

# Chuanjia Jiang

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

15,327  
citations

31902

53  
h-index

60497

81  
g-index

82  
all docs

82  
docs citations

82  
times ranked

13007  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Ultrathin 2D/2D WO <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> step-scheme H <sub>2</sub> -production photocatalyst. Applied Catalysis B: Environmental, 2019, 243, 556-565.   | 10.8 | 1,895     |
| 2  | g-C <sub>3</sub> N <sub>4</sub> -Based Heterostructured Photocatalysts. Advanced Energy Materials, 2018, 8, 1701503.   | 10.2 | 1,870     |
| 3  | Hierarchical Porous O <sub>2</sub> -Doped g-C <sub>3</sub> N <sub>4</sub> with Enhanced Photocatalytic CO <sub>2</sub> Reduction Activity. Small, 2017, 13, 1603938.   | 5.2  | 1,025     |
| 4  | A Review of Direct Z-scheme Photocatalysts. Small Methods, 2017, 1, 1700080.   | 4.6  | 955       |
| 5  | In Situ Irradiated X-ray Photoelectron Spectroscopy Investigation on a Direct Z-scheme TiO <sub>2</sub> /CdS Composite Film Photocatalyst. Advanced Materials, 2019, 31, e1802981.   | 11.1 | 714       |
| 6  | Ag <sub>2</sub> CrO <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> /graphene oxide ternary nanocomposite Z-scheme photocatalyst with enhanced CO <sub>2</sub> reduction activity. Applied Catalysis B: Environmental, 2018, 231, 368-380. | 10.8 | 469       |
| 7  | First principle investigation of halogen-doped monolayer g-C <sub>3</sub> N <sub>4</sub> photocatalyst. Applied Catalysis B: Environmental, 2017, 207, 27-34.  | 10.8 | 422       |
| 8  | Superb adsorption capacity of hierarchical calcined Ni/Mg/Al layered double hydroxides for Congo red and Cr(VI) ions. Journal of Hazardous Materials, 2017, 321, 801-811.  | 6.5  | 417       |
| 9  | Constructing 2D/2D Fe <sub>2</sub> O <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> Direct Z-scheme Photocatalysts with Enhanced H <sub>2</sub> Generation Performance. Solar Rrl, 2018, 2, 1800006.                                      | 3.1  | 403       |
| 10 | The effect of manganese vacancy in birnessite-type MnO <sub>2</sub> on room-temperature oxidation of formaldehyde in air. Applied Catalysis B: Environmental, 2017, 204, 147-155.  | 10.8 | 362       |
| 11 | Hollow CoS Polyhedrons Act as High-Efficiency Cocatalyst for Enhancing the Photocatalytic Hydrogen Generation of g-C <sub>3</sub> N <sub>4</sub> . ACS Sustainable Chemistry and Engineering, 2018, 6, 2767-2779.                        | 3.2  | 343       |
| 12 | Room-Temperature Oxidation of Formaldehyde by Layered Manganese Oxide: Effect of Water. Environmental Science & Technology, 2015, 49, 12372-12379.   | 4.6  | 297       |
| 13 | Synthesis of hierarchical porous zinc oxide (ZnO) microspheres with highly efficient adsorption of Congo red. Journal of Colloid and Interface Science, 2017, 490, 242-251.  | 5.0  | 266       |
| 14 | In situ hydrothermal synthesis of g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> heterojunction photocatalysts with high specific surface area for Rhodamine B degradation. Applied Surface Science, 2017, 411, 400-410.              | 3.1  | 254       |
| 15 | Hybrid carbon@TiO <sub>2</sub> hollow spheres with enhanced photocatalytic CO <sub>2</sub> reduction activity. Journal of Materials Chemistry A, 2017, 5, 5020-5029.   | 5.2  | 240       |
| 16 | Room-temperature in situ fabrication of Bi <sub>2</sub> O <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> direct Z-scheme photocatalyst with enhanced photocatalytic activity. Applied Surface Science, 2018, 430, 273-282.                | 3.1  | 216       |
| 17 | Direct evidence and enhancement of surface plasmon resonance effect on Ag-loaded TiO <sub>2</sub> nanotube arrays for photocatalytic CO <sub>2</sub> reduction. Applied Surface Science, 2018, 434, 423-432.                             | 3.1  | 199       |
| 18 | Review on noble metal-based catalysts for formaldehyde oxidation at room temperature. Applied Surface Science, 2019, 475, 237-255.   | 3.1  | 196       |

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|----|---|-----|-----------|
| 19 | Synthesis of core-shell TiO <sub>2</sub> @g-C <sub>3</sub> N <sub>4</sub> hollow microspheres for efficient photocatalytic degradation of rhodamine B under visible light. <i>Applied Surface Science</i> , 2018, 430, 263-272.                                 | 3.1 | 193       |
| 20 | Mechanistic insight into the enhanced photocatalytic activity of single-atom Pt, Pd or Au-embedded g-C <sub>3</sub> N <sub>4</sub> . <i>Applied Surface Science</i> , 2018, 433, 1175-1183.   | 3.1 | 188       |
| 21 | Hierarchical porous C/MnO <sub>2</sub> composite hollow microspheres with enhanced supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8635-8643.  | 5.2 | 174       |
| 22 | Hierarchical NiS/N-doped carbon composite hollow spheres with excellent supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21257-21265.   | 5.2 | 174       |
| 23 | Review on design and evaluation of environmental photocatalysts. <i>Frontiers of Environmental Science and Engineering</i> , 2018, 12, 1.   | 3.3 | 170       |
| 24 | Surface and interface engineering of hierarchical photocatalysts. <i>Applied Surface Science</i> , 2019, 471, 43-87.  | 3.1 | 170       |
| 25 | Formaldehyde and volatile organic compound (VOC) emissions from particleboard: Identification of odorous compounds and effects of heat treatment. <i>Building and Environment</i> , 2017, 117, 118-126.   | 3.0 | 169       |
| 26 | Hierarchical flower-like nickel(II) oxide microspheres with high adsorption capacity of Congo red in water. <i>Journal of Colloid and Interface Science</i> , 2017, 504, 688-696.   | 5.0 | 167       |
| 27 | Hierarchical flower-like C/NiO composite hollow microspheres and its excellent supercapacitor performance. <i>Journal of Power Sources</i> , 2017, 359, 371-378.  | 4.0 | 154       |
| 28 | Adsorptive removal of an anionic dye Congo red by flower-like hierarchical magnesium oxide (MgO)-graphene oxide composite microspheres. <i>Applied Surface Science</i> , 2018, 435, 1136-1142.  | 3.1 | 151       |
| 29 | Hierarchical honeycomb-like Pt/NiFe-LDH/rGO nanocomposite with excellent formaldehyde decomposition activity. <i>Chemical Engineering Journal</i> , 2019, 365, 378-388.   | 6.6 | 151       |
| 30 | ZnO hierarchical microsphere for enhanced photocatalytic activity. <i>Journal of Alloys and Compounds</i> , 2018, 741, 622-632.   | 2.8 | 145       |
| 31 | Few-Layered Graphene-like Boron Nitride: A Highly Efficient Adsorbent for Indoor Formaldehyde Removal. <i>Environmental Science and Technology Letters</i> , 2017, 4, 20-25.  | 3.9 | 136       |
| 32 | Silver Nanoparticle Behavior, Uptake, and Toxicity in <i>Caenorhabditis elegans</i> : Effects of Natural Organic Matter. <i>Environmental Science &amp; Technology</i> , 2014, 48, 3486-3495.   | 4.6 | 135       |
| 33 | Fabrication of flower-like direct Z-scheme $\hat{2}$ -Bi <sub>2</sub> O <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> photocatalyst with enhanced visible light photoactivity for Rhodamine B degradation. <i>Applied Surface Science</i> , 2018, 436, 162-171. | 3.1 | 134       |
| 34 | Enhanced visible-light photocatalytic H <sub>2</sub> -generation activity of carbon/g-C <sub>3</sub> N <sub>4</sub> nanocomposites prepared by two-step thermal treatment. <i>Dalton Transactions</i> , 2017, 46, 10611-10619.                                  | 1.6 | 128       |
| 35 | Hierarchical C/NiO-ZnO nanocomposite fibers with enhanced adsorption capacity for Congo red. <i>Journal of Colloid and Interface Science</i> , 2019, 537, 736-745.  | 5.0 | 123       |
| 36 | Co <sub>3</sub> O <sub>4</sub> nanorod-supported Pt with enhanced performance for catalytic HCHO oxidation at room temperature. <i>Applied Surface Science</i> , 2017, 404, 426-434.  | 3.1 | 110       |

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|----|--|-----|-----------|
| 37 | Effects of Natural Organic Matter Properties on the Dissolution Kinetics of Zinc Oxide Nanoparticles. <i>Environmental Science &amp; Technology</i> , 2015, 49, 11476-11484.   | 4.6 | 100       |
| 38 | Fabrication of hierarchical porous ZnO-Al <sub>2</sub> O <sub>3</sub> microspheres with enhanced adsorption performance. <i>Applied Surface Science</i> , 2017, 426, 360-368.  | 3.1 | 89        |
| 39 | Flexible nickel foam decorated with Pt/NiO nanoflakes with oxygen vacancies for enhanced catalytic formaldehyde oxidation at room temperature. <i>Environmental Science: Nano</i> , 2017, 4, 2215-2224.                                      | 2.2 | 87        |
| 40 | Ultrathin Bi <sub>2</sub> WO <sub>6</sub> nanosheet decorated with Pt nanoparticles for efficient formaldehyde removal at room temperature. <i>Applied Surface Science</i> , 2018, 441, 429-437.   | 3.1 | 84        |
| 41 | Pt/C@MnO <sub>2</sub> composite hierarchical hollow microspheres for catalytic formaldehyde decomposition at room temperature. <i>Applied Surface Science</i> , 2019, 466, 301-308.  | 3.1 | 81        |
| 42 | Effect of calcination temperature on formaldehyde oxidation performance of Pt/TiO <sub>2</sub> nanofiber composite at room temperature. <i>Applied Surface Science</i> , 2017, 426, 333-341.   | 3.1 | 80        |
| 43 | The effects of Mn loading on the structure and ozone decomposition activity of MnO <sub>x</sub> supported on activated carbon. <i>Chinese Journal of Catalysis</i> , 2014, 35, 335-341.  | 6.9 | 77        |
| 44 | Construction of Z-scheme Ag <sub>2</sub> CO <sub>3</sub> /N-doped graphene photocatalysts with enhanced visible-light photocatalytic activity by tuning the nitrogen species. <i>Applied Surface Science</i> , 2017, 396, 1368-1374.         | 3.1 | 73        |
| 45 | First-principles investigation of Cu-doped ZnS with enhanced photocatalytic hydrogen production activity. <i>Chemical Physics Letters</i> , 2017, 668, 1-6.  | 1.2 | 71        |
| 46 | Hierarchical Pt/MnO <sub>2</sub> @Ni(OH) <sub>2</sub> Hybrid Nanoflakes with Enhanced Room-Temperature Formaldehyde Oxidation Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12481-12488.                             | 3.2 | 70        |
| 47 | Fabrication of hierarchical porous ZnO/NiO hollow microspheres for adsorptive removal of Congo red. <i>Applied Surface Science</i> , 2018, 435, 1002-1010.   | 3.1 | 67        |
| 48 | Catalytic decomposition and mechanism of formaldehyde over Pt@Al <sub>2</sub> O <sub>3</sub> molecular sieves at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6957-6963.   | 1.3 | 66        |
| 49 | Chestnut husk-like nickel cobaltite hollow microspheres for the adsorption of Congo red. <i>Journal of Alloys and Compounds</i> , 2018, 735, 1041-1051.  | 2.8 | 66        |
| 50 | <i>In situ</i> remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. <i>Environmental Science: Nano</i> , 2019, 6, 1283-1302.   | 2.2 | 65        |
| 51 | Enhanced room-temperature HCHO decomposition activity of highly-dispersed Pt/Al <sub>2</sub> O <sub>3</sub> hierarchical microspheres with exposed {110} facets. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 45, 197-205. | 2.9 | 63        |
| 52 | Effects of hierarchical structure on the performance of tin oxide-supported platinum catalyst for room-temperature formaldehyde oxidation. <i>Chinese Journal of Catalysis</i> , 2017, 38, 199-206.  | 6.9 | 57        |
| 53 | Environmental transformation of natural and engineered carbon nanoparticles and implications for the fate of organic contaminants. <i>Environmental Science: Nano</i> , 2018, 5, 2500-2518.  | 2.2 | 54        |
| 54 | Intracellular trafficking pathways in silver nanoparticle uptake and toxicity in <i>Caenorhabditis elegans</i> . <i>Nanotoxicology</i> , 2016, 10, 831-835.  | 1.6 | 48        |

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|----|--|-----|-----------|
| 55 | Enhanced Hydrolysis of <i>p</i> -Nitrophenyl Phosphate by Iron (Hydr)oxide Nanoparticles: Roles of Exposed Facets. <i>Environmental Science &amp; Technology</i> , 2020, 54, 8658-8667.  | 4.6 | 42        |
| 56 | Direct in situ measurement of dissolved zinc in the presence of zinc oxide nanoparticles using anodic stripping voltammetry. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 2536-2544.                           | 1.7 | 40        |
| 57 | Hierarchical NiMn <sub>2</sub> O <sub>4</sub> /rGO composite nanosheets decorated with Pt for low-temperature formaldehyde oxidation. <i>Environmental Science: Nano</i> , 2020, 7, 198-209.                                       | 2.2 | 40        |
| 58 | Pollution level and seasonal variations of carbonyl compounds, aromatic hydrocarbons and TVOC in a furniture mall in Beijing, China. <i>Building and Environment</i> , 2013, 69, 227-232.  | 3.0 | 37        |
| 59 | Relative Contributions of Copper Oxide Nanoparticles and Dissolved Copper to Cu Uptake Kinetics of Gulf Killifish ( <i>Fundulus grandis</i> ) Embryos. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1395-1404.        | 4.6 | 37        |
| 60 | Synergy between Platinum and Gold Nanoparticles in Oxygen Activation for Enhanced Room-Temperature Formaldehyde Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .  | 7.8 | 37        |
| 61 | Facile Synthesis of Activated Carbon-Supported Porous Manganese Oxide via in situ Reduction of Permanganate for Ozone Decomposition. <i>Ozone: Science and Engineering</i> , 2013, 35, 308-315.                                    | 1.4 | 35        |
| 62 | Influence of light wavelength on the photoactivity, physicochemical transformation, and fate of graphene oxide in aqueous media. <i>Environmental Science: Nano</i> , 2018, 5, 2590-2603.  | 2.2 | 34        |
| 63 | Facet-dependent evolution of surface defects in anatase TiO <sub>2</sub> by thermal treatment: implications for environmental applications of photocatalysis. <i>Environmental Science: Nano</i> , 2019, 6, 1740-1753.             | 2.2 | 32        |
| 64 | Facile synthesis of three-dimensional Mn <sub>3</sub> O <sub>4</sub> hierarchical microstructures for efficient catalytic phenol oxidation with peroxymonosulfate. <i>Applied Surface Science</i> , 2019, 495, 143568.             | 3.1 | 27        |
| 65 | Principle and surface science of photocatalysis. <i>Interface Science and Technology</i> , 2020, 31, 1-38.   | 1.6 | 24        |
| 66 | Photochemical decomposition of 1H,1H,2H,2H-perfluorooctane sulfonate (6:2FTS) induced by ferric ions. <i>Journal of Environmental Sciences</i> , 2017, 51, 120-127.  | 3.2 | 22        |
| 67 | Facet-dependent generation of superoxide radical anions by ZnO nanomaterials under simulated solar light. <i>Environmental Science: Nano</i> , 2018, 5, 2864-2875.   | 2.2 | 22        |
| 68 | A Facile Synthesis of Ternary Nickel Iron Sulfide Nanospheres as Counter Electrode in Dye-Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2018, 24, 19032-19037.   | 1.7 | 21        |
| 69 | Current Methods and Prospects for Analysis and Characterization of Nanomaterials in the Environment. <i>Environmental Science &amp; Technology</i> , 2022, 56, 7426-7447.  | 4.6 | 19        |
| 70 | Fc $\beta$ RIIB receptor-mediated apoptosis in macrophages through interplay of cadmium sulfide nanomaterials and protein corona. <i>Ecotoxicology and Environmental Safety</i> , 2018, 164, 140-148.                              | 2.9 | 15        |
| 71 | <i>In Vivo</i> Effects of Silver Nanoparticles on Development, Behavior, and Mitochondrial Function are Altered by Genetic Defects in Mitochondrial Dynamics. <i>Environmental Science &amp; Technology</i> , 2022, 56, 1113-1124. | 4.6 | 14        |
| 72 | In situ synthesis of ternary nickel iron selenides with high performance applied in dye-sensitized solar cells. <i>Applied Surface Science</i> , 2019, 492, 520-526.   | 3.1 | 13        |

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|----|---|-----|-----------|
| 73 | Design and fabrication of direct Z-scheme photocatalysts. <i>Interface Science and Technology</i> , 2020, 31, 193-229.  | 1.6 | 12        |
| 74 | Photolysis of graphene oxide in the presence of nitrate: implications for graphene oxide integrity in water and wastewater treatment. <i>Environmental Science: Nano</i> , 2019, 6, 136-145.  | 2.2 | 11        |
| 75 | Indoor carbonyl compounds in an academic building in Beijing, China: concentrations and influencing factors. <i>Frontiers of Environmental Science and Engineering</i> , 2012, 6, 184-194.  | 3.3 | 9         |
| 76 | Key factors controlling colloids' bulk soil distribution of polybrominated diphenyl ethers (PBDEs) at an e-waste recycling site: Implications for PBDE mobility in subsurface environment. <i>Science of the Total Environment</i> , 2022, 819, 153080. | 3.9 | 9         |
| 77 | Sulfide and ferrous iron preferentially target specific surface O-functional groups of graphene oxide: implications for accumulation of contaminants. <i>Environmental Science: Nano</i> , 2020, 7, 462-471.  | 2.2 | 7         |
| 78 | Nanostructured manganese oxides exhibit facet-dependent oxidation capabilities. <i>Environmental Science: Nano</i> , 2020, 7, 3840-3848.  | 2.2 | 7         |
| 79 | Substoichiometric titanium oxide Ti <sub>2</sub> O <sub>3</sub> exhibits greater efficiency in enhancing hydrolysis of 1,1,2,2-tetrachloroethane than TiO <sub>2</sub> nanomaterials. <i>Science of the Total Environment</i> , 2021, 774, 145705.      | 3.9 | 6         |
| 80 | Enhanced hydrolysis of 1,1,2,2-tetrachloroethane by multi-walled carbon nanotube/TiO <sub>2</sub> nanocomposites: The synergistic effect. <i>Environmental Pollution</i> , 2019, 255, 113211.   | 3.7 | 3         |