

Zhaoyang Lin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5494350/publications.pdf>

Version: 2024-02-01

45
papers

9,887
citations

117453

34
h-index

205818

48
g-index

49
all docs

49
docs citations

49
times ranked

15389
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | High-performance transition metal-doped Pt ₃ Ni octahedra for oxygen reduction reaction. <i>Science</i> , 2015, 348, 1230-1234. | 6.0 | 1,623 |
| 2 | Ultrafine jagged platinum nanowires enable ultrahigh mass activity for the oxygen reduction reaction. <i>Science</i> , 2016, 354, 1414-1419. | 6.0 | 1,292 |
| 3 | Holey graphene frameworks for highly efficient capacitive energy storage. <i>Nature Communications</i> , 2014, 5, 4554. | 5.8 | 1,161 |
| 4 | Solution-processable 2D semiconductors for high-performance large-area electronics. <i>Nature</i> , 2018, 562, 254-258. | 13.7 | 644 |
| 5 | Single-atom tailoring of platinum nanocatalysts for high-performance multifunctional electrocatalysis. <i>Nature Catalysis</i> , 2019, 2, 495-503. | 16.1 | 464 |
| 6 | Double-negative-index ceramic aerogels for thermal superinsulation. <i>Science</i> , 2019, 363, 723-727. | 6.0 | 429 |
| 7 | General synthesis of two-dimensional van der Waals heterostructure arrays. <i>Nature</i> , 2020, 579, 368-374. | 13.7 | 393 |
| 8 | Monolayer atomic crystal molecular superlattices. <i>Nature</i> , 2018, 555, 231-236. | 13.7 | 323 |
| 9 | Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. <i>Science Advances</i> , 2015, 1, e1500613. | 4.7 | 265 |
| 10 | Microwave-Assisted Rapid Synthesis of Graphene-Supported Single Atomic Metals. <i>Advanced Materials</i> , 2018, 30, e1802146. | 11.1 | 244 |
| 11 | A rational design of cosolvent exfoliation of layered materials by directly probing liquid-solid interaction. <i>Nature Communications</i> , 2013, 4, 2213. | 5.8 | 235 |
| 12 | Nanowire Electronics: From Nanoscale to Macroscale. <i>Chemical Reviews</i> , 2019, 119, 9074-9135. | 23.0 | 210 |
| 13 | One-step strategy to graphene/Ni(OH) ₂ composite hydrogels as advanced three-dimensional supercapacitor electrode materials. <i>Nano Research</i> , 2013, 6, 65-76. | 5.8 | 202 |
| 14 | Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. <i>Joule</i> , 2017, 1, 548-562. | 11.7 | 199 |
| 15 | Three-dimensional graphene framework with ultra-high sulfur content for a robust lithium-sulfur battery. <i>Nano Research</i> , 2016, 9, 240-248. | 5.8 | 165 |
| 16 | High-order superlattices by rolling up van der Waals heterostructures. <i>Nature</i> , 2021, 591, 385-390. | 13.7 | 163 |
| 17 | Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO ₂ Nanowire Arrays by Nitrogen Implantation. <i>Nano Letters</i> , 2015, 15, 4692-4698. | 4.5 | 159 |
| 18 | Building two-dimensional materials one row at a time: Avoiding the nucleation barrier. <i>Science</i> , 2018, 362, 1135-1139. | 6.0 | 155 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Thickness-Tunable Synthesis of Ultrathin Type-II Dirac Semimetal PtTe ₂ Single Crystals and Their Thickness-Dependent Electronic Properties. <i>Nano Letters</i> , 2018, 18, 3523-3529. | 4.5 | 147 |
| 20 | Van der Waals thin-film electronics. <i>Nature Electronics</i> , 2019, 2, 378-388. | 13.1 | 131 |
| 21 | Highly-anisotropic optical and electrical properties in layered SnSe. <i>Nano Research</i> , 2018, 11, 554-564. | 5.8 | 114 |
| 22 | A Solution Processable High-Performance Thermoelectric Copper Selenide Thin Film. <i>Advanced Materials</i> , 2017, 29, 1606662. | 11.1 | 96 |
| 23 | Chemical vapor deposition growth of single-crystalline cesium lead halide microplatelets and heterostructures for optoelectronic applications. <i>Nano Research</i> , 2017, 10, 1223-1233. | 5.8 | 96 |
| 24 | Highly stretchable van der Waals thin films for adaptable and breathable electronic membranes. <i>Science</i> , 2022, 375, 852-859. | 6.0 | 96 |
| 25 | Layered Intercalation Materials. <i>Advanced Materials</i> , 2021, 33, e2004557. | 11.1 | 92 |
| 26 | In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. <i>Nano Letters</i> , 2019, 19, 6819-6826. | 4.5 | 72 |
| 27 | Solution Processable Colloidal Nanoplates as Building Blocks for High-Performance Electronic Thin Films on Flexible Substrates. <i>Nano Letters</i> , 2014, 14, 6547-6553. | 4.5 | 69 |
| 28 | Cosolvent Approach for Solution-Processable Electronic Thin Films. <i>ACS Nano</i> , 2015, 9, 4398-4405. | 7.3 | 63 |
| 29 | Tuning the Catalytic Activity of a Metal-Organic Framework Derived Copper and Nitrogen Co-Doped Carbon Composite for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26769-26774. | 4.0 | 63 |
| 30 | Probing photoelectrical transport in lead halide perovskites with van der Waals contacts. <i>Nature Nanotechnology</i> , 2020, 15, 768-775. | 15.6 | 63 |
| 31 | Programmable devices based on reversible solid-state doping of two-dimensional semiconductors with superionic silver iodide. <i>Nature Electronics</i> , 2020, 3, 630-637. | 13.1 | 61 |
| 32 | Approaching the intrinsic exciton physics limit in two-dimensional semiconductor diodes. <i>Nature</i> , 2021, 599, 404-410. | 13.7 | 57 |
| 33 | Scalable solution-phase epitaxial growth of symmetry-mismatched heterostructures on two-dimensional crystal soft template. <i>Science Advances</i> , 2016, 2, e1600993. | 4.7 | 52 |
| 34 | High-yield exfoliation of 2D semiconductor monolayers and reassembly of organic/inorganic artificial superlattices. <i>CheM</i> , 2021, 7, 1887-1902. | 5.8 | 36 |
| 35 | Three-dimensional graphene membrane cathode for high energy density rechargeable lithium-air batteries in ambient conditions. <i>Nano Research</i> , 2017, 10, 472-482. | 5.8 | 32 |
| 36 | Large-Area Synthesis and Patterning of All-Inorganic Lead Halide Perovskite Thin Films and Heterostructures. <i>Nano Letters</i> , 2021, 21, 1454-1460. | 4.5 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | High-Performance Flexible Bismuth Telluride Thin Film from Solution Processed Colloidal Nanoplates. <i>Advanced Materials Technologies</i> , 2020, 5, 2000600. | 3.0 | 26 |
| 38 | Molecular ligand modulation of palladium nanocatalysts for highly efficient and robust heterogeneous oxidation of cyclohexenone to phenol. <i>Science Advances</i> , 2017, 3, e1600615. | 4.7 | 24 |
| 39 | Plasmonic/Nonlinear Optical Material Core/Shell Nanorods as Nanoscale Plasmon Modulators and Optical Voltage Sensors. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 583-587. | 7.2 | 21 |
| 40 | van der Waals Integrated Devices Based on Nanomembranes of 3D Materials. <i>Nano Letters</i> , 2020, 20, 1410-1416. | 4.5 | 19 |
| 41 | Two-dimensional van der Waals thin film transistors as active matrix for spatially resolved pressure sensing. <i>Nano Research</i> , 2021, 14, 3395-3401. | 5.8 | 19 |
| 42 | Doping on demand in 2D devices. <i>Nature Electronics</i> , 2020, 3, 77-78. | 13.1 | 18 |
| 43 | Improvement by Channel Recess of Contact Resistance and Gate Control in Large-Scale Spin-Coated MoS ₂ MOSFETs. <i>IEEE Electron Device Letters</i> , 2018, 39, 1453-1456. | 2.2 | 6 |
| 44 | Graphene Hydrogels: Functionalized Graphene Hydrogel-Based High-Performance Supercapacitors (<i>Adv. Mater.</i> 40/2013). <i>Advanced Materials</i> , 2013, 25, 5828-5828. | 11.1 | 3 |
| 45 | Quantitative Surface Plasmon Interferometry via Upconversion Photoluminescence Mapping. <i>Research</i> , 2019, 2019, 8304824. | 2.8 | 2 |