

Jun Luo

List of Publications by Year in descending order

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times ranked

4765
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| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Improved Thermal Stability and Enhanced Thermoelectric Properties of p-Type BaCu ₂ Te ₂ by Doping of Cl. ACS Applied Materials & Interfaces, 2022, 14, 5634-5642. | 8.0 | 10 |
| 2 | Half-Heusler-like compounds with wide continuous compositions and tunable p- to n-type semiconducting thermoelectrics. Nature Communications, 2022, 13, 35. | 12.8 | 20 |
| 3 | Origin of ductility in amorphous Ag ₂ S _{0.4} Te _{0.6} . Applied Physics Letters, 2022, 120, . | 3.3 | 11 |
| 4 | Discovery of a Slater-Pauling Semiconductor ZrRu _{1.5} Sb with Promising Thermoelectric Properties. Advanced Functional Materials, 2022, 32, . | 14.9 | 12 |
| 5 | Synergistically Optimized Thermal Conductivity and Carrier Concentration in GeTe by Bi-Se Codoping. ACS Applied Materials & Interfaces, 2022, 14, 14359-14366. | 8.0 | 9 |
| 6 | Cu vacancy engineering of cage-compound BaCu ₂ Se ₂ : Realization of temperature-dependent hole concentration for high average thermoelectric figure-of-merit. Chemical Engineering Journal, 2022, 437, 135302. | 12.7 | 6 |
| 7 | Designing vacancy-filled Heusler thermoelectric semiconductors by the Slater-Pauling rule. Materials Today Energy, 2022, 27, 101035. | 4.7 | 8 |
| 8 | Entropy engineering: A simple route to both p- and n-type thermoelectrics from the same parent material. Materials Today Physics, 2022, 26, 100745. | 6.0 | 6 |
| 9 | Cubic Quaternary Silver Chalcogenide: A Promising Ductile Thermoelectric Inorganic. ACS Applied Energy Materials, 2022, 5, 8878-8884. | 5.1 | 5 |
| 10 | Tailoring the chemical bonding of GeTe-based alloys by MgB ₂ alloying to simultaneously enhance their mechanical and thermoelectric performance. Materials Today Physics, 2021, 16, 100308. | 6.0 | 29 |
| 11 | Influence of Ag substitution on thermoelectric properties of the quaternary diamond-like compound Zn ₂ Cu ₃ In ₃ Te ₈ . Journal of Materiomics, 2021, 7, 236-243. | 5.7 | 7 |
| 12 | Embedded in-situ nanodomains from chemical composition fluctuation in thermoelectric A ₂ Cu ₃ In ₃ Te ₈ (A = Zn, Cd). Materials Today Physics, 2021, 17, 100333. | 6.0 | 8 |
| 13 | Temperature-Dependent Band Renormalization in CoSb ₃ Skutterudites Due to Sb-Ring-Related Vibrations. Chemistry of Materials, 2021, 33, 1046-1052. | 6.7 | 16 |
| 14 | Stabilized cubic phase BiAgSe _{2-x} S _x with excellent thermoelectric properties via phase boundary engineering. Journal of Materials Chemistry C, 2021, 9, 6766-6772. | 5.5 | 4 |
| 15 | A general strategy for high-throughput experimental screening of promising bulk thermoelectric materials. Science China Materials, 2021, 64, 1751-1760. | 6.3 | 8 |
| 16 | Minimizing Thermal Conductivity for Boosting Thermoelectric Properties of Cu-Ni-Based Alloys through All-Scale Hierarchical Architectures. ACS Applied Energy Materials, 2021, 4, 5015-5023. | 5.1 | 9 |
| 17 | Optimization of electrical and thermal transport properties of layered Bi ₂ O ₂ Se via Nb doping. Journal of Materials Science, 2021, 56, 12732-12739. | 3.7 | 3 |
| 18 | Interfacial Decoration Tailoring the Thermoelectric Performance of TiCoNi _x Sb Half-Heusler Compounds. ACS Applied Energy Materials, 2021, 4, 7148-7156. | 5.1 | 6 |

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|----|---|------|-----------|
| 19 | Unveiling the origins of low lattice thermal conductivity in 122-phase Zintl compounds. <i>Materials Today Physics</i> , 2021, 21, 100480. | 6.0 | 20 |
| 20 | Precision grain boundary engineering in commercial Bi ₂ Te _{2.7} Se _{0.3} thermoelectric materials towards high performance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11442-11449. | 10.3 | 26 |
| 21 | The Electrical and Thermal Transport Properties of La-Doped SrTiO ₃ with Sc ₂ O ₃ Composite. <i>Materials</i> , 2021, 14, 6279. | 2.9 | 1 |
| 22 | Anisotropic artificial synapse based on 2D ReS ₂ field-effect transistor. <i>Applied Physics Letters</i> , 2021, 119, 163102. | 3.3 | 10 |
| 23 | Enhancement of Thermoelectric Properties in n-type NbCoSn Half-Heusler Compounds via Ta Alloying. <i>ACS Applied Energy Materials</i> , 2021, 4, 12458-12465. | 5.1 | 11 |
| 24 | Highly Distorted Grain Boundary with an Enhanced Carrier/Phonon Segregation Effect Facilitates High-Performance Thermoelectric Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 51018-51027. | 8.0 | 13 |
| 25 | Synergistically Optimizing Electrical and Thermal Transport Properties of ZrCoSb through Ru Doping. <i>ACS Applied Energy Materials</i> , 2021, 4, 13997-14003. | 5.1 | 9 |
| 26 | Optimizing Room-Temperature Thermoelectric Performance of n-Type Bi ₂ Te _{2.7} Se _{0.3} . <i>ACS Omega</i> , 2021, 6, 33883-33888. | 3.5 | 11 |
| 27 | Enhancement of the thermoelectric performance of InTe via introducing Cd dopant and regulating the annealing time. <i>Journal of Alloys and Compounds</i> , 2020, 813, 152210. | 5.5 | 12 |
| 28 | Effective Mass Enhancement and Thermal Conductivity Reduction for Improving the Thermoelectric Properties of Pseudo-Binary Ge ₂ Sb ₂ Te ₅ . <i>Annalen Der Physik</i> , 2020, 532, 1900390. | 2.4 | 8 |
| 29 | Tetrahedral Distortion and Thermoelectric Performance of the Ag-Substituted CuInTe ₂ Chalcopyrite Compound. <i>ACS Applied Energy Materials</i> , 2020, 3, 11015-11023. | 5.1 | 16 |
| 30 | Achieving High Thermoelectric Performance by Introducing 3D Atomically Thin Conductive Framework in Porous Bi ₂ Te _{2.7} Se _{0.3} â€“Carbon Nanotube Hybrids. <i>Advanced Electronic Materials</i> , 2020, 6, 2000292. | 5.1 | 8 |
| 31 | Excessive iodine addition leads to room-temperature superionic Cu ₂ S with enhanced thermoelectric properties and improved thermal stability. <i>Materials Today Physics</i> , 2020, 15, 100271. | 6.0 | 10 |
| 32 | Dual-doping of ruthenium and nickel into Co ₃ O ₄ for improving the oxygen evolution activity. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1390-1396. | 5.9 | 26 |
| 33 | Simultaneously increased carrier concentration and mobility in p-type Bi _{0.5} Sb _{1.5} Te ₃ through Cd doping. <i>Journal of Alloys and Compounds</i> , 2020, 830, 154625. | 5.5 | 23 |
| 34 | Intermediate-level doping strategy to simultaneously optimize power factor and phonon thermal conductivity for improving thermoelectric figure of merit. <i>Materials Today Physics</i> , 2020, 15, 100250. | 6.0 | 20 |
| 35 | Suppressing the dynamic precipitation and lowering the thermal conductivity for stable and high thermoelectric performance in BaCu ₂ Te ₂ based materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5323-5331. | 10.3 | 16 |
| 36 | Hierarchical N-Doped Porous Carbons for Znâ€“Air Batteries and Supercapacitors. <i>Nano-Micro Letters</i> , 2020, 12, 20. | 27.0 | 73 |

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|----|--|------|-----------|
| 37 | Semiconductor glass with superior flexibility and high room temperature thermoelectric performance. <i>Science Advances</i> , 2020, 6, eaaz8423. | 10.3 | 108 |
| 38 | Precise Regulation of Carrier Concentration in Thermoelectric BiSbTe Alloys via Magnetic Doping. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 20653-20663. | 8.0 | 37 |
| 39 | High Thermoelectric Performance of Cu-Doped PbSe-PbS System Enabled by High-Throughput Experimental Screening. <i>Research</i> , 2020, 2020, 1736798. | 5.7 | 18 |
| 40 | Violation of the T^1 Relationship in the Lattice Thermal Conductivity of Mg_3Sb_2 with Locally Asymmetric Vibrations. <i>Research</i> , 2020, 2020, 4589786. | 5.7 | 25 |
| 41 | Realization of higher thermoelectric performance by dynamic doping of copper in n-type PbTe. <i>Energy and Environmental Science</i> , 2019, 12, 3089-3098. | 30.8 | 127 |
| 42 | Magnetoresistance and spin-torque effect in flexible nanoscale magnetic tunnel junction. <i>Applied Physics Letters</i> , 2019, 115, 052401. | 3.3 | 2 |
| 43 | Mechanochemical synthesis of multi-site electrocatalysts as bifunctional zinc-air battery electrodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19355-19363. | 10.3 | 53 |
| 44 | Accelerating sample preparation of graded thermoelectric materials using an automatic powder feeding system. <i>Advances in Manufacturing</i> , 2019, 7, 278-287. | 6.1 | 3 |
| 45 | Enhanced room-temperature thermoelectric performance of p-type BiSbTe by reducing carrier concentration. <i>RSC Advances</i> , 2019, 9, 2252-2257. | 3.6 | 4 |
| 46 | Synergistic optimization of thermoelectric performance in p-type Ag ₂ Te through Cu substitution. <i>Journal of Materiomics</i> , 2019, 5, 489-495. | 5.7 | 33 |
| 47 | Thermal stability of Ag ₉ GaSe ₆ and its potential as a functionally graded thermoelectric material. <i>Chemical Engineering Journal</i> , 2019, 374, 494-501. | 12.7 | 39 |
| 48 | Enhanced and stabilized n-type thermoelectric performance in δ -CuAgSe by Ni doping. <i>Materials Today Physics</i> , 2019, 10, 100095. | 6.0 | 13 |
| 49 | Manipulation of Ni Interstitials for Realizing Large Power Factor in TiNiSn-Based Materials. <i>Advanced Electronic Materials</i> , 2019, 5, 1900166. | 5.1 | 32 |
| 50 | Engineering the electronic structure of single atom Ru sites via compressive strain boosts acidic water oxidation electrocatalysis. <i>Nature Catalysis</i> , 2019, 2, 304-313. | 34.4 | 757 |
| 51 | Impurity tracking enables synthesis of TiFe _{1-x} Ni _x Sb half-Heusler compounds with high purity. <i>Materials Today Physics</i> , 2019, 11, 100173. | 6.0 | 11 |
| 52 | A ₂ Cu ₃ In ₃ Te ₈ (A = Cd, Zn, Mn, Mg): A Type of Thermoelectric Material with Complex Diamond-like Structure and Low Lattice Thermal Conductivities. <i>ACS Applied Energy Materials</i> , 2019, 2, 8956-8965. | 5.1 | 17 |
| 53 | Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. <i>Nature Communications</i> , 2019, 10, 270. | 12.8 | 227 |
| 54 | Realizing High Thermoelectric Performance in BaCu ₂ Ag _x Te ₂ through Enhanced Carrier Effective Mass and Point-Defect Scattering. <i>ACS Applied Energy Materials</i> , 2019, 2, 889-895. | 5.1 | 26 |

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|----|---|------|-----------|
| 55 | Effects of Se substitution for Te on electrical and thermal transport properties of BiCuTeO. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 077201. | 0.5 | 3 |
| 56 | Increasing the thermoelectric power factor via Ag substitution at Zn site in Ba(Zn _{1-x} Ag _x) ₂ Sb ₂ . Journal of Alloys and Compounds, 2018, 745, 228-233. | 5.5 | 5 |
| 57 | Effective atomic interface engineering in Bi ₂ Te _{2.7} Se _{0.3} thermoelectric material by atomic-layer-deposition approach. Nano Energy, 2018, 49, 257-266. | 16.0 | 49 |
| 58 | Enhancing Thermoelectric Performance of PbSe by Se Vacancies. Journal of Electronic Materials, 2018, 47, 2584-2590. | 2.2 | 8 |
| 59 | Boosting the thermoelectric performance of PbSe through dynamic doping and hierarchical phonon scattering. Energy and Environmental Science, 2018, 11, 1848-1858. | 30.8 | 163 |
| 60 | Creation of Triple Hierarchical Micro-Meso-Macroporous N-doped Carbon Shells with Hollow Cores Toward the Electrocatalytic Oxygen Reduction Reaction. Nano-Micro Letters, 2018, 10, 3. | 27.0 | 99 |
| 61 | Discovery of High-Performance Thermoelectric Chalcogenides through Reliable High-Throughput Material Screening. Journal of the American Chemical Society, 2018, 140, 10785-10793. | 13.7 | 134 |
| 62 | Identifying the Key Role of Pyridinicâ€“Co Bonding in Synergistic Electrocatalysis for Reversible ORR/OER. Advanced Materials, 2018, 30, e1800005. | 21.0 | 394 |
| 63 | Enhanced Average Thermoelectric Figure of Merit of the PbTeâ€“SrTeâ€“MnTe Alloy. ACS Applied Materials & Interfaces, 2017, 9, 8729-8736. | 8.0 | 38 |
| 64 | Significantly enhanced thermoelectric performance of Cu-doped p-type Bi _{0.5-x} Sb _{1.5-x} Te ₃ by a hydrothermal synthesis method. RSC Advances, 2017, 7, 41111-41116. | 3.6 | 13 |
| 65 | Effects of Mn substitution on thermoelectric properties of Cu _{1-x} Mn _x Te ₂ . Chinese Physics B, 2017, 26, 097201. | 1.4 | 6 |
| 66 | Cd substitution in Zintl phase Eu ₅ In ₂ Sb ₆ enhancing the thermoelectric performance. Journal of Alloys and Compounds, 2017, 726, 618-622. | 5.5 | 7 |
| 67 | Optimized hetero-interfaces by tuning 2D SnS ₂ thickness in Bi ₂ Te _{2.7} Se _{0.3} /SnS ₂ nanocomposites to enhance thermoelectric performance. Nano Energy, 2017, 39, 297-305. | 16.0 | 74 |
| 68 | Enhanced thermoelectric properties of BaZn ₂ Sb ₂ via a synergistic optimization strategy using co-doped Na and Sr. Journal of Materials Chemistry A, 2016, 4, 12119-12125. | 10.3 | 19 |
| 69 | Enhanced thermoelectric performance in PbSe-SrSe solid solution by Mn substitution. Journal of Alloys and Compounds, 2016, 687, 765-772. | 5.5 | 15 |
| 70 | Hierarchical Nanoarrays: Hierarchical \pm -MnO ₂ Tube-on-Tube Arrays with Superior, Structure-Dependent Pseudocapacitor Performance Synthesized via a Selective Dissolution and Coherent Growth Mechanism (Adv. Mater. Interfaces 8/2016). Advanced Materials Interfaces, 2016, 3, . | 3.7 | 0 |
| 71 | 2D hetero-nanosheets to enable ultralow thermal conductivity by all scale phonon scattering for highly thermoelectric performance. Nano Energy, 2016, 30, 780-789. | 16.0 | 54 |
| 72 | EO polymer at cryogenic temperatures. Electronics Letters, 2016, 52, 1703-1705. | 1.0 | 4 |

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|----|--|------|-----------|
| 73 | Eutectic microstructures and thermoelectric properties of MnTe-rich precipitates hardened PbTe. <i>Acta Materialia</i> , 2016, 111, 202-209. | 7.9 | 32 |
| 74 | Hierarchical MnO_2 Tube-on-Tube Arrays with Superior, Structure-Dependent Pseudocapacitor Performance Synthesized via a Selective Dissolution and Coherent Growth Mechanism. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500761. | 3.7 | 8 |
| 75 | Thermoelectric Properties of Heavily Doped n-type $\text{Pb}_{1-x}\text{Y}_x\text{Te}$ Compounds. <i>Journal of Electronic Materials</i> , 2015, 44, 3556-3562. | 2.2 | 6 |
| 76 | 100 Gbit/s OOK using a silicon-organic hybrid (SOH) modulator. , 2015, , . | | 12 |
| 77 | Improved photovoltaic performance of dye-sensitized solar cells by carbon-ion implantation of tri-layer titania film electrodes. <i>Rare Metals</i> , 2015, 34, 34-39. | 7.1 | 8 |
| 78 | Enhanced thermoelectric properties of p-type Ag_2Te by Cu substitution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10303-10308. | 10.3 | 49 |
| 79 | Discrete Li-occupation versus pseudo-continuous Na-occupation and their relationship with structural change behaviors in $\text{Fe}_2(\text{MoO}_4)_3$. <i>Scientific Reports</i> , 2015, 5, 8810. | 3.3 | 42 |
| 80 | Effects of Ag-ion implantation on the performance of DSSCs with a tri-layer TiO_2 film. <i>RSC Advances</i> , 2014, 4, 56318-56322. | 3.6 | 17 |
| 81 | Time-, Energy-, and Phase-Resolved Second-Harmonic Generation at Semiconductor Interfaces. <i>Journal of Physical Chemistry C</i> , 2014, 118, 27981-27988. | 3.1 | 19 |
| 82 | Three-dimensional self-branching anatase TiO_2 nanorods: morphology control, growth mechanism and dye-sensitized solar cell application. <i>Journal of Materials Chemistry A</i> , 2014, 2, 16030-16038. | 10.3 | 21 |
| 83 | Synthesis of highly crystalline Bi_2Te_3 nanotubes and their enhanced thermoelectric properties. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12821. | 10.3 | 45 |
| 84 | High thermoelectric performance of $\text{Ge}_{1-x}\text{PbxSe}_{0.5}\text{Te}_{0.5}$ due to (Pb, Se) co-doping. <i>Acta Materialia</i> , 2014, 74, 215-223. | 7.9 | 28 |
| 85 | Phase separation and thermoelectric properties of Ag_2Te -doped $\text{PbTe}_{0.9}\text{S}_{0.1}$. <i>Acta Materialia</i> , 2012, 60, 7241-7248. | 7.9 | 14 |
| 86 | Stable micro-feeding of fine powders using a capillary with ultrasonic vibration. <i>Powder Technology</i> , 2011, 214, 237-242. | 4.2 | 30 |
| 87 | Highly Efficient Diels-Alder Crosslinkable Electro-Optic Dendrimers for Electric-Field Sensors. <i>Advanced Functional Materials</i> , 2007, 17, 2557-2563. | 14.9 | 73 |
| 88 | Tunable Fabry-Perot Filters using Electro-Optic Hybrid Sol-Gel. , 2006, , . | | 0 |
| 89 | Highly Efficient and Thermally Stable Electro-optic Polymer from a Smartly Controlled Crosslinking Process. <i>Advanced Materials</i> , 2003, 15, 1635-1638. | 21.0 | 72 |
| 90 | Microcathodoluminescence spectroscopy of defects in Bi_2O_3 -doped ZnO grains. <i>Journal of Applied Physics</i> , 2002, 92, 5072-5076. | 2.5 | 7 |

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|----|--|------|-----------|
| 91 | Design, Synthesis, and Properties of Highly Efficient Side-Chain Dendronized Nonlinear Optical Polymers for Electro-Optics. <i>Advanced Materials</i> , 2002, 14, 1763-1768. | 21.0 | 124 |
| 92 | Microstructure evolution and grain growth in the sintering of 3Yâ€“TZP ceramics. <i>Journal of Materials Science</i> , 1998, 33, 5301-5309. | 3.7 | 48 |
| 93 | Effect of filler porosity on the abrasion resistance of nanoporous silica gel/polymer composites. <i>Dental Materials</i> , 1998, 14, 29-36. | 3.5 | 37 |