Xin Liang

List of Publications by Year
in descending order

34 papers	612 citations	623734 14 h-index	610901 24 g-index
34 all docs	34 docs citations	34 times ranked	825 citing authors

#	Article	IF	Citations
1	Achieving ultralow lattice thermal conductivity and improved thermoelectric performance in BiSe by doping. Journal of the European Ceramic Society, 2022, 42, 3905-3912.	5.7	3
2	Thermal conductivity of nanostructured ZnO. , 2021, , 225-251.		0
3	Lattice thermal conductivity of transition metal carbides: Evidence of a strong electron-phonon interaction above room temperature. Acta Materialia, 2021, 216, 117160.	7.9	2
4	Ductile inorganic amorphous/crystalline composite Ag4TeS with phonon-glass electron-crystal transport behavior and excellent stability of high thermoelectric performance on plastic deformation. Acta Materialia, 2021, 218, 117231.	7.9	29
5	Epoxy Nanocomposites with Reduced Graphene Oxide-Constructed Three-Dimensional Networks of Single Wall Carbon Nanotube for Enhanced Thermal Management Capability with Low Filler Loading. ACS Applied Materials & Interfaces, 2020, 12, 3051-3058.	8.0	54
6	Influence of nonstoichiometry point defects on electronic thermal conductivity. Applied Physics Letters, 2020, 117, 213901.	3.3	1
7	Effect of plastic deformation on phonon thermal conductivity of <i>Î±</i> -Ag2S. Applied Physics Letters, 2020, 117, .	3.3	6
8	Electron and phonon transport anisotropy of ZnO at and above room temperature. Applied Physics Letters, 2020, 116, .	3.3	10
9	Phase Transition Engineering of Cu₂S to Widen the Temperature Window of Improved Thermoelectric Performance. Advanced Electronic Materials, 2019, 5, 1900486.	5.1	27
10	Orientation dependent physical transport behavior and the micro-mechanical response of ZnO nanocomposites induced by SWCNTs and graphene: importance of intrinsic anisotropy and interfaces. Journal of Materials Chemistry C, 2019, 7, 1208-1221.	5.5	6
11	Origin of anisotropy and compositional dependence of phonon and electron transport in ZnO based natural superlattices and role of atomic layer interfaces. Nano Energy, 2019, 59, 651-666.	16.0	5
12	Reduction of the Lorenz Number in Copper at Room Temperature due to Strong Inelastic Electron Scattering Brought about by High-Density Dislocations. Journal of Physical Chemistry Letters, 2019, 10, 507-512.	4.6	1
13	Optimizing interfacial transport properties of InO₂ single atomic layers in In₂O₃(ZnO)₄ natural superlattices for enhanced high temperature thermoelectrics. Nanoscale, 2018, 10, 4500-4514.	5.6	8
14	Interfacial thermal and electrical transport properties of pristine and nanometer-scale ZnS modified grain boundary in ZnO polycrystals. Acta Materialia, 2018, 148, 100-109.	7.9	11
15	Single layer In-O atomic sheets as phonon and electron barriers in ZnO-In2O3 natural superlattices: Implications for thermoelectricity. Journal of Applied Physics, 2018, 124, .	2.5	5
16	Thermoelectric properties of Bi_{1âˆ'x}Sn_xCuSeO solid solutions. Dalton Transactions, 2017, 46, 2510-2515.	3.3	16
17	Mobile copper ions as heat carriers in polymorphous copper sulfide superionic conductors. Applied Physics Letters, 2017, 111, .	3.3	13
18	Impact of grain boundary characteristics on lattice thermal conductivity: A kinetic theory study on ZnO. Physical Review B, 2017, 95, .	3.2	22

#	ARTICLE	IF	CITATIONS
19	The impact of core-shell nanotube structures on fracture in ceramic nanocomposites. Acta Materialia, 2017, 122, 82-91.	7.9	11
20	Optical and vibrational properties of (ZnO)<i>k</i> In2O3 natural superlattice nanostructures. Journal of Applied Physics, 2016, 119, .	2.5	11
21	Enhanced thermoelectric performance of n-type transformable AgBiSe2 polymorphs by indium doping. Applied Physics Letters, 2016, 109, .	3.3	30
22	Modeling of Î¸ â†' Î± alumina lateral phase transformation with applications to oxidation kinetics of NiAl-based alloys. Materials and Design, 2016, 112, 519-529.	7.0	14
23	Thermoelectric transport properties of naturally nanostructured Gaâ€“ZnO ceramics: Effect of point defect and interfaces. Journal of the European Ceramic Society, 2016, 36, 1643-1650.	5.7	57
24	Nanostructure Engineering of ZnO Based Complex Oxides for Thermoelectric Application. Current Nanoscience, 2016, 12, 157-168.	1.2	1
25	Thermoelectric Transport Properties of Fe-Enriched ZnO with High-Temperature Nanostructure Refinement. ACS Applied Materials & Interfaces, 2015, 7, 7927-7937.	8.0	43
26	Recasting the Callaway and von Baeyer thermal conductivity model on defective oxide materials: the ZnOâ€“In2O3 system as an example. Physical Chemistry Chemical Physics, 2015, 17, 27889-27893.	2.8	6
27	Remarkable enhancement in the Kapitza resistance and electron potential barrier of chemically modified In₂O₃(ZnO)₉ natural superlattice interfaces. Physical Chemistry Chemical Physics, 2015, 17, 29655-29660.	2.8	15
28	Quantification and promotion of interfacial interactions between carbon nanotubes and polymer derived ceramics. Carbon, 2015, 95, 964-971.	10.3	21
29	Employing nanoscale surface morphologies to improve interfacial adhesion between solid electrolytes and Li ion battery cathodes. Acta Materialia, 2015, 98, 175-181.	7.9	17
30	Relation between thermolectric properties and phase equilibria in the ZnOâ€“In2O3 binary system. Acta Materialia, 2014, 63, 191-201.	7.9	34
31	Scaling of stacking fault energy and deformation temperature on strain hardening of FCC metals and alloys. Philosophical Magazine Letters, 2014, 94, 556-563.	1.2	2
32	Thermal (Kapitza) resistance of interfaces in compositional dependent ZnO-In2O3 superlattices. Applied Physics Letters, 2013, 102, .	3.3	32
33	Microstructural characterization of transformable Feâ€“Mn alloys at different length scales. Materials Characterization, 2009, 60, 1224-1231.	4.4	6
34	Microstructural evolution and strain hardening of Feâ€“24Mn and Feâ€“30Mn alloys during tensile deformation. Acta Materialia, 2009, 57, 3978-3988.	7.9	93