# Weiwei Sun

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5045685/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 39 papers | 1,585 citations | 394286 19 h-index | 315616 38 g-index |
| 39 all docs | 39 docs citations | 39 times ranked | 2597 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Direct Synthesis of Largeâ€Area 2D Mo<sub>2</sub>C on In Situ Grown Graphene. Advanced Materials, 2017, 29, 1700072. | 11.1 | 305 |
| 2 | In situ atomistic insight into the growth mechanisms of single layer 2D transition metal carbides. Nature Communications, 2018, 9, 2266. | 5.8 | 125 |
| 3 | Computational Discovery and Design of MXenes for Energy Applications: Status, Successes, and Opportunities. ACS Applied Materials & Interfaces, 2019, 11, 24885-24905. | 4.0 | 105 |
| 4 | Tracking ion intercalation into layered Ti<sub>3</sub>C<sub>2</sub> MXene films across length scales. Energy and Environmental Science, 2020, 13, 2549-2558. | 15.6 | 100 |
| 5 | Double transition metal MXenes with wide band gaps and novel magnetic properties. Nanoscale, 2018, 10, 11962-11968. | 2.8 | 88 |
| 6 | Effects of Surface Terminations of 2D Bi<sub>2</sub>WO<sub>6</sub> on Photocatalytic Hydrogen Evolution from Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 20067-20074. | 4.0 | 78 |
| 7 | Low-Temperature Synthesis of Single Palladium Atoms Supported on Defective Hexagonal Boron Nitride Nanosheet for Chemoselective Hydrogenation of Cinnamaldehyde. ACS Nano, 2021, 15, 10175-10184. | 7.3 | 77 |
| 8 | Computational Screening of MXene Electrodes for Pseudocapacitive Energy Storage. Journal of Physical Chemistry C, 2019, 123, 315-321. | 1.5 | 69 |
| 9 | Edge Segregated Polymorphism in 2D Molybdenum Carbide. Advanced Materials, 2019, 31, e1808343. | 11.1 | 56 |
| 10 | Surface Reorganization Leads to Enhanced Photocatalytic Activity in Defective BiOCl. Chemistry of Materials, 2018, 30, 5128-5136. | 3.2 | 55 |
| 11 | Interfacial and electronic properties of heterostructures of MXene and graphene. Physical Review B, 2019, 99, . | 1.1 | 53 |
| 12 | Investigation of Charge-Transfer Interaction in Mixed Stack Donorâ€“Acceptor Cocrystals Toward Tunable Solid-State Emission Characteristics. Crystal Growth and Design, 2018, 18, 6001-6008. | 1.4 | 51 |
| 13 | A new 2D monolayer BiXene, M<sub>2</sub>C (M = Mo, Tc, Os). Nanoscale, 2016, 8, 15753-15762. | 2.8 | 46 |
| 14 | Synergistic effects between polyvinylpyrrolidone and oxygen vacancies on improving the oxidase-mimetic activity of flower-like CeO<sub>2</sub>nanozymes. Nanoscale, 2020, 12, 19104-19111. | 2.8 | 37 |
| 15 | Understanding the electrochemical properties of A<sub>2</sub>MSiO<sub>4</sub> (A = Li and Na; M =) Tj ETQq1 1 0.784314 rgBT /O calculations. Journal of Materials Chemistry A, 2016, 4, 17455-17463. | 5.2 | 35 |
| 16 | Multiscale and Multimodal Characterization of 2D Titanium Carbonitride MXene. Advanced Materials Interfaces, 2020, 7, 1902207. | 1.9 | 35 |
| 17 | Structure and energy of point defects in TiC: Anab initiostudy. Physical Review B, 2015, 91, . | 1.1 | 23 |
| 18 | High photon energy spectroscopy of NiO: Experiment and theory. Physical Review B, 2016, 93, . | 1.1 | 22 |

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|---|---|---|---|
| 19 | Dynamic stability of the single-layer transition metal dichalcogenides. Computational Materials Science, 2014, 92, 206-212. | 1.4 | 19 |
| 20 | Self-diffusion of Ti interstitial based point defects and complexes in TiC. Acta Materialia, 2019, 165, 381-387. | 3.8 | 18 |
| 21 | The role of group III, IV elements in Nb<sub>4</sub>AC<sub>3</sub>MAX phases (A = Al, Si, Ga, Ge) and the unusual anisotropic behavior of the electronic and optical properties. Physical Chemistry Chemical Physics, 2017, 19, 15471-15483. | 1.3 | 17 |
| 22 | Role of correlation and relativistic effects in MAX phases. Journal of Materials Science, 2012, 47, 7615-7620. | 1.7 | 16 |
| 23 | Investigations on electronic, Fermi surface, Curie temperature and optical properties of Zr 2 CoAl. Journal of Solid State Chemistry, 2017, 247, 97-104. | 1.4 | 15 |
| 24 | Stabilizing a hexagonal Ru2C via Lifshitz transition under pressure. Applied Physics Letters, 2013, 103, . | 1.5 | 14 |
| 25 | Anisotropic distortion and Lifshitz transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math>-Hf under pressure. Physical Review B, 2017, 95, . | 1.1 | 14 |
| 26 | Solid emission color tuning of organic charge transfer cocrystals based on planar Ï€-conjugated donors and TCNB. Journal of Solid State Chemistry, 2019, 272, 96-101. | 1.4 | 14 |
| 27 | Strain and doping effects on the energetics of hydrogen desorption from the MgH <sub>2</sub> (001) surface. Europhysics Letters, 2013, 101, 27006. | 0.7 | 13 |
| 28 | Pushing the limit of thermal conductivity of MAX borides and MABs. Journal of Materials Science and Technology, 2022, 97, 79-88. | 5.6 | 12 |
| 29 | Combining configurational energies and forces for molecular force field optimization. Journal of Chemical Physics, 2017, 147, 161713. | 1.2 | 11 |
| 30 | A combined machine learning and density functional theory study of binary Ti-Nb and Ti-Zr alloys: Stability and Youngâ€™s modulus. Computational Materials Science, 2020, 184, 109830. | 1.4 | 10 |
| 31 | Improvement in the desorption of H2 from the MgH2 (110) surface by means of doping and mechanical strain. Computational Materials Science, 2014, 86, 165-169. | 1.4 | 9 |
| 32 | Gluing together metallic and covalent layers to form Ru<sub>2</sub>C under ambient conditions. Physical Chemistry Chemical Physics, 2015, 17, 9730-9736. | 1.3 | 9 |
| 33 | Photoinduction of palladium single atoms supported on defect-containing Î³-AlOOH nanoleaf for efficient trans-stilbene epoxidation. Chemical Engineering Journal, 2022, 429, 132149. | 6.6 | 8 |
| 34 | Stability of a new cubic monoxide of Thorium under pressure. Scientific Reports, 2015, 5, 13740. | 1.6 | 7 |
| 35 | The correlation between N deficiency and the mechanical properties of the Ti2AlNy MAX phase. Journal of the European Ceramic Society, 2020, 40, 2279-2286. | 2.8 | 7 |
| 36 | Li<sub>2</sub>FePO<sub>4</sub>F and its metal-doping for Li-ion batteries: an ab initio study. RSC Advances, 2014, 4, 50195-50201. | 1.7 | 6 |

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|---|---|---|---|
| 37 | Behavior of intrinsic defects in BaF2 under uniaxial compressions: An ab initio investigation. Materials Today Communications, 2021, 28, 102730. | 0.9 | 5 |
| 38 | Observation of Square-Planar Distortion in Lanthanide-Doped Skutterudite Crystals. Journal of Physical Chemistry C, 2019, 123, 14632-14638. | 1.5 | 1 |
| 39 | Exchange of Re and Mo atoms in MoS2 driven by Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 1702-1703. | 0.2 | 0 |