Guang Han

List of Publications by Citations

81 papers	2,544 citations	25 h-index	49 g-index
86 ext. papers	3,148 ext. citations	9 avg, IF	5.24 L-index

#	Paper	IF	Citations
81	Nanostructured thermoelectric materials: Current research and future challenge. *Progress in Natural Science: Materials International*, **2012**, 22, 535-549	3.6	485
80	Indium selenides: structural characteristics, synthesis and their thermoelectric performances. *Small*, **2014**, 10, 2747-65	11	201
79	High-performance thermoelectric Cu2Se nanoplates through nanostructure engineering. *Nano Energy*, **2015**, 16, 367-374	17.1	169
78	Enhanced Thermoelectric Performance of Nanostructured Bi2Te3 through Significant Phonon Scattering. *ACS Applied Materials & Interfaces*, **2015**, 7, 23694-9	9.5	155
77	n-type Bi-doped PbTe Nanocubes with Enhanced Thermoelectric Performance. *Nano Energy*, **2017**, 31, 105-112	17.1	84
76	Texture-dependent thermoelectric properties of nano-structured Bi2Te3. *Chemical Engineering Journal*, **2020**, 388, 124295	14.7	72
75	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. *Angewandte Chemie - International Edition*, **2016**, 55, 6433-7	16.4	71
74	Facile in situ solution synthesis of SnSe/rGO nanocomposites with enhanced thermoelectric performance. *Journal of Materials Chemistry A*, **2020**, 8, 1394-1402	13	70
73	Te-Doped Cu2Se nanoplates with a high average thermoelectric figure of merit. *Journal of Materials Chemistry A*, **2016**, 4, 9213-9219	13	67
72	Impacts of Cu deficiency on the thermoelectric properties of Cu2−xSe nanoplates. *Acta Materialia*, **2016**, 113, 140-146	8.4	58
71	In-doped Bi2Se3 hierarchical nanostructures as anode materials for Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 7109	13	52
70	T-Shaped Bi2Te3–Te Heteronanojunctions: Epitaxial Growth, Structural Modeling, and Thermoelectric Properties. *Journal of Physical Chemistry C*, **2013**, 117, 12458-12464	3.8	51
69	Enhanced Thermoelectric Performance of Ultrathin Bi2Se3 Nanosheets through Thickness Control. *Advanced Electronic Materials*, **2015**, 1, 1500025	6.4	49
68	Chlorine-Enabled Electron Doping in Solution-Synthesized SnSe Thermoelectric Nanomaterials. *Advanced Energy Materials*, **2017**, 7, 1602328	21.8	48
67	Rational design of Bi2Te3 polycrystalline whiskers for thermoelectric applications. *ACS Applied Materials & Interfaces*, **2015**, 7, 989-95	9.5	47
66	Understanding the stepwise capacity increase of high energy low-Co Li-rich cathode materials for lithium ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 18767-18774	13	43
65	Twin Engineering in Solution-Synthesized Nonstoichiometric Cu5FeS4 Icosahedral Nanoparticles for Enhanced Thermoelectric Performance. *Advanced Functional Materials*, **2018**, 28, 1705117	15.6	37

64	Phase control and formation mechanism of Al□Mn(□Fe) intermetallic particles in Mg□Al-based alloys with FeCl3 addition or melt superheating. *Acta Materialia*, **2016**, 114, 54-66	8.4	35
63	Realizing Bi-doped □Cu2Se as a promising near-room-temperature thermoelectric material. *Chemical Engineering Journal*, **2019**, 371, 593-599	14.7	34
62	High Curie temperature Bi(1.85)Mn(0.15)Te3 nanoplates. *Journal of the American Chemical Society*, **2012**, 134, 18920-3	16.4	29
61	Thermal performance of two heat exchangers for thermoelectric generators. *Case Studies in Thermal Engineering*, **2016**, 8, 164-175	5.6	28
60	Grain refinement of Mg□Al based alloys by a new Al□C master alloy. *Journal of Alloys and Compounds*, **2009**, 467, 202-207	5.7	27
59	Multiphysics simulations of thermoelectric generator modules with cold and hot blocks and effects of some factors. *Case Studies in Thermal Engineering*, **2017**, 10, 63-72	5.6	26
58	Enhancing the Thermoelectric Performance of p-Type MgSb via Codoping of Li and Cd. *ACS Applied Materials & Interfaces*, **2020**, 12, 8359-8365	9.5	25
57	A new crystal: layer-structured rhombohedral In3Se4. *CrystEngComm*, **2014**, 16, 393-398	3.3	25
56	Topotactic anion-exchange in thermoelectric nanostructured layered tin chalcogenides with reduced selenium content. *Chemical Science*, **2018**, 9, 3828-3836	9.4	24
55	General surfactant-free synthesis of binary silver chalcogenides with tuneable thermoelectric properties. *Chemical Engineering Journal*, **2020**, 393, 124763	14.7	22
54	Melt-spun Sn1□Sb Mn Te with unique multiscale microstructures approaching exceptional average thermoelectric zT. *Nano Energy*, **2021**, 84, 105879	17.1	21
53	Strong lattice anharmonicity securing intrinsically low lattice thermal conductivity and high performance thermoelectric SnSb2Te4 via Se alloying. *Nano Energy*, **2020**, 76, 105084	17.1	20
52	Grain refinement of AZ31 magnesium alloy by new Al-Ti-C master alloys. *Transactions of Nonferrous Metals Society of China*, **2009**, 19, 1057-1064	3.3	20
51	High thermoelectric performance of CuSbSe nanocrystals with CuSe in situ inclusions synthesized by a microwave-assisted solvothermal method. *Nanoscale*, **2018**, 10, 14546-14553	7.7	19
50	Paramagnetic Cu-doped Bi2Te3 nanoplates. *Applied Physics Letters*, **2014**, 104, 053105	3.4	19
49	Thermal stability and oxidation of layer-structured rhombohedral In3Se4 nanostructures. *Applied Physics Letters*, **2013**, 103, 263105	3.4	19
48	Duplex nucleation in Mg□Al□Zn□Mn alloys with carbon inoculation. *Journal of Alloys and Compounds* , **2009**, 487, 194-197	5.7	19
47	Conceptual design and performance evaluation of a hybrid concentrating photovoltaic system in preparation for energy. *Energy*, **2018**, 147, 547-560	7.9	18

46	Large-Scale Surfactant-Free Synthesis of p-Type SnTe Nanoparticles for Thermoelectric Applications. *Materials*, **2017**, 10,	3.5	18
45	Realizing enhanced thermoelectric properties in Cu2S-alloyed SnSe based composites produced via solution synthesis and sintering. *Journal of Materials Science and Technology*, **2021**, 78, 121-130	9.1	18
44	A coupled optical-thermal-electrical model to predict the performance of hybrid PV/T-CCPC roof-top systems. *Renewable Energy*, **2017**, 112, 166-186	8.1	17
43	Grain refining efficiency of a new Al□B□.6C master alloy on AZ63 magnesium alloy. *Journal of Alloys and Compounds*, **2010**, 491, 165-169	5.7	17
42	Effect of manganese on the microstructure of Mg□Al alloy. *Journal of Alloys and Compounds*, **2009**, 486, 136-141	5.7	17
41	Nanostructured monoclinic CuSe as a near-room-temperature thermoelectric material. *Nanoscale*, **2020**, 12, 20536-20542	7.7	17
40	A novel absorptive/reflective solar concentrator for heat and electricity generation: An optical and thermal analysis. *Energy Conversion and Management*, **2016**, 114, 142-153	10.6	16
39	Trifold Tellurium One-Dimensional Nanostructures and Their Formation Mechanism. *Crystal Growth and Design*, **2013**, 13, 4796-4802	3.5	16
38	Phase Control and Formation Mechanism of New-Phase Layer-Structured Rhombohedral In3Se4 Hierarchical Nanostructures. *Crystal Growth and Design*, **2013**, 13, 5092-5099	3.5	15
37	Ba6□x Nd8+2x Ti18O54 Tungsten Bronze: A New High-Temperature n-Type Oxide Thermoelectric. *Journal of Electronic Materials*, **2016**, 45, 1894-1899	1.9	14
36	Morphology and Texture Engineering Enhancing Thermoelectric Performance of Solvothermal Synthesized Ultralarge SnS Microcrystal. *ACS Applied Energy Materials*, **2020**, 3, 2192-2199	6.1	12
35	Structure-Dependent Thermoelectric Properties of GeSeTe (0 □□0.5). *ACS Applied Materials & Interfaces*, **2020**, 12, 41381-41389	9.5	12
34	Anion-exchange synthesis of thermoelectric layered SnS0.1Se0.9□Tex nano/microstructures in aqueous solution: complexity and carrier concentration. *Journal of Materials Chemistry C*, **2019**, 7, 7572-7579	7.1	11
33	In3Se4 and S-doped In3Se4 nano/micro-structures as new anode materials for Li-ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 7560-7567	13	11
32	Facile microwave-assisted hydrothermal synthesis of SnSe: impurity removal and enhanced thermoelectric properties. *Journal of Materials Chemistry C*, **2020**, 8, 10333-10341	7.1	11
31	Achieving Enhanced Thermoelectric Performance in (SnTe)(SbTe) and (SnTe)(SbSe) Synthesized via Solvothermal Reaction and Sintering. *ACS Applied Materials & Interfaces*, **2020**, 12, 44805-44814	9.5	11
30	Co-doped Sb2Te3 paramagnetic nanoplates. *Journal of Materials Chemistry C*, **2016**, 4, 521-525	7.1	10
29	Long wavelength emissions of Se4+-doped In2O3 hierarchical nanostructures. *Journal of Materials Chemistry C*, **2014**, 2, 6529	7.1	8

28	Exceptional Performance Driven by Planar Honeycomb Structure in a New High Temperature Thermoelectric Material BaAgAs. *Advanced Functional Materials*, **2021**, 31, 2100583	15.6	8
27	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. *Angewandte Chemie*, **2016**, 128, 6543-6547	3.6	8
26	Realizing Cd and Ag codoping in p-type Mg3Sb2 toward high thermoelectric performance. *Journal of Magnesium and Alloys*, **2021**,	8.8	7
25	Dynamic Epitaxial Crystallization of SnSe on the Oxidized SnSe Surface and Its Atomistic Mechanisms. *ACS Applied Materials & Interfaces*, **2020**,	9.5	6
24	A scaling law for monocrystalline PV/T modules with CCPC and comparison with triple junction PV cells. *Applied Energy*, **2017**, 202, 755-771	10.7	6
23	Unconventional Doping Effect Leads to Ultrahigh Average Thermoelectric Power Factor in Cu SbSe -based Composites.. *Advanced Materials*, **2022**, e2109952	24	6
22	Realizing Enhanced Thermoelectric Performance and Hardness in Icosahedral Cu FeS Se with High-Density Twin Boundaries. *Small*, **2021**, e2104592	11	6
21	Exploring thermoelectric performance of Ca3Co4O9+□ceramics via chemical electroless plating with Cu. *Journal of Alloys and Compounds*, **2020**, 821, 153522	5.7	5
20	Regulating the electronic structure of ReS2 by Mo doping for electrocatalysis and lithium storage. *Chemical Engineering Journal*, **2021**, 414, 128811	14.7	5
19	Achieving enhanced thermoelectric performance of Ca1□□LaxSryMnO3 via synergistic carrier concentration optimization and chemical bond engineering. *Chemical Engineering Journal*, **2021**, 408, 127364	14.7	5
18	Manipulating the phase transformation temperature to achieve cubic Cu5FeS4□Sex and enhanced thermoelectric performance. *Journal of Materials Chemistry C*, **2020**, 8, 17222-17228	7.1	4
17	Constructing n-type Ag2Se/CNTs composites toward synergistically enhanced thermoelectric and mechanical performance. *Acta Materialia*, **2022**, 223, 117502	8.4	4
16	A new indium selenide phase: controllable synthesis, phase transformation and photoluminescence properties. *Journal of Materials Chemistry C*, **2019**, 7, 13573-13584	7.1	4
15	Thermoelectric performance of binary lithium-based compounds: Li3Sb and Li3Bi. *Applied Physics Letters*, **2021**, 119, 033901	3.4	4
14	Phase Composition Manipulation and Twin Boundary Engineering Lead to Enhanced Thermoelectric Performance of Cu2SnS3. *ACS Applied Energy Materials*, **2021**, 4, 9240-9247	6.1	4
13	Structural Core-Shell beyond Chemical Homogeneity in Non-Stoichiometric CuFeS Nano-Icosahedrons: An in Situ Heating TEM Study. *Nanomaterials*, **2019**, 10,	5.4	3
12	Phase Modulation Enabled High Thermoelectric Performance in Polycrystalline GeSe 0.75 Te 0.25. *Advanced Functional Materials*,2111238	15.6	3
11	Ultralow Lattice Thermal Conductivity of Cubic CuFeS2 Induced by Atomic Disorder. *Chemistry of Materials*, **2021**, 33, 9795-9802	9.6	3

10	Band convergence and thermoelectric performance enhancement of InSb via Bi doping. *Intermetallics*, **2021**, 139, 107347	3.5	2
9	Nitrogen-doped activated porous carbon for 4.5 V lithium-ion capacitor with high energy and power density. *Journal of Energy Storage*, **2021**, 47, 103675	7.8	1
8	Identification of vibrational mode symmetry and phonon anharmonicity in SbCrSe3 single crystal using Raman spectroscopy. *Science China Materials*, **2021**, 64, 2824-2834	7.1	1
7	Solution-Synthesized SnSeS: Dual-Functional Materials with Enhanced Electrochemical Storage and Thermoelectric Performance. *ACS Applied Materials & Interfaces*, **2021**, 13, 37201-37211	9.5	1
6	A new insight into heterogeneous nucleation mechanism of Al by non-stoichiometric TiCx. *Acta Materialia*, **2022**, 233, 117977	8.4	1
5	Simultaneously optimized thermoelectric and mechanical performance of p-type polycrystalline SnSe enabled by CNTs addition. *Scripta Materialia*, **2022**, 218, 114846	5.6	1
4	Phase Tuning for Enhancing the Thermoelectric Performance of Solution-Synthesized CuS. *ACS Applied Materials & Interfaces*, **2021**, 13, 39541-39549	9.5	0
3	Self-assembled epitaxy of Ga2Se3 on the oxidized GaSe surface and atomic imaging of the Ga2Se3/GaSe heterostructure. *Applied Surface Science*, **2022**, 586, 152774	6.7	0
2	Attaining enhanced thermoelectric performance in p-type (SnSe)1 (SnS2) produced via sintering their solution-synthesized micro/nanostructures. *Journal of Materials Science and Technology*, **2022**, 120, 205-213	9.1	0
1	Revealing the intrinsic p-to-n transition mechanism on Mg3Sb2 through extra Mg. *Applied Physics Letters*, **2022**, 120, 173902	3.4	0