Jun Liu

List of Publications by Year in Descending Order

47 papers	2,252 citations	20 h-index	47 g-index
49 ext. papers	2,577 ext. citations	4.7 avg, IF	5.17 L-index

#	Paper	IF	Citations
47	Thermal percolation and electrical insulation in composite materials with partially metallic coated fillers. *Applied Physics Letters*, **2021**, 119, 211602	3.4	1
46	Thermal boundary conductance across solid–solid interfaces at high temperatures: A microscopic approach. *Journal of Applied Physics*, **2021**, 129, 195102	2.5	3
45	Evaluating the roles of temperature-dependent eigenvectors in predicting phonon transport properties of anharmonic crystals using normal mode analysis methods. *Journal of Applied Physics*, **2021**, 129, 215102	2.5	1
44	Parallel Frameworks for Robust Optimization of Medium-Frequency Transformers. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 5097-5112	5.6	1
43	Molecular dynamics simulation of thermal transport in semicrystalline polyethylene: Roles of strain and the crystalline-amorphous interphase region. *Journal of Applied Physics*, **2021**, 130, 225101	2.5	1
42	Synergistic Effects of Boron Nitride (BN) Nanosheets and Silver (Ag) Nanoparticles on Thermal Conductivity and Electrical Properties of Epoxy Nanocomposites. *Polymers*, **2020**, 12,	4.5	29
41	In-Plane Thermoelectric Properties of Flexible and Room-Temperature-Doped Carbon Nanotube Films. *ACS Applied Energy Materials*, **2020**, 3, 6929-6936	6.1	13
40	Strong electron-phonon coupling induced anomalous phonon transport in ultrahigh temperature ceramics ZrB2 and TiB2. *International Journal of Heat and Mass Transfer*, **2020**, 152, 119481	4.9	7
39	Thermal resistance network model for heat conduction of amorphous polymers. *Physical Review Materials*, **2020**, 4,	3.2	9
38	Superior Thermal Dissipation in Graphene Electronic Device Through Novel Heat Path by Electron-Phonon Coupling. *ES Energy & Environments*, **2020**,	2.9	4
37	A skin layer made of cured polysilazane and yttria stabilized zirconia for enhanced thermal protection of carbon fiber reinforced polymers (CFRPs). *Surface and Coatings Technology*, **2020**, 404, 126481	4.4	0
36	Efficiency improvement of liquid piston compressor using metal wire mesh for near-isothermal compressed air energy storage application. *Journal of Energy Storage*, **2020**, 28, 101226	7.8	11
35	A Ubiquitous Thermal Conductivity Formula for Liquids, Polymer Glass, and Amorphous Solids. *Chinese Physics Letters*, **2020**, 37, 104401	1.8	11
34	Size Effects in the Thermal Conductivity of Amorphous Polymers. *Physical Review Applied*, **2020**, 14,	4.3	9
33	Designing high thermal conductivity of cross-linked epoxy resin via molecular dynamics simulations. *Physical Chemistry Chemical Physics*, **2020**, 22, 19735-19745	3.6	11
32	Sono-Assisted Surface Energy Driven Assembly of 2D Materials on Flexible Polymer Substrates: A Green Assembly Method Using Water. *ACS Applied Materials & Interfaces*, **2019**, 11, 33458-33464	9.5	11
31	Enhanced thermoelectric properties through minority carriers blocking in nanocomposites. *Journal of Applied Physics*, **2019**, 126, 095107	2.5	3

30	Optimization of Medium Frequency Transformers with Practical Considerations **2019**,		2
29	Roles of kink on the thermal transport in single polyethylene chains. *Journal of Applied Physics*, **2019**, 125, 164303	2.5	14
28	Role of radiation in heat transfer from nanoparticles to gas media in photothermal measurements. *International Journal of Modern Physics C*, **2019**, 30, 1950024	1.1	9
27	Role of angular bending freedom in regulating thermal transport in polymers. *Journal of Applied Physics*, **2019**, 125, 095104	2.5	8
26	On the importance of using exact full phonon dispersions for predicting interfacial thermal conductance of layered materials using diffuse mismatch model. *AIP Advances*, **2019**, 9, 115116	1.5	6
25	Strain effects on the anisotropic thermal transport in crystalline polyethylene. *Applied Physics Letters*, **2018**, 112, 051907	3.4	21
24	Thermal transport in semicrystalline polyethylene by molecular dynamics simulation. *Journal of Applied Physics*, **2018**, 123, 015107	2.5	27
23	Disorder enhanced thermal conductivity anisotropy in two-dimensional materials and van der Waals heterostructures. *Journal of Applied Physics*, **2018**, 124, 055104	2.5	8
22	Thermal percolation in composite materials with electrically conductive fillers. *Applied Physics Letters*, **2018**, 113, 041902	3.4	14
21	Solution-Processed CuSe Nanocrystal Films with Bulk-Like Thermoelectric Performance. *Scientific Reports*, **2017**, 7, 2765	4.9	17
20	Thermoelectric transport in hybrid materials incorporating metallic nanowires in polymer matrix. *Applied Physics Letters*, **2017**, 110, 113102	3.4	14
19	Analytical and numerical investigation on a new compact thermoelectric generator. *Energy Conversion and Management*, **2017**, 132, 261-271	10.6	44
18	Tuning thermal conductivity in molybdenum disulfide by electrochemical intercalation. *Nature Communications*, **2016**, 7, 13211	17.4	101
17	Anisotropic Thermal Transport in Thermoelectric Composites of Conjugated Polyelectrolytes/Single-Walled Carbon Nanotubes. *Macromolecules*, **2016**, 49, 4957-4963	5.5	26
16	Thermal Conductivity, Heat Capacity, and Elastic Constants of Water-Soluble Polymers and Polymer Blends. *Macromolecules*, **2016**, 49, 972-978	5.5	156
15	Harvesting Waste Heat in Unipolar Ion Conducting Polymers. *ACS Macro Letters*, **2016**, 5, 94-98	6.6	49
14	Electrochemical Effects in Thermoelectric Polymers. *ACS Macro Letters*, **2016**, 5, 455-459	6.6	50
13	Thermal Conductivity in the Radial Direction of Deformed Polymer Fibers. *ACS Macro Letters*, **2016**, 5, 646-650	6.6	17

12	Thermal Conductivity and Elastic Constants of PEDOT:PSS with High Electrical Conductivity. *Macromolecules*, **2015**, 48, 585-591	5.5	209
11	Measurement of the anisotropic thermal conductivity of molybdenum disulfide by the time-resolved magneto-optic Kerr effect. *Journal of Applied Physics*, **2014**, 116, 233107	2.5	173
10	Size effect on the thermal conductivity of ultrathin polystyrene films. *Applied Physics Letters*, **2014**, 104, 153110	3.4	32
9	Pump-probe measurements of the thermal conductivity tensor for materials lacking in-plane symmetry. *Review of Scientific Instruments*, **2014**, 85, 104903	1.7	76
8	Ultralow thermal conductivity of atomic/molecular layer-deposited hybrid organic-inorganic zincone thin films. *Nano Letters*, **2013**, 13, 5594-9	11.5	82
7	Thermoelectric Transport Across Nanoscale Polymer Semiconductor Polymer Junctions. *Journal of Physical Chemistry C*, **2013**, 117, 24716-24725	3.8	15
6	Simultaneous measurement of thermal conductivity and heat capacity of bulk and thin film materials using frequency-dependent transient thermoreflectance method. *Review of Scientific Instruments*, **2013**, 84, 034902	1.7	96
5	Thermal transport across carbon nanotubes connected by molecular linkers. *Carbon*, **2012**, 50, 1063-1070	10.4	31
4	Length-dependent thermal conductivity of single extended polymer chains. *Physical Review B*, **2012**, 86,	3.3	132
3	Electrochemically Induced High Capacity Displacement Reaction of PEO/MoS2/Graphene Nanocomposites with Lithium. *Advanced Functional Materials*, **2011**, 21, 2840-2846	15.6	461
2	Tuning the thermal conductivity of polymers with mechanical strains. *Physical Review B*, **2010**, 81,	3.3	126
1	Ultrafast thermoreflectance techniques for measuring thermal conductivity and interface thermal conductance of thin films. *Journal of Applied Physics*, **2010**, 108, 094315	2.5	111