

# Zhonglu Guo

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

2,935  
citations

218677

26  
h-index

168389

53  
g-index

55  
all docs

55  
docs citations

55  
times ranked

3411  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Breaking the linear scaling relations in MXene catalysts for efficient CO <sub>2</sub> reduction. <i>Chemical Engineering Journal</i> , 2022, 429, 132171.   | 12.7 | 32        |
| 2  | Surface ligand engineering of CsPbBr <sub>3</sub> perovskite nanowires for high-performance photodetectors. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2367-2376.  | 9.4  | 19        |
| 3  | Construction of 2D/2D Bi <sub>2</sub> WO <sub>6</sub> /BN heterojunction for effective improvement on photocatalytic degradation of tetracycline. <i>Journal of Alloys and Compounds</i> , 2022, 894, 162487.                              | 5.5  | 26        |
| 4  | Eco-green C, O co-doped porous BN adsorbent for aqueous solution with superior adsorption efficiency and selectivity. <i>Chemosphere</i> , 2022, 288, 132520.  | 8.2  | 8         |
| 5  | Densification and pelletization of porous boron nitride fibers for effective CO <sub>2</sub> adsorption. <i>Ceramics International</i> , 2022, , .   | 4.8  | 8         |
| 6  | Electronic properties and surface reactive sites of carbon and oxygen doped porous boron nitride: A DFT study. <i>Diamond and Related Materials</i> , 2022, 121, 108802.   | 3.9  | 1         |
| 7  | Enhanced adsorption of fluoroquinolone antibiotics on Cu-modified porous boron nitride nanofibers in aqueous solution. <i>Journal of Molecular Structure</i> , 2022, 1255, 132475.   | 3.6  | 3         |
| 8  | Cobalt Supported on BN Catalyst with High $\text{B}\hat{\text{O}}$ Defects and Its Efficient Hydrodeoxygenation Performance of HMF to DMF**. <i>ChemistrySelect</i> , 2022, 7, .   | 1.5  | 7         |
| 9  | Synergistic photocatalytic of CO <sub>2</sub> -to-CO conversion by 2D/1D Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> /p-BN heterojunction with interfacial chemical bonding. <i>Journal of Alloys and Compounds</i> , 2022, 920, 165933. | 5.5  | 15        |
| 10 | Anchoring of CsPbBr <sub>3</sub> perovskite quantum dots on BN nanostructures for enhanced efficiency and stability: a comparative study. <i>Journal of Materials Chemistry C</i> , 2021, 9, 842-850.                                      | 5.5  | 14        |
| 11 | Carbon doped hexagonal boron nitride nanoribbon as efficient metal-free electrochemical nitrogen reduction catalyst. <i>Chemical Engineering Journal</i> , 2021, 410, 128419.  | 12.7 | 59        |
| 12 | Ultrathin h-BN/Bi <sub>2</sub> MoO <sub>6</sub> heterojunction with synergetic effect for visible-light photocatalytic tetracycline degradation. <i>Journal of Colloid and Interface Science</i> , 2021, 589, 545-555.                     | 9.4  | 115       |
| 13 | Highly Selective Hydrogenation of Phenol Catalyzed by Porous BN Supported Ni <sup>0</sup> /Pd Catalysts. <i>ChemistrySelect</i> , 2021, 6, 5975-5982.  | 1.5  | 5         |
| 14 | Novel Two-Dimensional Janus MoSiGeN <sub>4</sub> and WSiGeN <sub>4</sub> as Highly Efficient Photocatalysts for Spontaneous Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 28090-28097.                | 8.0  | 89        |
| 15 | Mercury Adsorption on Thiol-Modified Porous Boron Nitride: A Combined Experimental and Theoretical Investigation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 12984-12998.  | 3.7  | 9         |
| 16 | Fluorine doped porous boron nitride for efficient CO <sub>2</sub> capture and separation: A DFT study. <i>Applied Surface Science</i> , 2021, 556, 149775.   | 6.1  | 16        |
| 17 | Controllable synthesis and enhanced microwave absorption properties of novel lightweight graphene quantum dots/hexagonal boron nitride composites. <i>Carbon</i> , 2021, 182, 134-143.   | 10.3 | 41        |
| 18 | Functionalized Mo <sub>2</sub> B <sub>2</sub> MBenes: Promising anchoring and electrocatalysis materials for Lithium-Sulfur battery. <i>Applied Surface Science</i> , 2021, 566, 150634.   | 6.1  | 29        |

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|----|---|------|-----------|
| 19 | Sc <sub>2</sub> CO-MXene/h-BN heterostructure with synergetic effect as an anchoring and catalytic material for lithium-sulfur battery. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161273.                                   | 5.5  | 15        |
| 20 | Bimetallic AuPd Nanoparticles Loaded on Amine-Functionalized Porous Boron Nitride Nanofibers for Catalytic Dehydrogenation of Formic Acid. <i>ACS Applied Nano Materials</i> , 2021, 4, 1849-1857.                                    | 5.0  | 27        |
| 21 | Synthesis of Nanostructured Boron Nitride Aerogels by Rapid Pyrolysis of Melamine Diborate Aerogels via Induction Heating: From Composition Adjustment to Property Studies. <i>ACS Applied Nano Materials</i> , 2021, 4, 13788-13797. | 5.0  | 8         |
| 22 | Two-dimensional chromium boride MBenes with high HER catalytic activity. <i>Applied Surface Science</i> , 2020, 500, 144248.  | 6.1  | 50        |
| 23 | Two-dimensional O-phase group III monochalcogenides for photocatalytic water splitting. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 065501.  | 1.8  | 6         |
| 24 | Enhanced Li <sup>+</sup> storage through highly hybridized networks of self-assembled SnS <sub>2</sub> /rGO aerogels. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154192.   | 5.5  | 8         |
| 25 | In Situ Cu-Loaded Porous Boron Nitride Nanofiber as an Efficient Adsorbent for CO <sub>2</sub> Capture. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7454-7462.  | 6.7  | 30        |
| 26 | Nickel (II) modified porous boron nitride: An effective adsorbent for tetracycline removal from aqueous solution. <i>Chemical Engineering Journal</i> , 2020, 394, 124985.  | 12.7 | 66        |
| 27 | M <sub>2</sub> C-type MXenes: Promising catalysts for CO <sub>2</sub> capture and reduction. <i>Applied Surface Science</i> , 2020, 521, 146436.  | 6.1  | 77        |
| 28 | Vacancy-mediated lithium adsorption and diffusion on MXene. <i>Applied Surface Science</i> , 2019, 488, 578-585.  | 6.1  | 46        |
| 29 | Local-ordering mediated configuration stability and elastic properties of aluminum-containing high entropy alloys. <i>Intermetallics</i> , 2019, 110, 106474.   | 3.9  | 6         |
| 30 | Lattice Thermal Conductivity of mGeTe <sub>n</sub> Sb <sub>2</sub> Te <sub>3</sub> Phase-Change Materials: A First-Principles Study. <i>Crystals</i> , 2019, 9, 136.  | 2.2  | 5         |
| 31 | Aggregate Stability under Long-Term Fertilization Practices: The Case of Eroded Ultisols of South-Central China. <i>Sustainability</i> , 2019, 11, 1169.  | 3.2  | 37        |
| 32 | Novel two-dimensional molybdenum carbides as high capacity anodes for lithium/sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12145-12153.   | 10.3 | 106       |
| 33 | Novel hierarchical RGO/MoS <sub>2</sub> /K <sub>1-x</sub> MnO <sub>2</sub> composite architectures with enhanced broadband microwave absorption performance. <i>Journal of Materials Chemistry C</i> , 2019, 7, 13878-13886.          | 5.5  | 15        |
| 34 | Solvothermal synthesis of Mn-doped CsPbCl <sub>3</sub> perovskite nanocrystals with tunable morphology and their size-dependent optical properties. <i>RSC Advances</i> , 2019, 9, 39315-39322.                                       | 3.6  | 16        |
| 35 | Strengthening mechanism of aluminum on elastic properties of NbVTiZr high-entropy alloys. <i>Intermetallics</i> , 2018, 92, 7-14.   | 3.9  | 44        |
| 36 | Combined effects of simulated rainfall and overland flow on sediment and solute transport in hillslope erosion. <i>Journal of Soils and Sediments</i> , 2018, 18, 1120-1132.  | 3.0  | 55        |

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|----|--|------|-----------|
| 37 | Synergistic effect of Ni and Fe in Fe-doped NiS <sub>2</sub> counter electrode for dye-sensitized solar cells: Experimental and DFT studies. <i>Electrochimica Acta</i> , 2018, 284, 24-29.                              | 5.2  | 23        |
| 38 | New gallium chalcogenides/arsenene van der Waals heterostructures promising for photocatalytic water splitting. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 15995-16004.                                 | 7.1  | 49        |
| 39 | Coincident modulation of lattice and electron thermal transport performance in MXenes via surface functionalization. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19689-19697.                                 | 2.8  | 18        |
| 40 | Strain-mediated type-I/type-II transition in MXene/Blue phosphorene van der Waals heterostructures for flexible optical/electronic devices. <i>Journal of Materials Chemistry C</i> , 2017, 5, 978-984.                  | 5.5  | 155       |
| 41 | New two-dimensional transition metal borides for Li ion batteries and electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23530-23535.  | 10.3 | 253       |
| 42 | Effect of water content, bulk density, and aggregate size on mechanical characteristics of Aquults soil blocks and aggregates from subtropical China. <i>Journal of Soils and Sediments</i> , 2017, 17, 210-219.         | 3.0  | 22        |
| 43 | Ti-enhanced exfoliation of V <sub>2</sub> AlC into V <sub>2</sub> C MXene for lithium-ion battery anodes. <i>Ceramics International</i> , 2017, 43, 11450-11454.   | 4.8  | 85        |
| 44 | Metal-Metal Bonding Stabilized Ground State Structure of Early Transition Metal Monoxide TM-MO (TM = Ti, Hf, V, Ta). <i>Journal of Physical Chemistry C</i> , 2016, 120, 10009-10014.                                    | 3.1  | 10        |
| 45 | MXene: a promising photocatalyst for water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11446-11452.  | 10.3 | 569       |
| 46 | Synergistic Resistive Switching Mechanism of Oxygen Vacancies and Metal Interstitials in Ta <sub>2</sub> O <sub>5</sub> . <i>Journal of Physical Chemistry C</i> , 2016, 120, 2456-2463.                                 | 3.1  | 34        |
| 47 | Design principles of tuning oxygen vacancy diffusion in SrZrO <sub>3</sub> for resistance random access memory. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4081-4085.  | 5.5  | 20        |
| 48 | An overview of materials issues in resistive random access memory. <i>Journal of Materiomics</i> , 2015, 1, 285-295.   | 5.7  | 106       |
| 49 | Microscopic origin of MXenes derived from layered MAX phases. <i>RSC Advances</i> , 2015, 5, 25403-25408.  | 3.6  | 61        |
| 50 | Realization of a reversible switching in TaO <sub>2</sub> polymorphs via Peierls distortion for resistance random access memory. <i>Applied Physics Letters</i> , 2015, 106, 091903.                                     | 3.3  | 19        |
| 51 | Flexible two-dimensional Ti <sub>n+1</sub> C <sub>n</sub> (n = 1, 2 and 3) and their functionalized MXenes predicted by density functional theories. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15348-15354. | 2.8  | 247       |
| 52 | First-principles investigation of the stability and stabilization mechanism of Ni <sub>2</sub> Zn <sub>11</sub> $\hat{1}^3$ brasses under high pressure. <i>Computational Materials Science</i> , 2015, 98, 430-434.     | 3.0  | 4         |
| 53 | Band gap engineering in huge-gap semiconductor SrZrO <sub>3</sub> for visible-light photocatalysis. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 2042-2048.   | 7.1  | 72        |
| 54 | Mechanical properties and soil stability affected by fertilizer treatments for an Ultisol in subtropical China. <i>Plant and Soil</i> , 2013, 363, 157-174.  | 3.7  | 31        |

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|----|---|-----|-----------|
| 55 | Role of oxygen vacancies in the resistive switching of SrZrO <sub>3</sub> for resistance random access memory. Journal of Alloys and Compounds, 2013, 580, 148-151. | 5.5 | 44        |