

# Dongsheng Li

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

3,199  
citations

304743

22  
h-index

223800

46  
g-index

48  
all docs

48  
docs citations

48  
times ranked

5522  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Grain-Boundary-Rich Noble Metal Nanoparticle Assemblies: Synthesis, Characterization, and Reactivity. <i>Advanced Functional Materials</i> , 2022, 32, .   | 14.9 | 5         |
| 2  | Design of additively manufactured methanol conversion reactor for high throughput production. <i>Material Design and Processing Communications</i> , 2021, 3, e143.  | 0.9  | 2         |
| 3  | Towards data-driven next-generation transmission electron microscopy. <i>Nature Materials</i> , 2021, 20, 274-279.   | 27.5 | 130       |
| 4  | Atomic Gradient Structure Alters Electronic Structure in 3D across the Bulk and Enhances Photoactivity. <i>Advanced Energy Materials</i> , 2021, 11, 2003548.  | 19.5 | 5         |
| 5  | Tuning proton transfer and catalytic properties in triple junction nanostructured catalyts. <i>Nano Energy</i> , 2021, 86, 106046.   | 16.0 | 5         |
| 6  | Formation of pyrophosphates across grain boundaries induces the formation of mismatched but oriented interfaces in silver phosphate polypods. <i>Applied Surface Science</i> , 2021, 563, 149980.  | 6.1  | 1         |
| 7  | Electrochemically Tunable Proton-Coupled Electron Transfer in Pd-Catalyzed Benzaldehyde Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1501-1505.   | 13.8 | 53        |
| 8  | Electrochemically Tunable Proton-Coupled Electron Transfer in Pd-Catalyzed Benzaldehyde Hydrogenation. <i>Angewandte Chemie</i> , 2020, 132, 1517-1521.  | 2.0  | 18        |
| 9  | Oriented attachment induces fivefold twins by forming and decomposing high-energy grain boundaries. <i>Science</i> , 2020, 367, 40-45.   | 12.6 | 136       |
| 10 | Further insights into the Fe( $\text{Fe}(\text{OH})_2$ ) reduction of 2-line ferrihydrite: a semi <i>in situ</i> and <i>in situ</i> TEM study. <i>Nanoscale Advances</i> , 2020, 2, 4938-4950.   | 4.6  | 5         |
| 11 | Phase transformations among $\text{TiO}_2$ polymorphs. <i>Nanoscale</i> , 2020, 12, 23183-23190.   | 5.6  | 15        |
| 12 | Realization of an intrinsic ferromagnetic topological state in $\text{MnBi}_8\text{Te}_{13}$ . <i>Science Advances</i> , 2020, 6, eaba4275.  | 10.3 | 122       |
| 13 | Ion redistributions at interfaces facilitate nucleation and growth of branched $\text{Ag}_3\text{PO}_4$ polypods. <i>Materials Letters</i> , 2020, 272, 127848.  | 2.6  | 0         |
| 14 | Amorphous $\text{Ag}_{2-x}\text{Cu}_x\text{S}$ quantum dots: "all-in-one" theranostic nanomedicines for near-infrared fluorescence/photoacoustics dual-modal-imaging-guided photothermal therapy. <i>Chemical Engineering Journal</i> , 2020, 399, 125777. | 12.7 | 19        |
| 15 | Effects of catalyst droplets on wire growth and the resulting branched structures during VLS growth. <i>Nanoscale</i> , 2020, 12, 7538-7543.   | 5.6  | 7         |
| 16 | Nucleation and growth of $\text{PbSeO}_3$ , $\text{Pb}_3(\text{CO}_3)_2(\text{OH})_2$ , and Se on the PbSe surfaces by decomposing PbSe in water. <i>Inorganic Chemistry Communication</i> , 2020, 118, 107989.  | 3.9  | 3         |
| 17 | Performance of Base and Noble Metals for Electrocatalytic Hydrogenation of Bio-Oil-Derived Oxygenated Compounds. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4407-4418.  | 6.7  | 65        |
| 18 | Shape-preserving amorphous-to-crystalline transformation of $\text{CaCO}_3$ revealed by <i>in situ</i> TEM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 3397-3404.                                 | 7.1  | 97        |

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|----|--|------|-----------|
| 19 | Revisiting Pt/TiO <sub>2</sub> photocatalysts for thermally assisted photocatalytic reduction of CO <sub>2</sub> . <i>Nanoscale</i> , 2020, 12, 7000-7010.   | 5.6  | 73        |
| 20 | Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. <i>ACS Catalysis</i> , 2019, 9, 8712-8718.  | 11.2 | 103       |
| 21 | Edge Dislocations Induce Improved Photocatalytic Efficiency of Colored TiO <sub>2</sub> . <i>Advanced Materials Interfaces</i> , 2019, 6, 1901121.   | 3.7  | 30        |
| 22 | Strain Relaxation-Induced Twin Interface Migration and Morphology Evolution of Silver Nanoparticles. <i>Chemistry of Materials</i> , 2019, 31, 842-850.  | 6.7  | 20        |
| 23 | TiO <sub>2</sub> Phase Transformation Mechanisms at Atomic Scale under Heating and Electron Beam Irradiation. <i>Microscopy and Microanalysis</i> , 2019, 25, 1868-1869.   | 0.4  | 1         |
| 24 | Interplay between Short- and Long-Ranged Forces Leading to the Formation of Ag Nanoparticle Superlattice. <i>Small</i> , 2019, 15, 1901966.  | 10.0 | 19        |
| 25 | <i>In situ</i> characterization of kinetics and mass transport of PbSe nanowire growth <i>via</i> LS and VLS mechanisms. <i>Nanoscale</i> , 2019, 11, 5874-5878.   | 5.6  | 9         |
| 26 | TiO <sub>2-x</sub> /CoO <sub>x</sub> photocatalyst sparkles in photothermocatalytic reduction of CO <sub>2</sub> with H <sub>2</sub> O steam. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 760-770.  | 20.2 | 132       |
| 27 | Enhanced photocatalytic hydrogen evolution by partially replaced corner-site C atom with P in g-C <sub>3</sub> N <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , 2019, 244, 486-493.  | 20.2 | 103       |
| 28 | Silver Nanocube and Nanobar Growth via Anisotropic Monomer Addition and Particle Attachment Processes. <i>Langmuir</i> , 2018, 34, 1466-1472.  | 3.5  | 13        |
| 29 | Fabrication of oriented crystals as force measurement tips via focused ion beam and microlithography methods. <i>Surface and Interface Analysis</i> , 2018, 50, 117-122.   | 1.8  | 2         |
| 30 | Mechanistic Understanding of the Growth Kinetics and Dynamics of Nanoparticle Superlattices by Coupling Interparticle Forces from Real-Time Measurements. <i>ACS Nano</i> , 2018, 12, 12778-12787.   | 14.6 | 34        |
| 31 | Self-Assembled Fe-Doped Carbon Nanotube Aerogels with Single-Atom Catalyst Feature as High-Efficiency Oxygen Reduction Electrocatalysts. <i>Small</i> , 2017, 13, 1603407.   | 10.0 | 254       |
| 32 | Two-Dimensional N,S-Codoped Carbon/Co <sub>9</sub> S <sub>8</sub> Catalysts Derived from Co(OH) <sub>2</sub> Nanosheets for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36755-36761.                                   | 8.0  | 45        |
| 33 | Investigating the magnitude and source of orientation-dependent interactions between TiO <sub>2</sub> crystal surfaces. <i>Nanoscale</i> , 2017, 9, 10173-10177.   | 5.6  | 15        |
| 34 | Trends in mica-mica adhesion reflect the influence of molecular details on long-range dispersion forces underlying aggregation and coalignment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7537-7542. | 7.1  | 56        |
| 35 | Kinetics of crystal growth of nanogoethite in aqueous solutions containing nitrate and sulfate anions. <i>CrystEngComm</i> , 2014, 16, 1466-1471.  | 2.6  | 18        |
| 36 | Investigating Processes of Nanocrystal Formation and Transformation via Liquid Cell TEM. <i>Microscopy and Microanalysis</i> , 2014, 20, 425-436.  | 0.4  | 94        |

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|----|--|------|-----------|
| 37 | Phase Transformations and Structural Developments in the Radular Teeth of <i>Cryptochiton Stelleri</i> . <i>Advanced Functional Materials</i> , 2013, 23, 2908-2917.                           | 14.9 | 63        |
| 38 | Growth Mechanism of Highly Branched Titanium Dioxide Nanowires via Oriented Attachment. <i>Crystal Growth and Design</i> , 2013, 13, 422-428.  | 3.0  | 68        |
| 39 | Design, Fabrication, and Applications of In Situ Fluid Cell TEM. <i>Methods in Enzymology</i> , 2013, 532, 147-164.  | 1.0  | 9         |
| 40 | Urease-Mediated Room-Temperature Synthesis of Nanocrystalline Titanium Dioxide. <i>Journal of the American Chemical Society</i> , 2012, 134, 13974-13977.                                      | 13.7 | 40        |
| 41 | Direction-Specific Interactions Control Crystal Growth by Oriented Attachment. <i>Science</i> , 2012, 336, 1014-1018.  | 12.6 | 958       |
| 42 | Solvothermal synthesis of a highly branched Ta-doped TiO <sub>2</sub> . <i>Journal of Materials Research</i> , 2011, 26, 2653-2659.  | 2.6  | 11        |
| 43 | Porous Platinum Nanotubes for Oxygen Reduction and Methanol Oxidation Reactions. <i>Advanced Functional Materials</i> , 2010, 20, 3742-3746.   | 14.9 | 243       |
| 44 | Nucleation and Crystal Growth of Nanocrystalline Anatase and Rutile Phase TiO <sub>2</sub> from a Water-Soluble Precursor. <i>Crystal Growth and Design</i> , 2010, 10, 5254-5261.             | 3.0  | 76        |
| 45 | Synthesis of Pt Nanoparticles and Nanorods by Microwave-assisted Solvothermal Technique. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2006, 61, 1566-1572. | 0.7  | 17        |