

# Xiaobin Chen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/364406/publications.pdf>

Version: 2024-02-01

42  
papers

1,559  
citations

331670

21  
h-index

302126

39  
g-index

44  
all docs

44  
docs citations

44  
times ranked

2274  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Intrinsic anisotropy of thermal conductance in graphene nanoribbons. Applied Physics Letters, 2009, 95, .   | 3.3  | 176       |
| 2  | Interlayer interactions in graphites. Scientific Reports, 2013, 3, 3046.  | 3.3  | 171       |
| 3  | Topological Phononics: From Fundamental Models to Real Materials. Advanced Functional Materials, 2020, 30, 1904784.   | 14.9 | 143       |
| 4  | Widely tunable and anisotropic charge carrier mobility in monolayer tin( $\text{Sn}$ ) selenide using biaxial strain: a first-principles study. Journal of Materials Chemistry C, 2017, 5, 1247-1254. | 5.5  | 104       |
| 5  | Defect-Dominated Shape Recovery of Nanocrystals: A New Strategy for Trimetallic Catalysts. Journal of the American Chemical Society, 2013, 135, 12220-12223.  | 13.7 | 96        |
| 6  | Thermal transport in graphene junctions and quantum dots. Physical Review B, 2010, 81, .  | 3.2  | 95        |
| 7  | Giant room-temperature spin caloritronics in spin-semiconducting graphene nanoribbons. Physical Review B, 2014, 90, .   | 3.2  | 85        |
| 8  | $\text{Pd}_2\text{O}$ and $\text{Ag}_2\text{O}$ Hybrid Concave Nanomaterials for an Effective Synergistic Catalyst. Angewandte Chemie - International Edition, 2013, 52, 11049-11053.                 | 13.8 | 74        |
| 9  | Photon-assisted thermoelectric properties of noncollinear spin valves. Physical Review B, 2013, 87, .   | 3.2  | 38        |
| 10 | Raman spectroscopy evidence for dimerization and Mott collapse in $\text{SnTe}$ under pressures. Physical Review Materials, 2019, 3, .  | 3.2  | 37        |
| 11 | Valley caloritronics and its realization by graphene nanoribbons. Physical Review B, 2015, 92, .  | 3.2  | 35        |
| 12 | Dirac fermions in blue-phosphorus. 2D Materials, 2014, 1, 031002.   | 4.4  | 34        |
| 13 | Interfacial thermal conductance of partially unzipped carbon nanotubes: Linear scaling and exponential decay. Physical Review B, 2013, 87, .  | 3.2  | 33        |
| 14 | Piezoelectric scattering limited mobility of hybrid organic-inorganic perovskites $\text{CH}_3\text{NH}_3\text{PbI}_3$ . Scientific Reports, 2017, 7, 41860.  | 3.3  | 31        |
| 15 | Perfect spin and valley polarized quantum transport in twisted SiC nanoribbons. 2D Materials, 2017, 4, 025013.  | 4.4  | 27        |
| 16 | Ubiquitous Topological States of Phonons in Solids: Silicon as a Model Material. Nano Letters, 2022, 22, 2120-2126.   | 9.1  | 26        |
| 17 | Enhanced thermoelectric figure of merit in thin GaAs nanowires. Nanoscale, 2015, 7, 8776-8781.  | 5.6  | 24        |
| 18 | Rectifying full-counting statistics in a spin Seebeck engine. Physical Review B, 2018, 97, .  | 3.2  | 23        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Observation of thermal spin-transfer torque via ferromagnetic resonance in magnetic tunnel junctions. <i>Physical Review B</i> , 2016, 94, .  | 3.2 | 22        |
| 20 | Phonon-Grain-Boundary-Interaction-Mediated Thermal Transport in Two-Dimensional Polycrystalline MoS <sub>2</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 25547-25555. | 8.0 | 22        |
| 21 | Topological Hall Effect in Traditional Ferromagnet Embedded with Black-Phosphorus-Like Bismuth Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 25135-25142.         | 8.0 | 21        |
| 22 | Unambiguous determination of crystal orientation in black phosphorus by angle-resolved polarized Raman spectroscopy. <i>Nanoscale Horizons</i> , 2021, 6, 809-818.                        | 8.0 | 20        |
| 23 | Magnetic order in XY-type antiferromagnetic monolayer revealed by Raman spectroscopy. <i>Physical Review B</i> , 2021, 103, .   | 8.2 | 20        |
| 24 | Thermal Engineering in Low-Dimensional Quantum Devices: A Tutorial Review of Nonequilibrium Green's Function Methods. <i>Small Methods</i> , 2018, 2, 1700343.                            | 8.6 | 18        |
| 25 | Trends in charge transfer and spin alignment of metallocene on graphene. <i>Physical Review B</i> , 2011, 83, .   | 3.2 | 15        |
| 26 | Tunable anisotropic thermal conduction in graphene nanoribbons. <i>Applied Physics Letters</i> , 2014, 104, .   | 3.3 | 15        |
| 27 | Valley filtering effect of phonons in graphene with a grain boundary. <i>Physical Review B</i> , 2019, 99, .  | 3.2 | 15        |
| 28 | Magnetic Raman continuum in single-crystalline H <sub>3</sub> O <sub>6</sub> Li <sub>3</sub> . <i>Physical Review B</i> , 2020, 101, .  | 3.2 | 11        |
| 29 | Theory of quantum transport in disordered systems driven by voltage pulse. <i>Physical Review B</i> , 2016, 94, .   | 3.2 | 12        |
| 30 | Probing the continuum scattering and magnetic collapse in single-crystalline L <sub>2</sub> I <sub>r</sub> O <sub>3</sub> by Raman spectroscopy. <i>Physical Review B</i> , 2020, 101, .  | 3.2 | 11        |
| 31 | Structure and Dynamics of the Electronic Heterointerfaces in MoS <sub>2</sub> by First-Principles Simulations. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1644-1649.        | 4.6 | 9         |
| 32 | Enhancing the spin transfer torque in magnetic tunnel junctions by ac modulation. <i>Physical Review B</i> , 2017, 95, .  | 3.2 | 7         |
| 33 | Moiré Superlattice-Induced Superconductivity in One-Unit-Cell FeTe. <i>Nano Letters</i> , 2021, 21, 1327-1334.  | 9.1 | 6         |
| 34 | Transient spin current under a thermal switch. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 274004.  | 2.8 | 5         |
| 35 | Understanding the flat band in 1D T <sub>3</sub> using a rotated basis. <i>Physical Review B</i> , 2021, 104, .   | 3.2 | 4         |
| 36 | Negative differential resistance in GeSi core-shell transport junctions: the role of local sp <sup>2</sup> hybridization. <i>Nanoscale</i> , 2016, 8, 16026-16033.                        | 5.6 | 3         |

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|----|--|------|-----------|
| 37 | Magneto-resistance of Ni/WSe <sub>2</sub> /Ni junctions: robustness against the thickness of WSe <sub>2</sub> . Nanotechnology, 2022, 33, 385001.            | 2.6  | 3         |
| 38 | A proposal of a spin cell using light on magnetic tunneling junctions. Journal of Physics Condensed Matter, 2014, 26, 016003.                                | 1.8  | 2         |
| 39 | Family of Magic-Sized Carbon Clusters on Transition Metal Substrates. Advanced Functional Materials, 2020, 30, 2006671.                                      | 14.9 | 2         |
| 40 | Towards ultrafast cooling through transient phonon currents: A closed-form solution. Physical Review B, 2021, 103, .   | 3.2  | 1         |
| 41 | Phonon structures of GaN-based random semiconductor alloys. European Physical Journal B, 2017, 90, 1.  | 1.5  | 0         |
| 42 | Dzyaloshinskii-Moriya anisotropy effect on field-induced magnon condensation in the kagome antiferromagnet $\hat{I}_{\pm}$ . Physical Review B, 2021, 104, . | 3.2  | 0         |