Saravanan Pichiah

List of Publications by Year
in descending order

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109 papers	3,000 citations	147801 31 h-index	189892 50 g-index
109 all docs	109 docs citations	109 times ranked	4059 citing authors

#	Article	IF	Citations
1	Graphene oxide and Ag engulfed TiO₂ nanotube arrays for enhanced electron mobility and visible-light-driven photocatalytic performance. Journal of Materials Chemistry A, 2014, 2, 5315-5322.	10.3	158
2	Growth kinetics of an indigenous mixed microbial consortium during phenol degradation in a batch reactor. Bioresource Technology, 2008, 99, 205-209.	9.6	156
3	Synthesis of surface plasmon resonance (SPR) triggered Ag/TiO2 photocatalyst for degradation of endocrine disturbing compounds. Applied Surface Science, 2014, 319, 128-135.	6.1	149
4	Palladium nanoparticles anchored to anatase TiO₂ for enhanced surface plasmon resonance-stimulated, visible-light-driven photocatalytic activity. Beilstein Journal of Nanotechnology, 2015, 6, 428-437.	2.8	133
5	Rapid thermal reduced graphene oxide/Ptâ€“TiO2 nanotube arrays for enhanced visible-light-driven photocatalytic reduction of CO2. Applied Surface Science, 2015, 358, 122-129.	6.1	119
6	Solar photocatalytic activity of anatase TiO2 nanocrystals synthesized by non-hydrolitic solâ€“gel method. Solar Energy, 2014, 101, 321-332.	6.1	109
7	A review on the progress of nanostructure materials for energy harnessing and environmental remediation. Journal of Nanostructure in Chemistry, 2018, 8, 255-291.	9.1	93
8	Novel Ag decorated, BiOCl surface doped AgVO3 nanobelt ternary composite with Z-scheme homojunction-heterojunction interface for high prolific photo switching, quantum efficiency and hole mediated photocatalysis. Applied Catalysis B: Environmental, 2021, 293, 120224.	20.2	82
9	Photocatalytic decolourization of basic green dye by pure and Fe, Co doped TiO2 under daylight illumination. Desalination, 2011, 269, 249-253.	8.2	78
10	A Review on Advanced Oxidation Processes for Effective Water Treatment. Current World Environment Journal, 2017, 12, 469-489.	0.5	72
11	Synergetic effect of conductive polymer poly(3,4-ethylenedioxythiophene) with different structural configuration of anode for microbial fuel cell application. Bioresource Technology, 2015, 189, 364-369.	9.6	68
12	Surface reconstruction of titania with g-C3N4 and Ag for promoting efficient electrons migration and enhanced visible light photocatalysis. Applied Surface Science, 2015, 358, 370-376.	6.1	63
13	Sonophotocatalytic degradation of bisphenol A and its intermediates with graphitic carbon nitride. Environmental Science and Pollution Research, 2019, 26, 1082-1093.	5.3	63
14	Reduced graphene oxide and Ag wrapped TiO2 photocatalyst for enhanced visible light photocatalysis. APL Materials, 2015, 3, .	5.1	62
15	Batch growth kinetics of an indigenous mixed microbial culture utilizing m-cresol as the sole carbon source. Journal of Hazardous Materials, 2009, 162, 476-481.	12.4	58
16	Biodegradation of phenol and m-cresol in a batch and fed batch operated internal loop airlift bioreactor by indigenous mixed microbial culture predominantly Pseudomonas sp.. Bioresource Technology, 2008, 99, 8553-8558.	9.6	57
17	Mechanistic insights into plasmonic photocatalysts in utilizing visible light. Beilstein Journal of Nanotechnology, 2018, 9, 628-648.	2.8	54
18	M/g-C3N4 (M=Ag, Au, and Pd) composite: synthesis via sunlight photodeposition and application towards the degradation of bisphenol A. Environmental Science and Pollution Research, 2018, 25, 25401-25412.	5.3	49

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19	Enhanced magnetic separation and photocatalytic activity of nitrogen doped titania photocatalyst supported on strontium ferrite. Journal of Hazardous Materials, 2012, 199-200, 143-150.	12.4	48
20	Iron oxide nano-material: physicochemical traits and in vitro antibacterial propensity against multidrug resistant bacteria. Journal of Industrial and Engineering Chemistry, 2017, 45, 121-130.	5.8	43
21	Kinetics of phenol and m-cresol biodegradation by an indigenous mixed microbial culture isolated from a sewage treatment plant. Journal of Environmental Sciences, 2008, 20, 1508-1513.	6.1	39
22	A review on potential applications of carbon nanotubes in marine current turbines. Renewable and Sustainable Energy Reviews, 2013, 28, 331-339.	16.4	39
23	Novel self-assembled 3D flower-like magnesium hydroxide coated granular polyurethane: Implication of its potential application for the removal of heavy metals. Journal of Cleaner Production, 2019, 216, 495-503.	9.3	39
24	Sugarcane juice derived carbon dotâ€“graphitic carbon nitride composites for bisphenol A degradation under sunlight irradiation. Beilstein Journal of Nanotechnology, 2018, 9, 353-363.	2.8	38
25	Critical insight on the hydrothermal effects toward exfoliation of g-C3N4 and simultaneous in-situ deposition of carbon quantum dots. Applied Surface Science, 2019, 471, 703-713.	6.1	36
26	Review of Hybrid 1D/2D Photocatalysts for Light-Harvesting Applications. ACS Applied Nano Materials, 2021, 4, 11323-11352.	5.0	36
27	Adsorption of mercury (II) ion from aqueous solution using lowâ€cost activated carbon prepared from mango kernel. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 1-10.	1.5	35
28	Preparation of Improved p-n Junction NiO/TiO₂Nanotubes for Solar-Energy-Driven Light Photocatalysis. International Journal of Photoenergy, 2013, 2013, 1-10.	2.5	35
29	Visible light improved, photocatalytic activity of magnetically separable titania nanocomposite. Chemical Engineering Journal, 2012, 183, 349-356.	12.7	34
30	Highly efficient magnetically separable TiO2â€“graphene oxide supported SrFe12O19 for direct sunlight-driven photoactivity. Chemical Engineering Journal, 2014, 235, 264-274.	12.7	34
31	Various fabrication methods of porous ceramic supports for membrane applications. Reviews in Chemical Engineering, 2013, 29, .	4.4	33
32	Z-scheme induced g-C3N4 /WS2 heterojunction photocatalyst with improved electron mobility for enhanced solar photocatalysis. Solar Energy, 2021, 228, 53-67.	6.1	33
33	Facile reconstruction of microbial fuel cell (MFC) anode with enhanced exoelectrogens selection for intensified electricity generation. International Journal of Hydrogen Energy, 2017, 42, 1661-1671.	7.1	32
34	Improved solar light stimulated charge separation of g-C 3 N 4 through self-altering acidic treatment. Applied Surface Science, 2018, 430, 355-361.	6.1	30
35	Titanium dioxide-based sonophotocatalytic mineralization of bisphenol A and its intermediates. Environmental Science and Pollution Research, 2017, 24, 15488-15499.	5.3	29
36	Mechanistic Characteristics of Surface Modified Organic Semiconductor g-C3N4 Nanotubes Alloyed with Titania. Materials, 2017, 10, 28.	2.9	29

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37	Granular Mg-Fe layered double hydroxide prepared using dual polymers: Insights into synergistic removal of As(III) and As(V). Journal of Hazardous Materials, 2021, 403, 123883.	12.4	29
38	Treatment of phenolics containing synthetic wastewater in an internal loop airlift bioreactor (ILALR) using indigenous mixed strain of Pseudomonas sp. under continuous mode of operation. Bioresource Technology, 2009, 100, 4111-4116.	9.6	27
39	Amalgamation of N-graphene quantum dots with nanocubic like TiO2: an insight study of sunlight sensitive photocatalysis. Environmental Science and Pollution Research, 2019, 26, 3455-3464.	5.3	27
40	Magnetised nanocomposite mesoporous silica and its application for effective removal of methylene blue from aqueous solution. Separation and Purification Technology, 2015, 153, 67-75.	7.9	26
41	S-Scheme/Type-1 heterostructure stimulated WO3/g-C3N4-WS2 ternary photocatalyst with improved charge transfer mechanism for full solar spectrum photocatalysis. Journal of Alloys and Compounds, 2022, 903, 163951.	5.5	26
42	Degradation of phenol by TiO2-based heterogeneousphotocatalysts in presence of sunlight. Journal of Hydro-Environment Research, 2009, 3, 45-50.	2.2	24
43	Ag⁺, Fe³⁺and Zn²⁺-intercalated cadmium(<scp>ii</scp>)-metalâ€“organic frameworks for enhanced daylight photocatalysis. RSC Advances, 2017, 7, 51272-51280.	3.6	24
44	A subtle review on the challenges of photocatalytic fuel cell for sustainable power production. International Journal of Hydrogen Energy, 2021, 46, 22877-22906.	7.1	24
45	Metal Organic Frameworks: A New Generation Coordination Polymers for Visible Light Photocatalysis. ChemistrySelect, 2017, 2, 6163-6177.	1.5	23
46	Dopant-free oxygen-rich titanium dioxide: LED light-induced photocatalysis and mechanism insight. Journal of Materials Science, 2017, 52, 11630-11642.	3.7	21
47	In situ growth of g-C3N4 on TiO2 nanotube arrays: Construction of heterostructures for improved photocatalysis properties. Journal of Environmental Chemical Engineering, 2020, 8, 103611.	6.7	21
48	Intramolecular orbital engineered hetero bimetallic Ceâ€Fe MOF with reduced transition energy and enhanced visible light property. Applied Organometallic Chemistry, 2020, 34, e5728.	3.5	20
49	Facile green synthesis of fingernails derived carbon quantum dots for Cu2+ sensing and photodegradation of 2,4-dichlorophenol. Journal of Environmental Chemical Engineering, 2021, 9, 104622.	6.7	20
50	Preparation, characterisation and solar photoactivity of titania supported strontium ferrite nanocomposite photocatalyst. Journal of Experimental Nanoscience, 2013, 8, 295-310.	2.4	19
51	A Review on the Synergistic Features of Hexagonal Boron Nitride (White Graphene) as Adsorbentâ€Photo Active Nanomaterial. ChemistrySelect, 2018, 3, 8023-8034.	1.5	19
52	Water hyacinth derived carbon quantum dots and g-C3N4 composites for sunlight driven photodegradation of 2,4-dichlorophenol. SN Applied Sciences, 2020, 2, 1.	2.9	18
53	Challenges and implication of full solar spectrum-driven photocatalyst. Reviews in Chemical Engineering, 2021, 37, 533-560.	4.4	18
54	Nanoremediation: Sunlight mediated dye degradation using electrospun PAN/CuOâ€“ZnO nanofibrous composites. Environmental Pollution, 2021, 280, 116964.	7.5	18

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55	Adsorption isotherm, kinetic and thermodynamic studies of activated carbon prepared from <scp>Garcinia mangostana</scp> shell. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 811-818.	1.5	17
56	A ligand strategic approach with Cu-MOF for enhanced solar light photocatalysis. New Journal of Chemistry, 2018, 42, 11124-11130.	2.8	16
57	Mechanism insight of dual synergistic effects of plasmonic Pd-SrTiO3 for enhanced solar energy photocatalysis. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	16
58	Improved charge carrier dynamics through a type II staggered Ce MOF/mc BiVO4 n-n heterojunction for enhanced visible light utilisation. Applied Surface Science, 2021, 553, 149556.	6.1	16
59	Responses of surface modeling and optimization of Brilliant Green adsorption by adsorbent prepared fromCitrus limettapeel. Desalination and Water Treatment, 2012, 50, 367-375.	1.0	15
60	Intimate coupling of electro and biooxidation of tannery wastewater. Desalination and Water Treatment, 2013, 51, 6617-6623.	1.0	15
61	Graphite nanopowder functionalized 3-D acrylamide polymeric anode for enhanced performance of microbial fuel cell. International Journal of Hydrogen Energy, 2020, 45, 23411-23421.	7.1	15
62	Surface chemistry and adsorption mechanism of cadmium ion on activated carbon derived from Garcinia mangostana shell. Korean Journal of Chemical Engineering, 2013, 30, 1904-1910.	2.7	14
63	Metal free and sunlight driven g-C3N4 based photocatalyst using carbon quantum dots from Arabian dates: Green strategy for photodegradation of 2,4-dichlorophenol and selective detection of Fe3+. Diamond and Related Materials, 2021, 120, 108679.	3.9	14
64	In-situ growth of manganese oxide on self-assembled 3D- magnesium hydroxide coated on polyurethane: Catalytic oxidation mechanism and application for Mn(II) removal. Journal of Hazardous Materials, 2022, 424, 127267.	12.4	13
65	Feasibility of m-cresol degradation using an indigenous mixed microbial culture with glucose as co-substrate. Clean Technologies and Environmental Policy, 2008, 10, 303-308.	4.1	12
66	Symbiotic Interaction of Amalgamated Photocatalysts with Improved Day Light Utilisation and Charge Separation. ChemistrySelect, 2017, 2, 84-89.	1.5	12
67	Facile Biosynthesis of ZnO and Iron Doped ZnO Nano-Catalyst: Physicochemical Traits and Multifunctional Applications. Journal of Bionanoscience, 2017, 11, 114-122.	0.4	10
68	Construction of highly efficient separable p-n junction based light driven composite (NiFe2O4/MnWO4) for improved solar light utilisation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 642, 128716.	4.7	10
69	Biodegradation kinetics of phenol by predominantlyPseudomonassp. in a batch shake flask. Desalination and Water Treatment, 2011, 36, 99-104.	1.0	8
70	Polymeric Materials for 3D Bioprinting. , 2019, , 63-81.		8
71	Environmental remediation using nano-photocatalyst under visible light irradiation: the case of bismuth phosphate. , 2020, , 193-207.		7
72	Recent progress on visible active nanostructured energy materials for water split generated hydrogen. Journal of Nanostructure in Chemistry, 2021, 11, 69-92.	9.1	7

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73	Active layer modification of commercial nanofiltration membrane using <scp>CuBTC</scp>/<scp>PVA</scp> matrix for improved surface and separation characteristics. Journal of Applied Polymer Science, 2021, 138, app50508.	2.6	7
74	Polydopamine modified silk fibroin 3-D anode for enhanced microbial fuel cell operation. Sustainable Energy Technologies and Assessments, 2022, 49, 101696.	2.7	7
75	Light Driven Nanomaterials for Removal of Agricultural Toxins. Sustainable Agriculture Reviews, 2016, , 225-242.	1.1	6
76	Sonocatalytic reduction of nitrate using magnetic layered double hydroxide: Implications for removal mechanism. Chemosphere, 2019, 218, 799-809.	8.2	6
77	Studies on growth kinetics of predominantly Pseudomonas sp. in internal loop airlift bioreactor using phenol and m-cresol. Korean Journal of Chemical Engineering, 2011, 28, 1550-1555.	2.7	5
78	Synthesis, Features and Solar-Light-Driven Photocatalytic Activity of TiO₂ Nanotube Arrays Loaded with SnO₂. Journal of Nanoscience and Nanotechnology, 2014, 14, 7001-7009.	0.9	5
79	Engineered Carbon Nanotubes: Review on the Role of Surface Chemistry, Mechanistic Features, and Toxicology in the Adsorptive Removal of Aquatic Pollutants.. ChemistrySelect, 2018, 3, 1040-1055.	1.5	5
80	C-Dot TiO₂nanorod composite for enhanced quantum efficiency under direct sunlight. RSC Advances, 2020, 10, 19490-19500.	3.6	5
81	Perspective View on Materialistic, Mechanistic and Operating Challenges of Microbial Fuel Cell on Commercialisation and Their Way Ahead. ChemistrySelect, 2019, 4, 1601-1612.	1.5	5
82	Hydrodynamics and batch biodegradation of phenol in an Internal Loop Airlift Reactor. International Journal of Environmental Engineering, 2010, 2, 303.	0.1	4
83	Sunlight Photodeposition of Gold nanoparticles onto Graphitic Carbon Nitride (g-C₃N₄) and Application Towards the Degradation of Bisphenol A. IOP Conference Series: Materials Science and Engineering, 0, 409, 012008.	0.6	4
84	Industrial application of light-driven nanomaterial. , 2019, , 151-179.		4
85	Microbial fuel cell: a prospective sustainable solution for energy and environmental crisis. International Journal of Biosensors & Bioelectronics, 2018, 4, .	0.2	4
86	Nanocrystal TiO₂ Engulfed SiO₂-Barium Hexaferrite for Enhanced Electrons Mobility and Solar Harvesting Potential. Materials Science Forum, 2015, 819, 226-231.	0.3	3
87	Preparation and characterization of zeolite polymer composite proton exchange membrane. Desalination and Water Treatment, 0, , 1-9.	1.0	3
88	Physical Mixing Of N-Doped Graphene Quantum Dots Functionalized TiO₂ For Sustainable Degradation Of Methylene Blue. IOP Conference Series: Materials Science and Engineering, 0, 409, 012009.	0.6	3
89	Biocatalyst physiology and interplay: a protagonist of MFC operation. Environmental Science and Pollution Research, 2021, 28, 43217-43233.	5.3	3
90	Perovskite Oxideâ€“Based Photocatalysts for Excellent Visible Lightâ€“Driven Photocatalysis and Energy Conversion. Nanotechnology in the Life Sciences, 2019, , 35-54.	0.6	3

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91	Synergized mechanistic and solar photocatalysis features of N-TiO₂ functionalised activated carbon. AIMS Materials Science, 2017, 4, 800-813.	1.4	3
92	Synthesis and characterization of proton exchange membrane employing waste polystyrene as precursor. Natural Resources & Engineering, 2016, 1, 35-42.	0.3	2
93	Titania with Alkaline Treated Graphitic Carbon Nitride (g-C3N4) to Improve Photocatalysis Properties. IOP Conference Series: Materials Science and Engineering, 2017, 205, 012023.	0.6	2
94	Solar Light Harvesting N-Graphene Quantum Dots Decorated TiO2 for Enhanced Photocatalytic Activity. E3S Web of Conferences, 2018, 65, 05014.	0.5	2
95	Bioinspired Synthesis of Carbon Dots/g-C3N4 Nanocomposites for Photocatalytic Application. E3S Web of Conferences, 2018, 65, 05015.	0.5	2
96	Visible light responsive BiPO₄/g-C₃N₄ for enhanced photocatalysis of 2-4 dichlorophenol under solar irradiation. IOP Conference Series: Materials Science and Engineering, 2020, 917, 012007.	0.6	2
97	Significance of rod shape transformation of tetrahedral TiO2 under thermal influence for enhanced solar photocatalysis. Research on Chemical Intermediates, 2021, 47, 2339.	2.7	2
98	Accelerated sunlight photocatalysis through improved electron mobility between g-C3N4 and BiPO4 nanomaterial. Environmental Science and Pollution Research, 2022, 29, 86068-86076.	5.3	2
99	Heterojunction formation between AgNbO3 and Co3O4 for full solar light utilization with improved charge-carrier separation. Photochemical and Photobiological Sciences, 2022, 21, 1735-1750.	2.9	2
100	Kinetics of growth and multi substrate degradation by an indigenous mixed microbial culture isolated from a wastewater treatment plant in Guwahati, India. Water Science and Technology, 2008, 58, 1101-1106.	2.5	1
101	Nano-Structured Magnesium Oxide Coated Iron Ore: Its Application to the Remediation of Wastewater Containing Lead. Journal of Nanoscience and Nanotechnology, 2015, 15, 9603-9611.	0.9	1
102	Black carbon aerosols from the coal seam of eastern India: A real-time analysis with statistical validation. Journal of Earth System Science, 2019, 128, 1.	1.3	1
103	Green Carbon Dots for Metal Sensing. Materials Science Forum, 0, 962, 36-40.	0.3	1
104	Thermo-photodynamic perspective of the simultaneous S-Scheme ternary heterostructure through Ag3VO4 shuttle for the increased photo-redox ability. Applied Materials Today, 2022, 27, 101435.	4.3	1
105	Design of homemade photoreactor for dye removal upon irradiation by sunlight. AIP Conference Proceedings, 2021, , .	0.4	0
106	Design of photoreactor with high sunlight concentration for improved photocatalytic degradation of dye pollutant. IOP Conference Series: Earth and Environmental Science, 2021, 646, 012012.	0.3	0
107	Carbon Dots Synthesized from Green Precursors with an Amplified Photoluminescence: Synthesis, Characterization, and Its Application. Nanotechnology in the Life Sciences, 2019, , 1-33.	0.6	0
108	FACILE TECHNIQUE FOR THE IMMOBILISATION OF TIO2 NANOPARTICLES ON GLASS SUBSTRATES FOR APPLICATIONS IN THE PHOTOCATALYTIC SELF-CLEANING OF INDOOR AIR POLLUTANTS. Malaysian Journal of Analytical Sciences, 2019, 23, .	0.1	0

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109	Amalgamation of g-C₃N₄ with KNbO₃ for enhanced removal of Bisphenol A under sunlight irradiation. IOP Conference Series: Earth and Environmental Science, 2021, 945, 012052.	0.3	0