

# Sekar Karthikeyan

## List of Publications by Year in descending order

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75  
papers

4,326  
citations

147566

31  
h-index

106150

65  
g-index

75  
all docs

75  
docs citations

75  
times ranked

5354  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Enhanced photocatalytic activity of ZnO/CuO nanocomposite for the degradation of textile dye on visible light illumination. <i>Materials Science and Engineering C</i> , 2013, 33, 91-98.  | 3.8  | 923       |
| 2  | A new approach for the degradation of high concentration of aromatic amine by heterocatalytic Fenton oxidation: Kinetic and spectroscopic studies. <i>Journal of Molecular Liquids</i> , 2012, 173, 153-163.   | 2.3  | 521       |
| 3  | Cobalt promoted TiO <sub>2</sub> /GO for the photocatalytic degradation of oxytetracycline and Congo Red. <i>Applied Catalysis B: Environmental</i> , 2017, 201, 159-168.  | 10.8 | 298       |
| 4  | Treatment of textile wastewater by homogeneous and heterogeneous Fenton oxidation processes. <i>Desalination</i> , 2011, 281, 438-445.   | 4.0  | 218       |
| 5  | g-C <sub>3</sub> N <sub>4</sub> -Based Nanomaterials for Visible Light-Driven Photocatalysis. <i>Catalysts</i> , 2018, 8, 74.  | 1.6  | 188       |
| 6  | Cu and Fe oxides dispersed on SBA-15: A Fenton type bimetallic catalyst for N,N -diethyl- p -phenyl diamine degradation. <i>Applied Catalysis B: Environmental</i> , 2016, 199, 323-330.   | 10.8 | 119       |
| 7  | Adsorption of ammonium ion by coconut shell-activated carbon from aqueous solution: kinetic, isotherm, and thermodynamic studies. <i>Environmental Science and Pollution Research</i> , 2013, 20, 533-542.   | 2.7  | 112       |
| 8  | Multi-functional properties of ternary CeO <sub>2</sub> /SnO <sub>2</sub> /rGO nanocomposites: Visible light driven photocatalyst and heavy metal removal. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 346, 32-45.                              | 2.0  | 109       |
| 9  | Cubic Cu <sub>2</sub> O nanoparticles decorated on TiO <sub>2</sub> nanofiber heterostructure as an excellent synergistic photocatalyst for H <sub>2</sub> production and sulfamethoxazole degradation. <i>Applied Catalysis B: Environmental</i> , 2021, 294, 120221.     | 10.8 | 79        |
| 10 | Synthesis and characterization of mesoporous activated carbon from rice husk for adsorption of glycine from alcohol-aqueous mixture. <i>Journal of Molecular Liquids</i> , 2013, 177, 416-425.   | 2.3  | 75        |
| 11 | Surface functionalized mesoporous activated carbon for the immobilization of acidic lipase and their application to hydrolysis of waste cooked oil: Isotherm and kinetic studies. <i>Process Biochemistry</i> , 2012, 47, 435-445.   | 1.8  | 73        |
| 12 | In situ generation of hydroxyl radical by cobalt oxide supported porous carbon enhance removal of refractory organics in tannery dyeing wastewater. <i>Journal of Colloid and Interface Science</i> , 2015, 448, 163-174.  | 5.0  | 73        |
| 13 | Fenton-like degradation of Bisphenol A catalyzed by mesoporous Cu/TUD-1. <i>Applied Surface Science</i> , 2017, 393, 67-73.  | 3.1  | 63        |
| 14 | Surfactant- and template-free hydrothermal assembly of Cu <sub>2</sub> O visible light photocatalysts for trimethoprim degradation. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119741.   | 10.8 | 60        |
| 15 | Hydroxyl radical generation by cactus-like copper oxide nanoporous carbon catalysts for microcystin-LR environmental remediation. <i>Catalysis Science and Technology</i> , 2016, 6, 530-544.  | 2.1  | 58        |
| 16 | Fabrication and characterization of ternary sepiolite/g-C <sub>3</sub> N <sub>4</sub> /Pd composites for improvement of photocatalytic degradation of ciprofloxacin under visible light irradiation. <i>Journal of Colloid and Interface Science</i> , 2020, 577, 397-405. | 5.0  | 58        |
| 17 | Characterization of iron impregnated polyacrylamide catalyst and its application to the treatment of municipal wastewater. <i>RSC Advances</i> , 2013, 3, 15044.   | 1.7  | 48        |
| 18 | Controlled synthesis and characterization of electron rich iron (<math>Fe</math>) oxide doped nanoporous activated carbon for the catalytic oxidation of aqueous ortho phenylene diamine. <i>RSC Advances</i> , 2014, 4, 19183-19195.                                      | 1.7  | 48        |

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|----|--|-----|-----------|
| 19 | Three dimensional electro catalytic oxidation of aniline by boron doped mesoporous activated carbon. Journal of Industrial and Engineering Chemistry, 2015, 21, 942-950.   | 2.9 | 48        |
| 20 | Template free mild hydrothermal synthesis of core-shell Cu <sub>2</sub> O(Cu)@CuO visible light photocatalysts for <i>N</i> -acetyl- <i>p</i> -aminophenol degradation. Journal of Materials Chemistry A, 2019, 7, 20767-20777.          | 5.2 | 46        |
| 21 | Process optimization for the treatment of pharmaceutical wastewater catalyzed by poly sulphha sponge. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1739-1747.  | 2.7 | 45        |
| 22 | Crumpled sheet like graphene based WO <sub>3</sub> -Fe <sub>2</sub> O <sub>3</sub> nanocomposites for enhanced charge transfer and solar photocatalysts for environmental remediation. Applied Surface Science, 2019, 470, 114-128.      | 3.1 | 45        |
| 23 | Size-Dependent Visible Light Photocatalytic Performance of Cu <sub>2</sub> O Nanocubes. ChemCatChem, 2018, 10, 3554-3563.  | 1.8 | 44        |
| 24 | Fabrication and characterization of carbon quantum dots decorated hollow porous graphitic carbon nitride through polyaniline for photocatalysis. Chemical Engineering Journal, 2021, 426, 131739.  | 6.6 | 44        |
| 25 | In situ generation of a hydroxyl radical by nanoporous activated carbon derived from rice husk for environmental applications: kinetic and thermodynamic constants. Physical Chemistry Chemical Physics, 2014, 16, 3924.                 | 1.3 | 41        |
| 26 | Importance of ZnTiO <sub>3</sub> Phase in ZnTi-Mixed Metal Oxide Photocatalysts Derived from Layered Double Hydroxide. ACS Applied Materials & Interfaces, 2020, 12, 9169-9180.  | 4.0 | 41        |
| 27 | Single-step synthesis of oxygen-doped hollow porous graphitic carbon nitride for photocatalytic ciprofloxacin decomposition. Chemical Engineering Journal, 2021, 425, 130502.  | 6.6 | 41        |
| 28 | Delaminated CoAl-Layered Double Hydroxide@TiO <sub>2</sub> Heterojunction Nanocomposites for Photocatalytic Reduction of CO <sub>2</sub> . Particle and Particle Systems Characterization, 2018, 35, 1700317.                            | 1.2 | 40        |
| 29 | Heterocatalytic Fenton oxidation process for the treatment of tannery effluent: kinetic and thermodynamic studies. Environmental Science and Pollution Research, 2012, 19, 1828-1840.  | 2.7 | 39        |
| 30 | Pompon Dahliaklike Cu <sub>2</sub> O/rGO Nanostructures for Visible Light Photocatalytic H <sub>2</sub> Production and 4-Chlorophenol Degradation. ChemCatChem, 2020, 12, 1699-1709.   | 1.8 | 34        |
| 31 | Immobilization of Bacillus sp. in mesoporous activated carbon for degradation of sulphonated phenolic compound in wastewater. Materials Science and Engineering C, 2013, 33, 735-745.  | 3.8 | 33        |
| 32 | Oxidation of refractory organics by heterogeneous Fenton to reduce organic load in tannery wastewater. Clean Technologies and Environmental Policy, 2013, 15, 245-253.   | 2.1 | 33        |
| 33 | Characterisation and recovery of sodium chloride from salt-laden solid waste generated from leather industry. Clean Technologies and Environmental Policy, 2013, 15, 117-124.  | 2.1 | 32        |
| 34 | Preparation, characterizations and its application of heterogeneous Fenton catalyst for the treatment of synthetic phenol solution. Journal of Molecular Liquids, 2013, 177, 402-408.  | 2.3 | 31        |
| 35 | A promising Zn-Ti layered double hydroxide/Fe-bearing montmorillonite composite as an efficient photocatalyst for Cr(VI) reduction: Insight into the role of Fe impurity in montmorillonite. Applied Surface Science, 2021, 546, 148835. | 3.1 | 30        |
| 36 | Energy-resolved distribution of electron traps for O/S-doped carbon nitrides by reversed double-beam photoacoustic spectroscopy and the photocatalytic reduction of Cr( <sup>vi</sup> ). Chemical Communications, 2020, 56, 3793-3796.   | 2.2 | 28        |

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|----|--|-----|-----------|
| 37 | Response surface modeling for optimization heterocatalytic Fenton oxidation of persistence organic pollution in high total dissolved solid containing wastewater. <i>Environmental Science and Pollution Research</i> , 2014, 21, 1489-1502. | 2.7 | 26        |
| 38 | Facile green synthesis and antimicrobial performance of Cu <sub>2</sub> O nanospheres decorated g-C <sub>3</sub> N <sub>4</sub> nanocomposite. <i>Materials Research Bulletin</i> , 2019, 112, 331-335.                                      | 2.7 | 26        |
| 39 | Recent development of organic-inorganic hybrid photocatalysts for biomass conversion into hydrogen production. <i>Nanoscale Advances</i> , 2022, 4, 2561-2582.   | 2.2 | 24        |
| 40 | Hierarchical bismuth vanadate/reduced graphene oxide composite photocatalyst for hydrogen evolution and bisphenol A degradation. <i>Applied Materials Today</i> , 2021, 22, 100963.  | 2.3 | 23        |
| 41 | Hierarchical TiO <sub>2</sub> spheroids decorated g-C <sub>3</sub> N <sub>4</sub> nanocomposite for solar driven hydrogen production and water depollution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 3709-3721.           | 3.8 | 21        |
| 42 | Recent development on core-shell photo(electro)catalysts for elimination of organic compounds from pharmaceutical wastewater. <i>Chemosphere</i> , 2022, 298, 134311.  | 4.2 | 21        |
| 43 | Sustainable preparation and enhanced photocatalytic activity of Ag/AgBr@G nanocomposite for degradation of water pollutants under visible light. <i>Applied Surface Science</i> , 2021, 553, 149555.   | 3.1 | 20        |
| 44 | Synthesis, characterization, and application of MOF@clay composite as a visible light-driven photocatalyst for Rhodamine B degradation. <i>Chemosphere</i> , 2022, 291, 132922.  | 4.2 | 20        |
| 45 | A simple tactic synthesis of hollow porous graphitic carbon nitride with significantly enhanced photocatalytic performance. <i>Chemical Communications</i> , 2021, 57, 6772-6775.  | 2.2 | 19        |
| 46 | Fabrication of graphitic carbon nitride/ZnTi-mixed metal oxide heterostructure: Robust photocatalytic decomposition of ciprofloxacin. <i>Journal of Alloys and Compounds</i> , 2022, 906, 164294.  | 2.8 | 19        |
| 47 | Heterogeneous Fenton oxidation of dissolved organics in salt-laden wastewater from leather industry without sludge production. <i>Environmental Chemistry Letters</i> , 2011, 9, 499-504.  | 8.3 | 18        |
| 48 | Arachis hypogaea derived activated carbon/Pt catalyst: Reduction of organic dyes. <i>Surfaces and Interfaces</i> , 2018, 13, 101-111.  | 1.5 | 18        |
| 49 | Integrated Bacillus sp. immobilized cell reactor and Synechocystis sp. algal reactor for the treatment of tannery wastewater. <i>Environmental Science and Pollution Research</i> , 2013, 20, 281-291.                                       | 2.7 | 17        |
| 50 | Simultaneous removal of NH <sub>4</sub> <sup>+</sup> -N and refractory organics through sequential heterogeneous Fenton oxidation process and struvite precipitation: kinetic study. <i>RSC Advances</i> , 2016, 6, 4250-4261.               | 1.7 | 17        |
| 51 | Single-step synthesis of efficient nanometric boron carbon nitride semiconductor for photocatalysis. <i>Materials Research Bulletin</i> , 2021, 134, 111106.   | 2.7 | 17        |
| 52 | Synergistic ternary porous CN@PPy@MMt nanocomposite for efficient photocatalytic metronidazole mineralization: performance, mechanism, and pathways. <i>Environmental Science: Nano</i> , 2021, 8, 2261-2276.                                | 2.2 | 16        |
| 53 | The birefringence spectroscopic studies on ferroelectric glycine phosphite (GPI) single crystals. <i>Materials Science-Poland</i> , 2013, 31, 1-5.   | 0.4 | 15        |
| 54 | Nanoporous activated carbon fluidized bed catalytic oxidations of aqueous o, p and m-cresols: kinetic and thermodynamic studies. <i>Environmental Science and Pollution Research</i> , 2013, 20, 4790-4806.                                  | 2.7 | 14        |

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|----|--|-----|-----------|
| 55 | Synthesis and characterization of Co-NPAC and in situ hydroxyl radical generation for the oxidation of dye laden wastewater from the leather industry. <i>RSC Advances</i> , 2014, 4, 63354-63366.   | 1.7 | 14        |
| 56 | CuO-ZnO-PANI a lethal p-n-p combination in degradation of 4-chlorophenol under visible light. <i>Journal of Hazardous Materials</i> , 2021, 416, 125989.   | 6.5 | 14        |
| 57 | Synthesis of reactive iron impregnated nanoporous activated carbon and its application in anaerobic biological treatment to enhance biodegradability of ortho-phenylenediamine. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1013-1026.                                     | 1.6 | 13        |
| 58 | Sulfonated poly(ether ether ketone): efficient ion-exchange polymer electrolytes for fuel cell applications—a versatile review. <i>Materials Advances</i> , 2022, 3, 6085-6095.  | 2.6 | 13        |
| 59 | Advanced oxidation of catechol in reverse osmosis concentrate generated in leather wastewater by Cu-graphite electrode. <i>International Journal of Environmental Science and Technology</i> , 2016, 13, 2143-2152.  | 1.8 | 12        |
| 60 | NiO/nanoporous carbon heterogeneous Fenton catalyst for aqueous microcystine-LR decomposition. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 74, 289-295.   | 2.7 | 11        |
| 61 | Cobalt promoted bifunctional graphene composite (Co@pGSC) for heterogeneous peroxydisulfate activation. <i>Chemical Engineering Journal</i> , 2020, 399, 125752.   | 6.6 | 11        |
| 62 | A Critical Study of Cu <sub>2</sub> O: Synthesis and Its Application in CO <sub>2</sub> Reduction by Photochemical and Electrochemical Approaches. <i>Catalysts</i> , 2022, 12, 445.   | 1.6 | 11        |
| 63 | Boron carbonitride sheet/ Cu <sub>2</sub> O composite for an efficient photocatalytic hydrogen evolution. <i>Materials Chemistry and Physics</i> , 2018, 219, 204-211.   | 2.0 | 9         |
| 64 | Functioned silver nanoparticle loaded activated carbon for the recovery of bioactive molecule from bacterial fermenter for its bactericidal activity. <i>Applied Surface Science</i> , 2018, 427, 813-824.   | 3.1 | 9         |
| 65 | A porous activated carbon supported Pt catalyst for the oxidative degradation of poly[(naphthaleneformaldehyde)sulfonate]. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 93, 289-297.   | 2.7 | 7         |
| 66 | Fenton-type Oxidative Degradation of Diethyl-phenylenediamine by a Mesoporous Wormhole Structured Fe-TUD Catalyst. <i>Clean - Soil, Air, Water</i> , 2015, 43, 375-381.  | 0.7 | 6         |
| 67 | Enhanced photocatalytic reduction of hexavalent chromium ions over Zn-bearing in CuZn hydroxy double salts: Insight into the structural investigation using extended X-ray absorption fine structure. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 645, 128893. | 2.3 | 6         |
| 68 | Fabrication of Hydrotalcite-like Copper Hydroxyl Salts as a Photocatalyst and Adsorbent for Hexavalent Chromium Removal. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 182.   | 0.8 | 4         |
| 69 | Zinc chloride promoted the inimitable dissolution and degradation of polyethylene in a deep eutectic solvent under white light. <i>Green Chemistry</i> , 2022, 24, 2953-2961.  | 4.6 | 4         |
| 70 | Determination of the roles of Fe <sup>III</sup> in the interface between titanium dioxide and montmorillonite in Fe <sup>III</sup> -doped montmorillonite/titanium dioxide composites as photocatalysts. <i>Applied Clay Science</i> , 2022, 227, 106577.  | 2.6 | 4         |
| 71 | One-pot sustainable preparation of sunlight active ZnS@graphene nano-composites using a Zn containing surface active ionic liquid. <i>Nanoscale Advances</i> , 2020, 2, 4770-4776.   | 2.2 | 3         |
| 72 | In situ preparation of a nanocomposite comprising graphene and Fe <sup>2+</sup> -Fe <sub>2</sub> O <sub>3</sub> nanospindles for the photo-degradation of antibiotics under visible light. <i>New Journal of Chemistry</i> , 2020, 44, 15567-15573.  | 1.4 | 3         |

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|----|---|-----|-----------|
| 73 | Immobilized Micro-Organism in Mesoporous Activated Carbon for Treatment of Tannery Waste Water. Tenside, Surfactants, Detergents, 2012, 49, 472-480.                            | 0.5 | 2         |
| 74 | Fabrication of BiVO <sub>4</sub> / reduced graphene oxide photocatlyst for hexavalent chromium reduction under visible region. Materials Today: Proceedings, 2022, 50, 400-405. | 0.9 | 1         |
| 75 | Nanoscale materials with different dimensions for advanced electrocatalysts. , 2020, , 193-218.   |     | 0         |