

Rajesh J Tayade

List of Publications by Year in descending order

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59
papers

4,371
citations

172207

29
h-index

174990

52
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59
all docs

59
docs citations

59
times ranked

5662
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Photocatalytic performance and interaction mechanism of reverse micelle synthesized Cu-TiO ₂ nanomaterials towards levofloxacin under visible LED light. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 77-89. | 1.6 | 13 |
| 2 | Low temperature energy- efficient synthesis methods for bismuth-based nanostructured photocatalysts for environmental remediation application: A review. <i>Chemosphere</i> , 2022, 304, 135300. | 4.2 | 8 |
| 3 | TiO ₂ /graphene oxide nanocomposite with enhanced photocatalytic capacity for degradation of 2,4-dichlorophenoxyacetic acid herbicide. <i>Water-Energy Nexus</i> , 2021, 4, 103-112. | 1.7 | 14 |
| 4 | Biomass-Derived Humin-like Furanic Polymers as an Effective UV-Shielding Agent for Optically Transparent Thin-Film Composites. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1932-1942. | 2.0 | 10 |
| 5 | Direct dual CaIn ₂ S ₄ /Bi ₂ WO ₆ semiconductor nanocomposites with efficient inter-cross-sectional charge carrier transfer for enhanced visible light photocatalysis. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1. | 0.8 | 12 |
| 6 | Nitrogen Doped Titanium Dioxide (N-TiO ₂): Synopsis of Synthesis Methodologies, Doping Mechanisms, Property Evaluation and Visible Light Photocatalytic Applications. <i>Photochem</i> , 2021, 1, 371-410. | 1.3 | 29 |
| 7 | Enhanced photocatalytic degradation of nitrobenzene using MWCNT/β ² -ZnMoO ₄ composites under UV light emitting diodes (LEDs). <i>Materials Today Chemistry</i> , 2020, 17, 100331. | 1.7 | 11 |
| 8 | Photocatalytic degradation of pharmaceutical and pesticide compounds (PPCs) using doped TiO ₂ nanomaterials: A review. <i>Water-Energy Nexus</i> , 2020, 3, 46-61. | 1.7 | 161 |
| 9 | Synthesis Route Impact on BiVO ₄ Nanoparticles and their Visible Light Photocatalytic Activity Under Green LED Irradiation. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 5100-5115. | 0.9 | 8 |
| 10 | Rutile phase dominant TiO ₂ formed by thermal treatment and its high photocatalytic activity under narrow spectrum ultraviolet light emitting diodes. <i>Materials Research Express</i> , 2019, 6, 015049. | 0.8 | 5 |
| 11 | Effective removal of organic pollutants using GeO ₂ /TiO ₂ nanoparticle composites under direct sunlight. <i>Materials Chemistry Frontiers</i> , 2018, 2, 741-751. | 3.2 | 17 |
| 12 | Visible light driven redox-mediator-free dual semiconductor photocatalytic systems for pollutant degradation and the ambiguity in applying Z-scheme concept. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 296-311. | 10.8 | 183 |
| 13 | Recent advances based on the synergetic effect of adsorption for removal of dyes from waste water using photocatalytic process. <i>Journal of Environmental Sciences</i> , 2018, 65, 201-222. | 3.2 | 541 |
| 14 | Enhanced Photocatalytic Activity of TiO ₂ Supported on Different Carbon Allotropes for Degradation of Pharmaceutical Organic Compounds. <i>Materials Research Foundations</i> , 2018, , 139-159. | 0.2 | 0 |
| 15 | Enhanced Hydrogen Storage Properties of Hydrothermally Synthesized TiO ₂ Nanotube-Multiwall Carbon Nanotube Nanocomposite. <i>Materials Research Foundations</i> , 2018, , 258-275. | 0.2 | 0 |
| 16 | Modeling and Optimization of Photocatalytic Degradation Process of 4-Chlorophenol using Response Surface Methodology (RSM) and Artificial Neural Network (ANN). <i>Materials Research Foundations</i> , 2018, , 405-432. | 0.2 | 1 |
| 17 | Synthesis of multiwall carbon nanotubes/TiO ₂ nanotube composites with enhanced photocatalytic decomposition efficiency. <i>Catalysis Today</i> , 2017, 282, 13-23. | 2.2 | 92 |
| 18 | Direct sunlight driven photocatalytic activity of GeO ₂ / monoclinic -BiVO ₄ nanoplate composites. <i>Solar Energy</i> , 2017, 148, 87-97. | 2.9 | 22 |

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|----|---|-----|-----------|
| 19 | Recovered spinel MnCo ₂ O ₄ from spent lithium-ion batteries for enhanced electrocatalytic oxygen evolution in alkaline medium. Dalton Transactions, 2017, 46, 14382-14392. | 1.6 | 72 |
| 20 | Photocatalysis: Present, past and future. Materials Research Foundations, 2017, , 1-63. | 0.2 | 1 |
| 21 | Synthesis and characterization of ferrite-semiconductor nano composite for photocatalytic degradation of aqueous nitrobenzene solution. AIP Conference Proceedings, 2016, , . | 0.3 | 6 |
| 22 | Photocatalytic Degradation of Indigo Carmine Dye Using Hydrothermally Synthesized Anatase TiO ₂ Nanotubes under Ultraviolet Light Emitting Diode Irradiation. Materials Science Forum, 2016, 855, 45-57. | 0.3 | 4 |
| 23 | Facile synthesis of TiO ₂ /ZnFe ₂ O ₄ nanocomposite by sol-gel auto combustion method for superior visible light photocatalytic efficiency. Korean Journal of Chemical Engineering, 2016, 33, 1788-1798. | 1.2 | 21 |
| 24 | Palmyra tuber peel derived activated carbon and anatase TiO ₂ nanotube based nanocomposites with enhanced photocatalytic performance in rhodamine 6G dye degradation. Chemical Engineering Research and Design, 2016, 104, 346-357. | 2.7 | 33 |
| 25 | Synthesis and Characterization of Tantalum Based Photocatalysts and Application for Methylene Blue Degradation . Materials Science Forum, 2016, 855, 147-155. | 0.3 | 2 |
| 26 | Direct Blue Dye Degradation Using Titanium Nanostructures Under Energy-Efficient UV-LED Irradiation. Journal of Materials Engineering and Performance, 2016, 25, 83-90. | 1.2 | 9 |
| 27 | Photocatalytic efficiency of bismuth oxyhalide (Br, Cl and I) nanoplates for RhB dye degradation under LED irradiation. Journal of Industrial and Engineering Chemistry, 2016, 34, 146-156. | 2.9 | 94 |
| 28 | Facile photocatalytic reactor development using nano-TiO ₂ immobilized mosquito net and energy efficient UVLED for industrial dyes effluent treatment. Journal of Environmental Chemical Engineering, 2016, 4, 319-327. | 3.3 | 36 |
| 29 | Synergetic effect of adsorption on degradation of malachite green dye under blue LED irradiation using spiral-shaped photocatalytic reactor. Journal of Chemical Technology and Biotechnology, 2015, 90, 2280-2289. | 1.6 | 35 |
| 30 | Iron-functionalized titanium dioxide on flexible glass fibers for photocatalysis of benzene, toluene, ethylbenzene, and <i>o</i>-xylene (BTEX) under visible- or ultraviolet-light irradiation. Journal of the Air and Waste Management Association, 2015, 65, 365-373. | 0.9 | 26 |
| 31 | Synthesis of homogeneous sphere-like Bi ₂ WO ₆ nanostructure by silica protected calcination with high visible-light-driven photocatalytic activity under direct sunlight. CrystEngComm, 2015, 17, 1037-1049. | 1.3 | 52 |
| 32 | Recent developments in photocatalytic dye degradation upon irradiation with energy-efficient light emitting diodes. Chinese Journal of Catalysis, 2014, 35, 1781-1792. | 6.9 | 97 |
| 33 | Ultrasoundâ€assisted adsorption of reactive blue 21 dye on TiO ₂ in the presence of some rare earths (La, Ce, Pr & Gd). Canadian Journal of Chemical Engineering, 2014, 92, 41-51. | 0.9 | 19 |
| 34 | Enhanced direct sunlight photocatalytic oxidation of methanol using nanocrystalline TiO ₂ calcined at different temperature. Journal of Nanoparticle Research, 2014, 16, 1. | 0.8 | 8 |
| 35 | Preferential adsorption behavior of methylene blue dye onto surface hydroxyl group enriched TiO ₂ nanotube and its photocatalytic regeneration. Journal of Colloid and Interface Science, 2014, 433, 104-114. | 5.0 | 106 |
| 36 | Enhanced Photocatalytic Degradation of Aqueous Nitrobenzene Using Graphitic Carbonâ€TiO ₂ Composites. Industrial & Engineering Chemistry Research, 2014, 53, 3455-3461. | 1.8 | 55 |

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|----|---|-----|-----------|
| 37 | New Generation Energy-Efficient Light Source for Photocatalysis: LEDs for Environmental Applications. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 2073-2084. | 1.8 | 215 |
| 38 | Study on identification of leather industry wastewater constituents and its photocatalytic treatment. <i>International Journal of Environmental Science and Technology</i> , 2013, 10, 855-864. | 1.8 | 41 |
| 39 | Enhanced photocatalytic activity of bismuth-doped TiO ₂ nanotubes under direct sunlight irradiation for degradation of Rhodamine B dye. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1. | 0.8 | 135 |
| 40 | MIL-53(Al): An Efficient Adsorbent for the Removal of Nitrobenzene from Aqueous Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 10516-10524. | 1.8 | 125 |
| 41 | Energy Efficient UV-LED Source and TiO ₂ Nanotube Array-Based Reactor for Photocatalytic Application. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 7753-7762. | 1.8 | 144 |
| 42 | Photocatalytic reactor based on UV-LED/TiO ₂ coated quartz tube for degradation of dyes. <i>Chemical Engineering Journal</i> , 2011, 178, 40-49. | 6.6 | 172 |
| 43 | Study on UV-LED/TiO ₂ process for degradation of Rhodamine B dye. <i>Chemical Engineering Journal</i> , 2011, 169, 126-134. | 6.6 | 453 |
| 44 | Photocatalytic removal of organic contaminants from water exploiting tuned bandgap photocatalysts. <i>Desalination</i> , 2011, 275, 160-165. | 4.0 | 36 |
| 45 | TiO ₂ -Coated Cenospheres as Catalysts for Photocatalytic Degradation of Methylene Blue, <i>p</i> -Nitroaniline, <i>n</i> -Decane, and <i>n</i> -Tridecane under Solar Irradiation. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 8908-8919. | 1.8 | 44 |
| 46 | Photocatalytic Degradation of Nitrobenzene in an Aqueous System by Transition-Metal-Exchanged ETS-10 Zeolites. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 3961-3966. | 1.8 | 38 |
| 47 | Photocatalytic Degradation of Methylene Blue Dye Using Ultraviolet Light Emitting Diodes. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 10262-10267. | 1.8 | 248 |
| 48 | Photocatalytic Degradation of 3,3'-Dimethylbiphenyl-4,4'-diamine (<i>o</i> -Tolidine) over Nanocrystalline TiO ₂ Synthesized by Sol-Gel, Solution Combustion, and Hydrothermal Methods. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 5847-5855. | 1.8 | 33 |
| 49 | Enhanced Photocatalytic Activity by Silver Metal Ion Exchanged NaY Zeolite Photocatalysts for the Degradation of Organic Contaminants and Dyes in Aqueous Medium. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 7545-7551. | 1.8 | 32 |
| 50 | Enhanced Photocatalytic Activity of TiO ₂ -Coated NaY and HY Zeolites for the Degradation of Methylene Blue in Water. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 369-376. | 1.8 | 82 |
| 51 | Effect of Anions on the Photocatalytic Activity of Fe(III) Salts Impregnated TiO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 6196-6203. | 1.8 | 75 |
| 52 | Photocatalytic degradation of dyes and organic contaminants in water using nanocrystalline anatase and rutile TiO ₂ . <i>Science and Technology of Advanced Materials</i> , 2007, 8, 455-462. | 2.8 | 264 |
| 53 | Transition Metal Ion Impregnated Mesoporous TiO ₂ for Photocatalytic Degradation of Organic Contaminants in Water. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 5231-5238. | 1.8 | 169 |
| 54 | Photocatalytic Degradation of Aqueous Nitrobenzene by Nanocrystalline TiO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 922-927. | 1.8 | 151 |

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|----|--|-----|-----------|
| 55 | Synthesis and Characterization of Titanium Dioxide Nanotubes for Photocatalytic Degradation of Aqueous Nitrobenzene in the Presence of Sunlight. Materials Science Forum, 0, 657, 62-74. | 0.3 | 26 |
| 56 | Correlation of Surface Properties and Photocatalytic Activity of Nanocrystalline TiO ₂ on the Synthesis Route. Nano Hybrids, 0, 1, 57-80. | 0.3 | 9 |
| 57 | Metal Doped Titanium Dioxide: Synthesis and Effect of Metal Ions on Physico-Chemical and Photocatalytic Properties. Materials Science Forum, 0, 734, 364-378. | 0.3 | 40 |
| 58 | Photocatalytic Degradation of Aqueous Nitrobenzene Solution Using Nanocrystalline Mg-Mn Ferrites. Materials Science Forum, 0, 764, 116-129. | 0.3 | 25 |
| 59 | Photocatalytic H ₂ Production Using Semiconductor Nanomaterials via Water Splitting – An Overview. Advanced Materials Research, 0, 1116, 130-156. | 0.3 | 11 |