Jun Luo

List of Publications by Year
in descending order

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		186265	133252
93	3,799	28	59
papers	citations	h-index	g-index

93	93	93	4765
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Engineering the electronic structure of single atom Ru sites via compressive strain boosts acidic water oxidation electrocatalysis. Nature Catalysis, 2019, 2, 304-313.	34.4	757
2	Identifying the Key Role of Pyridinicâ€Nâ€“Co Bonding in Synergistic Electrocatalysis for Reversible ORR/OER. Advanced Materials, 2018, 30, e1800005.	21.0	394
3	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. Nature Communications, 2019, 10, 270.	12.8	227
4	Boosting the thermoelectric performance of PbSe through dynamic doping and hierarchical phonon scattering. Energy and Environmental Science, 2018, 11, 1848-1858.	30.8	163
5	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
6	Realization of higher thermoelectric performance by dynamic doping of copper in n-type PbTe. Energy and Environmental Science, 2019, 12, 3089-3098.	30.8	127
7	Design, Synthesis, and Properties of Highly Efficient Side-Chain Dendronized Nonlinear Optical Polymers for Electro-Optics. Advanced Materials, 2002, 14, 1763-1768.	21.0	124
8	Semiconductor glass with superior flexibility and high room temperature thermoelectric performance. Science Advances, 2020, 6, eaaz8423.	10.3	108
9	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
10	Optimized hetero-interfaces by tuning 2D SnS2 thickness in Bi2Te2.7Se0.3/SnS2 nanocomposites to enhance thermoelectric performance. Nano Energy, 2017, 39, 297-305.	16.0	74
11	Highly Efficient Dielsâ€“Alder Crosslinkable Electroâ€Optic Dendrimers for Electricâ€Field Sensors. Advanced Functional Materials, 2007, 17, 2557-2563.	14.9	73
12	Hierarchical N-Doped Porous Carbons for Znâ€“Air Batteries and Supercapacitors. Nano-Micro Letters, 2020, 12, 20.	27.0	73
13	Highly Efficient and Thermally Stable Electro-optic Polymer from a Smartly Controlled Crosslinking Process. Advanced Materials, 2003, 15, 1635-1638.	21.0	72
14	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
15	Mechanochemical synthesis of multi-site electrocatalysts as bifunctional zincâ€“air battery electrodes. Journal of Materials Chemistry A, 2019, 7, 19355-19363.	10.3	53
16	Enhanced thermoelectric properties of p-type Ag₂Te by Cu substitution. Journal of Materials Chemistry A, 2015, 3, 10303-10308.	10.3	49
17	Effective atomic interface engineering in Bi2Te2.7Se0.3 thermoelectric material by atomic-layer-deposition approach. Nano Energy, 2018, 49, 257-266.	16.0	49
18	Microstructure evolution and grain growth in the sintering of 3Yâ€“TZP ceramics. Journal of Materials Science, 1998, 33, 5301-5309.	3.7	48

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19	Synthesis of highly crystalline Bi₂Te₃nanotubes and their enhanced thermoelectric properties. Journal of Materials Chemistry A, 2014, 2, 12821.	10.3	45
20	Discrete Li-occupation versus pseudo-continuous Na-occupation and their relationship with structural change behaviors in Fe2(MoO4)3. Scientific Reports, 2015, 5, 8810.	3.3	42
21	Thermal stability of Ag9GaSe6 and its potential as a functionally graded thermoelectric material. Chemical Engineering Journal, 2019, 374, 494-501.	12.7	39
22	Enhanced Average Thermoelectric Figure of Merit of the PbTeâ€“SrTeâ€“MnTe Alloy. ACS Applied Materials & Interfaces, 2017, 9, 8729-8736.	8.0	38
23	Effect of filler porosity on the abrasion resistance of nanoporous silica gel/polymer composites. Dental Materials, 1998, 14, 29-36.	3.5	37
24	Precise Regulation of Carrier Concentration in Thermoelectric BiSbTe Alloys via Magnetic Doping. ACS Applied Materials & Interfaces, 2020, 12, 20653-20663.	8.0	37
25	Synergistic optimization of thermoelectric performance in p-type Ag2Te through Cu substitution. Journal of Materiomics, 2019, 5, 489-495.	5.7	33
26	Eutectic microstructures and thermoelectric properties of MnTe-rich precipitates hardened PbTe. Acta Materialia, 2016, 111, 202-209.	7.9	32
27	Manipulation of Ni Interstitials for Realizing Large Power Factor in TiNiSnâ€Based Materials. Advanced Electronic Materials, 2019, 5, 1900166.	5.1	32
28	Stable micro-feeding of fine powders using a capillary with ultrasonic vibration. Powder Technology, 2011, 214, 237-242.	4.2	30
29	Tailoring the chemical bonding of GeTe-based alloys by MgB2 alloying to simultaneously enhance their mechanical and thermoelectric performance. Materials Today Physics, 2021, 16, 100308.	6.0	29
30	High thermoelectric performance of Ge1âˆ’xPbxSe0.5Te0.5 due to (Pb, Se) co-doping. Acta Materialia, 2014, 74, 215-223.	7.9	28
31	Realizing High Thermoelectric Performance in BaCu_{2â€“x}Ag_xTe₂ through Enhanced Carrier Effective Mass and Point-Defect Scattering. ACS Applied Energy Materials, 2019, 2, 889-895.	5.1	26
32	Dual-doping of ruthenium and nickel into Co₃O₄for improving the oxygen evolution activity. Materials Chemistry Frontiers, 2020, 4, 1390-1396.	5.9	26
33	Precision grain boundary engineering in commercial Bi₂Te_{2.7}Se_{0.3} thermoelectric materials towards high performance. Journal of Materials Chemistry A, 2021, 9, 11442-11449.	10.3	26
34	Violation of the T ^{âˆ’1} Relationship in the Lattice Thermal Conductivity of Mg ₃ Sb ₂ with Locally Asymmetric Vibrations. Research, 2020, 2020, 4589786.	5.7	25
35	Simultaneously increased carrier concentration and mobility in p-type Bi0.5Sb1.5Te3 throng Cd doping. Journal of Alloys and Compounds, 2020, 830, 154625.	5.5	23
36	Three-dimensional self-branching anatase TiO₂ nanorods: morphology control, growth mechanism and dye-sensitized solar cell application. Journal of Materials Chemistry A, 2014, 2, 16030-16038.	10.3	21

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37	Intermediate-level doping strategy to simultaneously optimize power factor and phonon thermal conductivity for improving thermoelectric figure of merit. Materials Today Physics, 2020, 15, 100250.	6.0	20
38	Unveiling the origins of low lattice thermal conductivity in 122-phase Zintl compounds. Materials Today Physics, 2021, 21, 100480.	6.0	20
39	Half-Heusler-like compounds with wide continuous compositions and tunable p- to n-type semiconducting thermoelectrics. Nature Communications, 2022, 13, 35.	12.8	20
40	Time-, Energy-, and Phase-Resolved Second-Harmonic Generation at Semiconductor Interfaces. Journal of Physical Chemistry C, 2014, 118, 27981-27988.	3.1	19
41	Enhanced thermoelectric properties of BaZn₂Sb₂via a synergistic optimization strategy using co-doped Na and Sr. Journal of Materials Chemistry A, 2016, 4, 12119-12125.	10.3	19
42	High Thermoelectric Performance of Cu-Doped PbSe-PbS System Enabled by High-Throughput Experimental Screening. Research, 2020, 2020, 1736798.	5.7	18
43	Effects of Ag-ion implantation on the performance of DSSCs with a tri-layer TiO₂ film. RSC Advances, 2014, 4, 56318-56322.	3.6	17
44	A₂Cu₃In₃Te₈ (A = Cd, Zn, Mn, Mg): A Type of Thermoelectric Material with Complex Diamond-like Structure and Low Lattice Thermal Conductivities. ACS Applied Energy Materials, 2019, 2, 8956-8965.	5.1	17
45	Tetrahedral Distortion and Thermoelectric Performance of the Ag-Substituted CuInTe₂ Chalcopyrite Compound. ACS Applied Energy Materials, 2020, 3, 11015-11023.	5.1	16
46	Suppressing the dynamic precipitation and lowering the thermal conductivity for stable and high thermoelectric performance in BaCu2Te2 based materials. Journal of Materials Chemistry A, 2020, 8, 5323-5331.	10.3	16
47	Temperature-Dependent Band Renormalization in CoSb₃ Skutterudites Due to Sb-Ring-Related Vibrations. Chemistry of Materials, 2021, 33, 1046-1052.	6.7	16
48	Enhanced thermoelectric performance in PbSe-SrSe solid solution by Mn substitution. Journal of Alloys and Compounds, 2016, 687, 765-772.	5.5	15
49	Phase separation and thermoelectric properties of Ag2Te-doped PbTe0.9S0.1. Acta Materialia, 2012, 60, 7241-7248.	7.9	14
50	Significantly enhanced thermoelectric performance of Cu-doped p-type Bi_{0.5}Sb_{1.5}Te₃ by a hydrothermal synthesis method. RSC Advances, 2017, 7, 41111-41116.	3.6	13
51	Enhanced and stabilized n-type thermoelectric performance in Î±-CuAgSe by Ni doping. Materials Today Physics, 2019, 10, 100095.	6.0	13
52	Highly Distorted Grain Boundary with an Enhanced Carrier/Phonon Segregation Effect Facilitates High-Performance Thermoelectric Materials. ACS Applied Materials & Interfaces, 2021, 13, 51018-51027.	8.0	13
53	100 Gbit/s OOK using a silicon-organic hybrid (SOH) modulator. , 2015, , .		12
54	Enhancement of the thermoelectric performance of InTe via introducing Cd dopant and regulating the annealing time. Journal of Alloys and Compounds, 2020, 813, 152210.	5.5	12

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55	Discovery of a Slaterâ€“Pauling Semiconductor ZrRu_{1.5}Sb with Promising Thermoelectric Properties. Advanced Functional Materials, 2022, 32, .	14.9	12
56	Impurity tracking enables synthesis of TiFe1-Ni Sb half-Heusler compounds with high purity. Materials Today Physics, 2019, 11, 100173.	6.0	11
57	Enhancement of Thermoelectric Properties in n-type NbCoSn Half-Heusler Compounds via Ta Alloying. ACS Applied Energy Materials, 2021, 4, 12458-12465.	5.1	11
58	Origin of ductility in amorphous Ag2S0.4Te0.6. Applied Physics Letters, 2022, 120, .	3.3	11
59	Optimizing Room-Temperature Thermoelectric Performance of n-Type Bi₂Te_{2.7}Se_{0.3}. ACS Omega, 2021, 6, 33883-33888.	3.5	11
60	Excessive iodine addition leads to room-temperature superionic Cu2S with enhanced thermoelectric properties and improved thermal stability. Materials Today Physics, 2020, 15, 100271.	6.0	10
61	Anisotropic artificial synapse based on 2D ReS2 field-effect transistor. Applied Physics Letters, 2021, 119, 163102.	3.3	10
62	Improved Thermal Stability and Enhanced Thermoelectric Properties of p-Type BaCu2Te2 by Doping of Cl. ACS Applied Materials & Interfaces, 2022, 14, 5634-5642.	8.0	10
63	Minimizing Thermal Conductivity for Boosting Thermoelectric Properties of Cuâ€“Ni-Based Alloys through All-Scale Hierarchical Architectures. ACS Applied Energy Materials, 2021, 4, 5015-5023.	5.1	9
64	Synergistically Optimizing Electrical and Thermal Transport Properties of ZrCoSb through Ru Doping. ACS Applied Energy Materials, 2021, 4, 13997-14003.	5.1	9
65	Synergistically Optimized Thermal Conductivity and Carrier Concentration in GeTe by Biâ€“Se Codoping. ACS Applied Materials & Interfaces, 2022, 14, 14359-14366.	8.0	9
66	Improved photovoltaic performance of dye-sensitized solar cells by carbon-ion implantation of tri-layer titania film electrodes. Rare Metals, 2015, 34, 34-39.	7.1	8
67	Hierarchical Î±â€MnO₂ Tubeâ€onâ€Tube Arrays with Superior, Structureâ€Dependent Pseudocapacitor Performance Synthesized via a Selective Dissolution and Coherent Growth Mechanism. Advanced Materials Interfaces, 2016, 3, 1500761.	3.7	8
68	Enhancing Thermoelectric Performance of PbSe by Se Vacancies. Journal of Electronic Materials, 2018, 47, 2584-2590.	2.2	8
69	Effective Mass Enhancement and Thermal Conductivity Reduction for Improving the Thermoelectric Properties of Pseudoâ€Binary Ge₂Sb₂Te₅. Annalen Der Physik, 2020, 532, 1900390.	2.4	8
70	Achieving High Thermoelectric Performance by Introducing 3D Atomically Thin Conductive Framework in Porous Bi₂Te_{2.7}Se_{0.3}â€Carbon Nanotube Hybrids. Advanced Electronic Materials, 2020, 6, 2000292.	5.1	8
71	Embedded in-situ nanodomains from chemical composition fluctuation in thermoelectric A2Cu3In3Te8 (AÂ= Zn, Cd). Materials Today Physics, 2021, 17, 100333.	6.0	8
72	A general strategy for high-throughput experimental screening of promising bulk thermoelectric materials. Science China Materials, 2021, 64, 1751-1760.	6.3	8

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73	Designing vacancy-filled Heusler thermoelectric semiconductors by the Slater-Pauling rule. Materials Today Energy, 2022, 27, 101035.	4.7	8
74	Microcathodoluminescence spectroscopy of defects in Bi2O3-doped ZnO grains. Journal of Applied Physics, 2002, 92, 5072-5076.	2.5	7
75	Cd substitution in Zintl phase Eu5In2Sb6 enhancing the thermoelectric performance. Journal of Alloys and Compounds, 2017, 726, 618-622.	5.5	7
76	Influence of Ag substitution on thermoelectric properties of the quaternary diamond-like compound Zn2Cu3In3Te8. Journal of Materiomics, 2021, 7, 236-243.	5.7	7
77	Thermoelectric Properties of Heavily Doped n-type Pb1â^'x Y x Te Compounds. Journal of Electronic Materials, 2015, 44, 3556-3562.	2.2	6
78	Effects of Mn substitution on thermoelectric properties of CuIn 1â^'x Mn x Te 2. Chinese Physics B, 2017, 26, 097201.	1.4	6
79	Interfacial Decoration Tailoring the Thermoelectric Performance of TiCoNi_xSb Half-Heusler Compounds. ACS Applied Energy Materials, 2021, 4, 7148-7156.	5.1	6
80	Cu vacancy engineering of cage-compound BaCu2Se2: Realization of temperature-dependent hole concentration for high average thermoelectric figure-of-merit. Chemical Engineering Journal, 2022, 437, 135302.	12.7	6
81	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
82	Increasing the thermoelectric power factor via Ag substitution at Zn site in Ba(Zn1-Ag)2Sb2. Journal of Alloys and Compounds, 2018, 745, 228-233.	5.5	5
83	Cubic Quaternary Silver Chalcogenide: A Promising Ductile Thermoelectric Inorganic. ACS Applied Energy Materials, 2022, 5, 8878-8884.	5.1	5
84	EO polymer at cryogenic temperatures. Electronics Letters, 2016, 52, 1703-1705.	1.0	4
85	Enhanced room-temperature thermoelectric performance of p-type BiSbTe by reducing carrier concentration. RSC Advances, 2019, 9, 2252-2257.	3.6	4
86	Stabilized cubic phase BiAgSe_{2â^'x}S_x with excellent thermoelectric properties via phase boundary engineering. Journal of Materials Chemistry C, 2021, 9, 6766-6772.	5.5	4
87	Accelerating sample preparation of graded thermoelectric materials using an automatic powder feeding system. Advances in Manufacturing, 2019, 7, 278-287.	6.1	3
88	Optimization of electrical and thermal transport properties of layered Bi2O2Se via Nb doping. Journal of Materials Science, 2021, 56, 12732-12739.	3.7	3
89	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
90	Magnetoresistance and spin-torque effect in flexible nanoscale magnetic tunnel junction. Applied Physics Letters, 2019, 115, 052401.	3.3	2

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91	The Electrical and Thermal Transport Properties of La-Doped SrTiO3 with Sc2O3 Composite. Materials, 2021, 14, 6279.	2.9	1
92	Tunable Fabry-Perot Filters using Electro-Optic Hybrid Sol-Gel. , 2006, , .		0
93	Hierarchical Nanoarrays: Hierarchical Î±-MnO2Tube-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