Xiangfan Xu

List of Publications by Year
in descending order

64 papers	14,149 citations	126907 33 h-index	110387 64 g-index
65 all docs	65 docs citations	65 times ranked	19858 citing authors

#	Article	IF	Citations
1	Roll-to-roll production of 30-inch graphene films for transparent electrodes. Nature Nanotechnology, 2010, 5, 574-578.	31.5	7,294
2	Graphene for Controlled and Accelerated Osteogenic Differentiation of Human Mesenchymal Stem Cells. ACS Nano, 2011, 5, 4670-4678.	14.6	819
3	Length-dependent thermal conductivity in suspended single-layer graphene. Nature Communications, 2014, 5, 3689.	12.8	735
4	Thorium-dopingâ€"induced superconductivity up to 56â€‰K in Gd _{1â^'x} Th _x FeAsO. Europhysics Letters, 2008, 83, 67006.	2.0	576
5	Electrochemical Delamination of CVD-Grown Graphene Film: Toward the Recyclable Use of Copper Catalyst. ACS Nano, 2011, 5, 9927-9933.	14.6	529
6	Interface Engineering of Layerâ€byâ€Layer Stacked Graphene Anodes for Highâ€Performance Organic Solar Cells. Advanced Materials, 2011, 23, 1514-1518.	21.0	489
7	Thermal Conductivity of Polymers and Their Nanocomposites. Advanced Materials, 2018, 30, e1705544.	21.0	442
8	Interstitial Point Defect Scattering Contributing to High Thermoelectric Performance in SnTe. Advanced Electronic Materials, 2016, 2, 1600019.	5.1	235
9	Large Thermoelectricity via Variable Range Hopping in Chemical Vapor Deposition Grown Single-Layer MoS₂. Nano Letters, 2014, 14, 2730-2734.	9.1	210
10	Antiferromagnetic transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>EuFe</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m A possible parent compound for superconductors. Physical Review B, 2008, 78, .	3.2	185
11	Interfacial thermal resistance: Past, present, and future. Reviews of Modern Physics, 2022, 94, .	45.6	178
12	Graphene related materials for thermal management. 2D Materials, 2020, 7, 012001.	4.4	161
13	An innovative way of etching MoS2: Characterization and mechanistic investigation. Nano Research, 2013, 6, 200-207.	10.4	140
14	Thermal transport in nanostructures. AIP Advances, 2012, 2, .	1.3	138
15	A Paper-Like Inorganic Thermal Interface Material Composed of Hierarchically Structured Graphene/Silicon Carbide Nanorods. ACS Nano, 2019, 13, 1547-1554.	14.6	131
16	Nonvolatile Floatingâ€Gate Memories Based on Stacked Black Phosphorusâ€"Boron Nitrideâ€"MoS₂ Heterostructures. Advanced Functional Materials, 2015, 25, 7360-7365.	14.9	129
17	Superior thermal conductivity in suspended bilayer hexagonal boron nitride. Scientific Reports, 2016, 6, 25334.	3.3	124
18	Thermal Transport in Conductive Polymerâ€"Based Materials. Advanced Functional Materials, 2020, 30, 1904704.	14.9	122

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19	Thermoelectric Properties of Cu₂SnSe₄ with Intrinsic Vacancy. Chemistry of Materials, 2016, 28, 6227-6232.	6.7	115
20	Metamagnetic transition in EuFe₂As₂single crystals. New Journal of Physics, 2009, 11, 025007.	2.9	109
21	Toward High Throughput Interconvertible Graphane-to-Graphene Growth and Patterning. ACS Nano, 2010, 4, 6146-6152.	14.6	109
22	Anomalous heat conduction and anomalous diffusion in low dimensional nanoscale systems. European Physical Journal B, 2012, 85, 1.	1.5	106
23	Tailoring the Thermal and Mechanical Properties of Graphene Film by Structural Engineering. Small, 2018, 14, e1801346.	10.0	106
24	Epitaxial nucleation and lateral growth of high-crystalline black phosphorus films on silicon. Nature Communications, 2020, 11, 1330.	12.8	102
25	Phonon thermal conduction in novel 2D materials. Journal of Physics Condensed Matter, 2016, 28, 483001.	1.8	81
26	Conformal hexagonal-boron nitride dielectric interface for tungsten diselenide devices with improved mobility and thermal dissipation. Nature Communications, 2019, 10, 1188.	12.8	71
27	Thermal conductivity of suspended few-layer MoS₂. Nanoscale, 2018, 10, 2727-2734.	5.6	70
28	Transport properties of graphene with one-dimensional charge defects. Europhysics Letters, 2011, 94, 28003.	2.0	63
29	A new route to graphene layers by selective laser ablation. AIP Advances, 2011, 1, .	1.3	56
30	Measuring the thermal conductivity and interfacial thermal resistance of suspended MoS 2 using electron beam self-heating technique. Science Bulletin, 2018, 63, 452-458.	9.0	54
31	Thermal conduction across a boron nitride and SiO₂interface. Journal Physics D: Applied Physics, 2017, 50, 104002.	2.8	46
32	Dimensional crossover of heat conduction in amorphous polyimide nanofibers. National Science Review, 2018, 5, 500-506.	9.5	43
33	Thermal rectification in Y-junction carbon nanotube bundle. Carbon, 2018, 140, 673-679.	10.3	42
34	A Ubiquitous Thermal Conductivity Formula for Liquids, Polymer Glass, and Amorphous Solids*. Chinese Physics Letters, 2020, 37, 104401.	3.3	33
35	Relationship between spin state of Co ions and thermopower in La1âˆ’xSrxCoO3. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 351, 431-434.	2.1	27
36	Thermal percolation in composite materials with electrically conductive fillers. Applied Physics Letters, 2018, 113, .	3.3	22

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37	Thicknessâ€Dependent Inâ€Plane Thermal Conductivity and Enhanced Thermoelectric Performance in pâ€Type ZrTe₅ Nanoribbons. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800529.	2.4	22
38	Thermal resistance network model for heat conduction of amorphous polymers. Physical Review Materials, 2020, 4, .	2.4	19
39	Elastic Modulus and Thermal Conductivity of Thiolene/TiO₂ Nanocomposites. Journal of Physical Chemistry C, 2017, 121, 25568-25575.	3.1	18
40	Phonon Renormalization Induced by Electric Field in Ferroelectric Poly(Vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (Fluoride	3.8	18
41	Band-Dependent Normal-State Coherence in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>RuO</mml:mi><mm Evidence from Nernst Effect and Thermopower Measurements. Physical Review Letters, 2008, 101, 057002.	7.8	15
42	Thermal conductivity of V₂O₅ nanowires and their contact thermal conductance. Nanoscale, 2020, 12, 1138-1143.	5.6	15
43	Magnetic, electrical transport, and thermoelectric properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Ru</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>10</mml:mn></mml:msub></mml:mrow></mml:math>: Evidence for a field-induced electronic phase transition at low temperatures. Physical Review B, 2007,	3.2	14
44	Unprecedently low thermal conductivity of unique tellurium nanoribbons. Nano Research, 2021, 14, 4725-4731.	10.4	14
45	Thermal transport in organic/inorganic composites. Frontiers in Energy, 2018, 12, 72-86.	2.3	13
46	High thermal conductivity and superior thermal stability of amorphous PMDA/ODA nanofiber. Applied Physics Letters, 2018, 112, .	3.3	12
47	Suppressed Thermal Conductivity in Polycrystalline Gold Nanofilm: The Effect of Grain Boundary and Substrate. Chinese Physics Letters, 2021, 38, 027202.	3.3	12
48	Recent progresses of thermal conduction in two-dimensional materials. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 196602.	0.5	12
49	Direct growth of nanographene at low temperature from carbon black for highly sensitive temperature detectors. Nanotechnology, 2016, 27, 505603.	2.6	10
50	Conformal interface of monolayer molybdenum diselenide/disulfide and dielectric substrate with improved thermal dissipation. Journal Physics D: Applied Physics, 2019, 52, 385306.	2.8	9
51	Graphene Fieldâ€Effect Transistors on Hexagonalâ€Boron Nitride for Enhanced Interfacial Thermal Dissipation. Advanced Electronic Materials, 2020, 6, 2000059.	5.1	8
52	Surface contacts strongly influence the elasticity and thermal conductivity of silica nanoparticle fibers. Physical Chemistry Chemical Physics, 2021, 23, 3707-3715.	2.8	7
53	Scaling behavior of thermal conductivity in single-crystalline Î±-Fe₂O₃ nanowires*. Chinese Physics B, 2020, 29, 084402.	1.4	7
54	Superior Thermal Dissipation in Graphene Electronic Device Through Novel Heat Path by Electron-Phonon Coupling. ES Energy & Environments, 2020, , .	1.1	7

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55	Nanoscale thermal mapping of few-layer organic crystals. CrystEngComm, 2019, 21, 5402-5409.	2.6	5
56	Thermal Conductivity of VO2 Nanowires at Metal-Insulator Transition Temperature. Nanomaterials, 2021, 11, 2428.	4.1	5
57	Thermal manipulation and thermal rectification in Ï€-stacked organic nanowires. Nanoscale, 2021, 13, 13641-13649.	5.6	4
58	Thermal conductivity of one-dimensional organic nanowires: effect of mass difference phonon scattering. Nanotechnology, 2020, 31, 324003.	2.6	3
59	Stabilization of cobalt oxyhydrate superconductor. Chemical Communications, 2008, , 2155.	4.1	2
60	Coupling Electronic and Phonon Thermal Transport in Poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) Nanofibers. Nanomaterials, 2022, 12, 1282.	4.1	2
61	Low-energy collective excitations in a chargeâ€"density wave conductor K0.3MoO3. Journal of Luminescence, 2006, 119-120, 395-398.	3.1	1
62	Effect of magnetic field on the spin-Peierls transition in single-crystal CuGeO. Chinese Physics B, 2008, 17, 3490-3494.	1.4	1
63	Artificial microstructure materials and heat flux manipulation. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2015, 45, 705-713.	0.5	1
64	Dimension reduction induced anisotropic magnetic thermal conductivity in hematite nanowires. Physical Review B, 2021, 104, .	3.2	1