₂ O ₃ . Polymer-Plastics Technology and Engineering, 2012, 51, 317-320.	1.9	14
67	Thermally Sprayable Anti-corrosion Marine Coatings Based on MAH-g-LDPE/UHMWPE Nanocomposites. Journal of Thermal Spray Technology, 2014, 23, 1413-1424.	3.1	14
68	Transmembrane gas transfer: Mathematics of diffusion and experimental practice. Journal of Membrane Science, 2020, 601, 117737.	8.2	14
69	Sequestration of CO ₂ by red mud with flue gas using response surface methodology. Carbon Management, 2021, 12, 139-151.	2.4	14
70	Removal and recovery of p-nitrophenol from aqueous solution using natural solid triglycerides. Desalination, 2011, 272, 196-200.	8.2	13
71	A New Additive Formulation to Enhance Photo and Biodegradation Characteristics of Polypropylene. International Journal of Polymeric Materials and Polymeric Biomaterials, 2012, 61, 793-808.	3.4	13
72	Investigation of the properties of ferromagnetic ZnO:Cr ₂ O ₃ nanocomposites. Materials Science in Semiconductor Processing, 2012, 15, 326-330.	4.0	13

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73	Praseodymium oxide modified hybrid silane coatings for anti-corrosion applications. <i>Surface Engineering</i> , 2016, 32, 47-52.	2.2	12
74	Removal of Hexavalent Chromium on Chitosan-Deposited Activated Carbon. <i>Solid State Phenomena</i> , 0, 135, 85-88.	0.3	10
75	Recovery of Sodium Bicarbonate from Textile Dye Bath Effluent Using Carbon Dioxide Gas. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 16922-16928.	3.7	10
76	Removal of textile dyes from aqueous solution using PEG based aqueous biphasic system. <i>Toxicological and Environmental Chemistry</i> , 2005, 87, 499-507.	1.2	9
77	Assessment of Population Exposure to Coarse and Fine Particulate Matter in the Urban Areas of Chennai, India. <i>Scientific World Journal</i> , The, 2015, 2015, 1-11.	2.1	9
78	Vulnerability and adaptation assessment a way forward for sustainable sectoral development in the purview of climate variability and change: insights from the coast of Tamil Nadu, India. <i>International Journal of Global Warming</i> , 2016, 10, 307.	0.5	9
79	Sequestration of carbon dioxide by red mud through direct mineral carbonation at room temperature. <i>International Journal of Global Warming</i> , 2017, 11, 23.	0.5	9
80	Carbon dioxide separation using γ -alumina ceramic tube supported cellulose triacetate-tributyl phosphate composite membrane. , 2019, 9, 287-305.		9
81	Conversion of carbon dioxide to resorcylic acid under ultrasonication by Kolbe-Schmitt reaction. <i>Ultrasonics Sonochemistry</i> , 2015, 27, 268-276.	8.2	8
82	Separation of carbon dioxide and nitrogen gases using novel composite membranes. <i>Canadian Journal of Chemistry</i> , 2017, 95, 57-67.	1.1	8
83	Trends of the observed temperature and its variations in the Tamil Nadu State of India. <i>Theoretical and Applied Climatology</i> , 2019, 137, 103-116.	2.8	8
84	Climate risks and socio-economic vulnerability in Tamil Nadu, India. <i>Theoretical and Applied Climatology</i> , 2021, 145, 121-135.	2.8	8
85	Climate portfolio™ of Pichavaram mangrove region of Tamil Nadu coast, India: an add-on information for adaptation policy planning. <i>Journal of Integrative Environmental Sciences</i> , 2014, 11, 173-186.	2.5	7
86	Efficient facilitated transport PETIM dendrimer-PVA-PEG/PTFE composite flat-bed membranes for selective removal of CO ₂ . <i>Journal of Membrane Science</i> , 2021, 622, 119007.	8.2	7
87	Thin film hydrogel polymer layered polyvinyltrimethylsilane dual layer flat bed composite membrane for CO ₂ gas separation. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	7
88	Electrospinning of Polymer-Unaided TiO ₂ Fibers and Iron Impregnation for Sunlight-Induced Photo-Fenton's Degradation of Dyes. <i>Environmental Engineering Science</i> , 2013, 30, 653-662.	1.6	6
89	Alkyl amine and vegetable oil mixture a viable candidate for CO ₂ capture and utilization. <i>Environmental Science and Pollution Research</i> , 2017, 24, 5733-5745.	5.3	6
90	Characterization of future climate extremes over Tamil Nadu, India, using high-resolution regional climate model simulation. <i>Theoretical and Applied Climatology</i> , 2019, 138, 1297-1309.	2.8	6

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91	Carbon capture and storage using coal fly ash with flue gas. <i>Clean Technologies and Environmental Policy</i> , 2022, 24, 1053-1071.	4.1	5
92	Electrochemical treatment of reactive dye effluent using solar energy. <i>Coloration Technology</i> , 2005, 121, 198-202.	1.5	4
93	Photocatalytic Degradation of Procion Blue Dye in Aqueous Solution by a TiO ₂ -Carbon Nano-Composite. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 297-302.	0.9	4
94	Mechanical and morphological behaviour of grafted UHMWPE/EVA nanoclay composites. , 2013, , .		4
95	Anti-corrosion coatings on SS 304 by incorporation of Pr ₆ O ₁₁ -TiO ₂ in siloxane network. <i>Surface Engineering and Applied Electrochemistry</i> , 2015, 51, 589-597.	0.8	4
96	Carbon dioxide capture by facilitated transport membranes: a review. <i>International Journal of Global Warming</i> , 2017, 12, 1.	0.5	4
97	Understanding the Local Perception, Adaptation to Climate Change and Resilience Planning Among the Farmers of Semi-Arid Tracks of South India. <i>Agricultural Research</i> , 2022, 11, 291-308.	1.7	4
98	Removal of Mercury in Aqueous Solutions Using Tri n-Butyl Phosphate-Based Polymer Inclusion Membrane. <i>Environmental Engineering Science</i> , 2022, 39, 650-661.	1.6	4
99	Prediction of Future Extremes During the Northeast Monsoon in the Coastal Districts of Tamil Nadu State in India Based on ENSO. <i>Pure and Applied Geophysics</i> , 2021, 178, 3207-3228.	1.9	3
100	Copper removal from aqueous solution by marine green alga <i>Ulva reticulata</i> . <i>Electronic Journal of Biotechnology</i> , 2004, 7, .	2.2	3
101	Natural solar light driven degradation of refractory chlorophenolic pollutant using. <i>Journal of Environmental Chemical Engineering</i> , 2014, 2, 1804-1812.	6.7	2
102	Enhancement of Gas Separation Properties of Polyvinyltrimethylsilane by Low-Temperature Plasma Treatment for Carbon Dioxide Utilization in "Green Chemistry" Processes. <i>Membranes and Membrane Technologies</i> , 2021, 3, 43-51.	1.9	2
103	A Study on the Degradation of 2,4-Dichlorophenol by Electrochemical Oxidation Using TiO ₂ -Modified Graphite Electrode. <i>Science of Advanced Materials</i> , 2009, 1, 186-191.	0.7	2
104	The urgent call for land degradation vulnerability assessment for conserving land quality in the purview of climate change: Perspective from South Indian Coast. <i>AIMS Agriculture and Food</i> , 2016, 1, 330-341.	1.6	2
105	Column Removal of Trichloroethylene and Dichloromethane using Low Cost Activated Carbon. <i>Carbon Letters</i> , 2010, 11, 13-21.	5.9	2
106	Vulnerability and adaptation assessment a way forward for sustainable sectoral development in the purview of climate variability and change: insights from the coast of Tamil Nadu, India. <i>International Journal of Global Warming</i> , 2016, 10, 307.	0.5	2
107	Utilization of steelmaking slag for carbon capture and storage with flue gas. <i>Environmental Science and Pollution Research</i> , 2021, , 1.	5.3	2
108	Spatio-temporal variation and sensitivity analysis of aerosol particulate matter during the COVID-19 phase-wise lockdowns in Indian cities. <i>Journal of Atmospheric Chemistry</i> , 2022, 79, 39-66.	3.2	2

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109	Biodegradation of Photo-Oxidized Low-Density Polyethylene Using Photodegradable Additive. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2014, 44, 55-64.	0.6	1
110	Waste cooking oil as an efficient solvent for the production of urea precursor ammonium carbamate from carbon dioxide. , 2021, 11, 222-231.		1
111	Sequestration of carbon dioxide by red mud through direct mineral carbonation at room temperature. International Journal of Global Warming, 2017, 11, 23.	0.5	1
112	Thermodynamic activities at 1256 K in the system nickel oxide-magnesium oxide-zinc oxide using a solid-state galvanic cell. Journal of Materials Science Letters, 1993, 12, 1927-1929.	0.5	0
113	Spatial and temporal variations of water quality in Pallikaranai wetland, Chennai, India. International Journal of Global Environmental Issues, 2019, 18, 86.	0.1	0
114	Challenges in Chennai City to Cope with Changing Climate. , 2021, 3, 33-43.		0
115	Urban Climate Change Adaptation Framework for Chennai City, India. , 2021, , 1-23.		0
116	Spatial and temporal variations of water quality in Pallikaranai wetland, Chennai, India. International Journal of Global Environmental Issues, 2019, 18, 86.	0.1	0
117	Urban Climate Change Adaptation Framework for Chennai City, India. , 2021, , 3431-3453.		0
118	Destruction of cyanide in aqueous waste by electrochemical oxidation. Annali Di Chimica, 2003, 93, 811-5.	0.6	0
119	Treatment of municipal landfill leachate by solar photocatalytic method using fixed titanium dioxide. , 2007, 49, 54-7.		0
120	Climate variability trend and extreme indices for the Thanjavur Delta region of Tamil Nadu in South India. Mausam, 2022, 73, 237-250.	0.1	0