Beomjin Kwon

List of Publications by Year in descending order

47 papers	1,239 citations	361413 20 h-index	377865 34 g-index
47 all docs	47 docs citations	47 times ranked	1689 citing authors

#	Article	IF	Citations
1	3D printing of shape-conformable thermoelectric materials using all-inorganic Bi2Te3-based inks. Nature Energy, 2018, 3, 301-309.	39.5	237
2	High-performance shape-engineerable thermoelectric painting. Nature Communications, 2016, 7, 13403.	12.8	122
3	Machine learning for heat transfer correlations. International Communications in Heat and Mass Transfer, 2020, 116, 104694.	5.6	64
4	Free-electron creation at the 60Â° twin boundary in Bi2Te3. Nature Communications, 2016, 7, 12449.	12.8	59
5	Porous organic filler for high efficiency of flexible thermoelectric generator. Nano Energy, 2021, 81, 105604.	16.0	58
6	Air Jet Impingement Cooling of Electronic Devices Using Additively Manufactured Nozzles. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 220-229.	2.5	52
7	Heat transfer enhancement of internal laminar flows using additively manufactured static mixers. International Journal of Heat and Mass Transfer, 2019, 137, 292-300.	4.8	47
8	Millimeter-scale liquid metal droplet thermal switch. Applied Physics Letters, 2018, 112, .	3.3	44
9	Composition-segmented BiSbTe thermoelectric generator fabricated by multimaterial 3D printing. Nano Energy, 2021, 81, 105638.	16.0	43
10	Cu2Se-based thermoelectric cellular architectures for efficient and durable power generation. Nature Communications, 2021, 12, 3550.	12.8	41
11	SnO 2 thin films grown by atomic layer deposition using a novel Sn precursor. Applied Surface Science, 2014, 320, 188-194.	6.1	35
12	A composite phase change material thermal buffer based on porous metal foam and low-melting-temperature metal alloy. Applied Physics Letters, 2020, 116, .	3.3	31
13	Glancing angle deposited WO 3 nanostructures for enhanced sensitivity and selectivity to NO 2 in gas mixture. Sensors and Actuators B: Chemical, 2016, 229, 92-99.	7.8	28
14	Design and Experimental Investigation of Thermoelectric Generators for Wearable Applications. Advanced Materials Technologies, 2017, 2, 1600292.	5.8	28
15	An Integrated Liquid Metal Thermal Switch for Active Thermal Management of Electronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 2341-2351.	2.5	28
16	Effect of spark plasma sintering conditions on the thermoelectric properties of (Bi0.25Sb0.75)2Te3 alloys. Journal of Alloys and Compounds, 2016, 678, 396-402.	5.5	25
17	Enhancement of Mechanical Hardness in SnO_xN_y with a Dense High-Pressure Cubic Phase of SnO₂. Chemistry of Materials, 2016, 28, 7051-7057.	6.7	23
18	Impact of parasitic thermal effects on thermoelectric property measurements by Harman method. Review of Scientific Instruments, 2014, 85, 045108.	1.3	21

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19	High power density air-cooled microchannel heat exchanger. International Journal of Heat and Mass Transfer, 2018, 118, 1276-1283.	4.8	21
20	Dynamic thermomechanical response of bimaterial microcantilevers to periodic heating by infrared radiation. Review of Scientific Instruments, 2012, 83, 015003.	1.3	20
21	Hardening of Biâ€“Te based alloys by dispersing B4C nanoparticles. Acta Materialia, 2015, 97, 68-74.	7.9	19
22	Harman Measurements for Thermoelectric Materials and Modules under Non-Adiabatic Conditions. Scientific Reports, 2016, 6, 39131.	3.3	19
23	Sn doping in thermoelectric Bi2Te3 films by metal-organic chemical vapor deposition. Applied Surface Science, 2015, 353, 232-237.	6.1	18
24	High power density two-phase cooling in microchannel heat exchangers. Applied Thermal Engineering, 2019, 148, 1271-1277.	6.0	17
25	Bimaterial microcantilevers with black silicon nanocone arrays. Sensors and Actuators A: Physical, 2013, 199, 143-148.	4.1	13
26	Electric-field-induced Shift in the Threshold Voltage in LaAlO3/SrTiO3 Heterostructures. Scientific Reports, 2015, 5, 8023.	3.3	13
27	Thickness-Dependent Electrocaloric Effect in Pb0.9La0.1Zr0.65Ti0.35O3 Films Grown by Solâ€“Gel Process. Journal of Electronic Materials, 2016, 45, 1057-1064.	2.2	12
28	Dynamic temperature response of electrocaloric multilayer capacitors. Applied Physics Letters, 2014, 104, .	3.3	11
29	Correction of the Electrical and Thermal Extrinsic Effects in Thermoelectric Measurements by the Harman Method. Scientific Reports, 2016, 6, 26507.	3.3	11
30	Giant Electroresistive Ferroelectric Diode on 2DEG. Scientific Reports, 2015, 5, 10548.	3.3	10
31	Computationally efficient optimization of wavy surface roughness in cooling channels using simulated annealing. International Journal of Heat and Mass Transfer, 2020, 150, 119300.	4.8	9
32	Thermal conductivity of metal coated polymer foam: Integrated experimental and modeling study. International Journal of Thermal Sciences, 2021, 169, 107045.	4.9	9
33	Effect of Sn Doping on the Thermoelectric Properties of n-type Bi2(Te,Se)3 Alloys. Journal of Electronic Materials, 2015, 44, 1926-1930.	2.2	8
34	Machine learning to predict effective reaction rates in 3D porous media from pore structural features. Scientific Reports, 2022, 12, 5486.	3.3	8
35	Accurate Models for Optimizing Tapered Microchannel Heat Sinks in 3D ICs. , 2018, , .		6
36	Impact of silicon nitride thickness on the infrared sensitivity of silicon nitrideâ€“aluminum microcantilevers. Sensors and Actuators A: Physical, 2012, 185, 17-23.	4.1	5

#	Article	IF	Citations
37	Continuous Nanoparticle Patterning Strategy in Layerâ€Structured Nanocomposite Fibers. Advanced Functional Materials, 2022, 32, .	14.9	5
38	Deep Learning of Forced Convection Heat Transfer. Journal of Heat Transfer, 2022, 144, .	2.1	4
39	Large infrared absorptance of bimaterial microcantilevers based on silicon high contrast grating. Journal of Applied Physics, 2013, 114, 153511.	2.5	3
40	A differential method for measuring cooling performance of a thermoelectric module. Applied Thermal Engineering, 2015, 87, 209-213.	6.0	3
41	Thermoelectric Properties of Sn-Doped Bi0.4Sb1.6Te3 Thin Films. Journal of Electronic Materials, 2015, 44, 1573-1578.	2.2	3
42	Optimization of Liquid Cooling Microchannel in 3D IC using Complete Converging and Diverging Channel Models. , 2019, , .		2
43	Electrocaloric Effect in Pb_{0.865}La_{0.09}(Zr_{0.65}Ti_{0.35})O₃Thin Film. Journal of Sensor Science and Technology, 2014, 23, 224-228.	0.2	1
44	Heuristic Optimization of Ribbed Cooling Channels With Variable Length and Roughness. Journal of Heat Transfer, 2020, 142, .	2.1	1
45	Machine learning flow regime classification in three-dimensional printed tubes. Physical Review Fluids, 2020, 5, .	2.5	1
46	A two-dimensional finite element model for Cu-CNT composite: The impact of interface resistances on electrical and thermal transports. Materialia, 2022, 24, 101505.	2.7	1
47	Microscale transport physics during atomic force microscopy mass spectrometry and improved sampling efficiency. , 2017, , .		0