

# Jun Liu

## List of Publications by Year in descending order

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48  
papers

2,890  
citations

279487

23  
h-index

214527

47  
g-index

49  
all docs

49  
docs citations

49  
times ranked

4422  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemically Induced High Capacity Displacement Reaction of PEO/MoS <sub>2</sub> /Graphene Nanocomposites with Lithium. <i>Advanced Functional Materials</i> , 2011, 21, 2840-2846.	7.8	491
2	Thermal Conductivity and Elastic Constants of PEDOT:PSS with High Electrical Conductivity. <i>Macromolecules</i> , 2015, 48, 585-591.	2.2	253
3	Measurement of the anisotropic thermal conductivity of molybdenum disulfide by the time-resolved magneto-optic Kerr effect. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	210
4	Thermal Conductivity, Heat Capacity, and Elastic Constants of Water-Soluble Polymers and Polymer Blends. <i>Macromolecules</i> , 2016, 49, 972-978.	2.2	201
5	Length-dependent thermal conductivity of single extended polymer chains. <i>Physical Review B</i> , 2012, 86, .	1.1	163
6	Ultrafast thermoreflectance techniques for measuring thermal conductivity and interface thermal conductance of thin films. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	161
7	Tuning the thermal conductivity of polymers with mechanical strains. <i>Physical Review B</i> , 2010, 81, .	1.1	147
8	Tuning thermal conductivity in molybdenum disulfide by electrochemical intercalation. <i>Nature Communications</i> , 2016, 7, 13211.	5.8	136
9	Simultaneous measurement of thermal conductivity and heat capacity of bulk and thin film materials using frequency-dependent transient thermoreflectance method. <i>Review of Scientific Instruments</i> , 2013, 84, 034902.	0.6	120
10	Pump-probe measurements of the thermal conductivity tensor for materials lacking in-plane symmetry. <i>Review of Scientific Instruments</i> , 2014, 85, 104903.	0.6	104
11	Ultralow Thermal Conductivity of Atomic/Molecular Layer-Deposited Hybrid Organic-Inorganic Zinc Oxide Thin Films. <i>Nano Letters</i> , 2013, 13, 5594-5599.	4.5	94
12	Harvesting Waste Heat in Unipolar Ion Conducting Polymers. <i>ACS Macro Letters</i> , 2016, 5, 94-98.	2.3	62
13	Electrochemical Effects in Thermoelectric Polymers. <i>ACS Macro Letters</i> , 2016, 5, 455-459.	2.3	59
14	Analytical and numerical investigation on a new compact thermoelectric generator. <i>Energy Conversion and Management</i> , 2017, 132, 261-271.	4.4	56
15	Synergistic Effects of Boron Nitride (BN) Nanosheets and Silver (Ag) Nanoparticles on Thermal Conductivity and Electrical Properties of Epoxy Nanocomposites. <i>Polymers</i> , 2020, 12, 426.	2.0	52
16	Size effect on the thermal conductivity of ultrathin polystyrene films. <i>Applied Physics Letters</i> , 2014, 104, 153110.	1.5	43
17	Thermal transport in semicrystalline polyethylene by molecular dynamics simulation. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	39
18	Thermal transport across carbon nanotubes connected by molecular linkers. <i>Carbon</i> , 2012, 50, 1063-1070.	5.4	35

#	ARTICLE	IF	CITATIONS
19	A Ubiquitous Thermal Conductivity Formula for Liquids, Polymer Glass, and Amorphous Solids*. Chinese Physics Letters, 2020, 37, 104401.	1.3	33
20	Anisotropic Thermal Transport in Thermoelectric Composites of Conjugated Polyelectrolytes/Single-Walled Carbon Nanotubes. Macromolecules, 2016, 49, 4957-4963.	2.2	31
21	Strain effects on the anisotropic thermal transport in crystalline polyethylene. Applied Physics Letters, 2018, 112, .	1.5	31
22	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.	3.9	30
23	Solution-Processed Cu <sub>2</sub> Se Nanocrystal Films with Bulk-Like Thermoelectric Performance. Scientific Reports, 2017, 7, 2765.	1.6	24
24	Designing high thermal conductivity of cross-linked epoxy resin <i>via</i> molecular dynamics simulations. Physical Chemistry Chemical Physics, 2020, 22, 19735-19745.	1.3	24
25	Size Effects in the Thermal Conductivity of Amorphous Polymers. Physical Review Applied, 2020, 14, .	1.5	23
26	Thermal percolation in composite materials with electrically conductive fillers. Applied Physics Letters, 2018, 113, .	1.5	22
27	Roles of kink on the thermal transport in single polyethylene chains. Journal of Applied Physics, 2019, 125, .	1.1	22
28	Thermal Conductivity in the Radial Direction of Deformed Polymer Fibers. ACS Macro Letters, 2016, 5, 646-650.	2.3	20
29	Disorder enhanced thermal conductivity anisotropy in two-dimensional materials and van der Waals heterostructures. Journal of Applied Physics, 2018, 124, .	1.1	20
30	In-Plane Thermoelectric Properties of Flexible and Room-Temperature-Doped Carbon Nanotube Films. ACS Applied Energy Materials, 2020, 3, 6929-6936.	2.5	19
31	Thermal resistance network model for heat conduction of amorphous polymers. Physical Review Materials, 2020, 4, .	0.9	19
32	Thermoelectric Transport Across Nanoscale Polymer-Semiconductor-Polymer Junctions. Journal of Physical Chemistry C, 2013, 117, 24716-24725.	1.5	16
33	Thermoelectric transport in hybrid materials incorporating metallic nanowires in polymer matrix. Applied Physics Letters, 2017, 110, .	1.5	16
34	Role of angular bending freedom in regulating thermal transport in polymers. Journal of Applied Physics, 2019, 125, 095104.	1.1	16
35	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.	4.0	15
36	Strong electron-phonon coupling induced anomalous phonon transport in ultrahigh temperature ceramics ZrB <sub>2</sub> and TiB <sub>2</sub> . International Journal of Heat and Mass Transfer, 2020, 152, 119481.	2.5	15

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37	Role of radiation in heat transfer from nanoparticles to gas media in photothermal measurements. International Journal of Modern Physics C, 2019, 30, 1950024.	0.8	12
38	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, .	0.6	11
39	Enhanced thermoelectric properties through minority carriers blocking in nanocomposites. Journal of Applied Physics, 2019, 126, 095107.	1.1	8
40	Superior Thermal Dissipation in Graphene Electronic Device Through Novel Heat Path by Electron-Phonon Coupling. ES Energy & Environments, 2020, , .	0.5	7
41	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.	2.2	7
42	Thermal boundary conductance across solid-liquid interfaces at high temperatures: A microscopic approach. Journal of Applied Physics, 2021, 129, .	1.1	6
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.	1.1	6
44	Optimization of Medium Frequency Transformers with Practical Considerations. , 2019, , .		3
45	Thermal percolation and electrical insulation in composite materials with partially metallic coated fillers. Applied Physics Letters, 2021, 119, .	1.5	3
46	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, .	1.1	2
47	Thermal Transport across Polyethylene Chains. Journal of Thermal Science, 2022, 31, 1061-1067.	0.9	2
48	Parallel Frameworks for Robust Optimization of Medium-Frequency Transformers. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 5097-5112.	3.7	1