

# Tianzhuo Zhan

## List of Publications by Year in descending order

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31  
papers

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citations

623574

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h-index

610775

24  
g-index

32  
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32  
docs citations

32  
times ranked

835  
citing authors

#	ARTICLE	IF	CITATIONS
1	Densely Interconnected Porous BN Frameworks for Multifunctional and Isotropically Thermoconductive Polymer Composites. <i>Advanced Functional Materials</i> , 2018, 28, 1801205.	7.8	76
2	Prediction of thermal boundary resistance by the machine learning method. <i>Scientific Reports</i> , 2017, 7, 7109.	1.6	71
3	Modeling, Simulation, Fabrication, and Characterization of a 10- $\mu\text{m}$ Class Si-Nanowire Thermoelectric Generator for IoT Applications. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 5180-5188.	1.6	54
4	Control of p-type and n-type thermoelectric properties of bismuth telluride thin films by combinatorial sputter coating technology. <i>Applied Surface Science</i> , 2017, 407, 405-411.	3.1	43
5	Miniaturized planar Si-nanowire micro-thermoelectric generator using exuded thermal field for power generation. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 443-453.	2.8	43
6	Direct visualization of ultrasonic power distribution using mechanoluminescent film. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 436-439.	3.8	33
7	Phonons with long mean free paths in a-Si and a-Ge. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	32
8	Enhancement of afterglow in $\text{SrAl}_2\text{O}_4:\text{Eu}^{2+}$ long-lasting phosphor with swift heavy ion irradiation. <i>RSC Advances</i> , 2012, 2, 328-332.	1.7	31
9	Thermal boundary resistance at Si/Ge interfaces by molecular dynamics simulation. <i>AIP Advances</i> , 2015, 5, .	0.6	27
10	Enhancement of impact-induced mechanoluminescence by swift heavy ion irradiation. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	20
11	Thermal conductivity of sputtered amorphous Ge films. <i>AIP Advances</i> , 2014, 4, .	0.6	20
12	Magnetization of microorganism cells by sol-gel method. <i>Science in China Series D: Earth Sciences</i> , 2008, 51, 591-597.	0.9	18
13	Fabrication of high-quality GaAs/diamond heterointerface for thermal management applications. <i>Diamond and Related Materials</i> , 2021, 111, 108207.	1.8	16
14	Thermal boundary resistance at Au/Ge/Ge and Au/Si/Ge interfaces. <i>RSC Advances</i> , 2015, 5, 49703-49707.	1.7	15
15	Experimental Study on Solidification Characteristics of Sessile Urine Droplets on a Horizontal Cold Plate Surface under Natural Convection. <i>Langmuir</i> , 2022, 38, 7846-7857.	1.6	13
16	Modification of thermal conductivity and thermal boundary resistance of amorphous Si thin films by Al doping. <i>RSC Advances</i> , 2017, 7, 7901-7905.	1.7	11
17	Effect of Thermal Boundary Resistance between the Interconnect Metal and Dielectric Interlayer on Temperature Increase of Interconnects in Deeply Scaled VLSI. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 22347-22356.	4.0	10
18	Effect of the Thermal Boundary Resistance in Metal/Dielectric Thermally Conductive Layers on Power Generation of Silicon Nanowire Microthermoelectric Generators. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 34441-34450.	4.0	9

#	ARTICLE	IF	CITATIONS
19	Physical and chemical descriptors for predicting interfacial thermal resistance. Scientific Data, 2020, 7, 36.	2.4	9
20	Ultra-low thermal conductivity of high-interface density Si/Ge amorphous multilayers. Applied Physics Express, 2018, 11, 045202.	1.1	8
21	Modification and Characterization of Interfacial Bonding for Thermal Management of Ruthenium Interconnects in Next-Generation Very-Large-Scale Integration Circuits. ACS Applied Materials & Interfaces, 2022, 14, 7392-7404.	4.0	8
22	Beam profile indicator for swift heavy ions using phosphor afterglow. AIP Advances, 2012, 2, .	0.6	7
23	$10^{1/4}$ W/cm <sup>2</sup> -Class High Power Density Planar Si-Nanowire Thermoelectric Energy Harvester Compatible with CMOS-VLSI Technology. , 2018, , .		7
24	Characteristics analysis and parameter optimization of a micro-combustion based thermoelectric generator. Applied Thermal Engineering, 2021, 193, 116992.	3.0	5
25	Mechanoluminescent Film Sensor for Visualizing Ultrasonic Power Distribution. IOP Conference Series: Materials Science and Engineering, 2011, 18, 212011.	0.3	4
26	<i>(Invited)</i> Cavity-Free Micro Thermoelectric Energy Harvester with Si Nanowires. ECS Transactions, 2019, 89, 95-110.	0.3	4
27	Understanding the role of potassium incorporation in realizing transparent p-type ZnO thin films. Journal of Alloys and Compounds, 2022, 904, 164070.	2.8	3
28	Sn-incorporation effect on thermoelectric properties of Sb-doped Ge-rich Ge <sub>1-x</sub> Si <sub>x</sub> Sn <sub>y</sub> epitaxial layers grown on GaAs(001). Japanese Journal of Applied Physics, 2022, 61, 085502.	0.8	3
29	Enhancement of impact-induced mechanoluminescence for structure health monitoring using swift heavy ion irradiation. , 2012, , .		1
30	Unexpectedly high thermal boundary resistance of Cr/graphene/SiO <sub>2</sub> structure. Japanese Journal of Applied Physics, 2017, 56, 055101.	0.8	1
31	Enhancement of thermoelectric power of a Si nanowire micro thermoelectric generator by improving the thermal conductivity of AlN thermally conductive film. Journal of Physics: Conference Series, 2018, 1052, 012131.	0.3	0