Stephen Dongmin Kang

List of Publications by Year
in descending order

38	3,106	279798	315739
papers	citations	23 h-index	38 g-index

39	39	39	3705
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Charge-transport model for conducting polymers. Nature Materials, 2017, 16, 252-257.	27.5	412
2	Phase Boundary Mapping to Obtain n-type Mg3Sb2-Based Thermoelectrics. Joule, 2018, 2, 141-154.	24.0	274
3	Grain boundary dominated charge transport in Mg₃Sb₂-based compounds. Energy and Environmental Science, 2018, 11, 429-434.	30.8	253
4	A practical field guide to thermoelectrics: Fundamentals, synthesis, and characterization. Applied Physics Reviews, 2018, 5, 021303.	11.3	223
5	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. Science Advances, 2018, 4, eaau5849.	10.3	208
6	Band engineering in Mg₃Sb₂ by alloying with Mg₃Bi₂ for enhanced thermoelectric performance. Materials Horizons, 2018, 5, 59-64.	12.2	177
7	Exceptional thermoelectric performance in Mg₃Sb_{0.6}Bi_{1.4} for low-grade waste heat recovery. Energy and Environmental Science, 2019, 12, 965-971.	30.8	177
8	High thermoelectric performance in (Bi0.25Sb0.75)2Te3 due to band convergence and improved by carrier concentration control. Materials Today, 2017, 20, 452-459.	14.2	151
9	Optimization principles and the figure of merit for triboelectric generators. Science Advances, 2017, 3, eaap8576.	10.3	133
10	Enhancement of average thermoelectric figure of merit by increasing the grain-size of Mg3.2Sb1.5Bi0.49Te0.01. Applied Physics Letters, 2018, 112, .	3.3	126
11	Dislocation strain as the mechanism of phonon scattering at grain boundaries. Materials Horizons, 2016, 3, 234-240.	12.2	108
12	Fictitious phase separation in Li layered oxides driven by electro-autocatalysis. Nature Materials, 2021, 20, 991-999.	27.5	101
13	Enhancing the thermoelectric performance of SnSe_{1â^'x}Te_x nanoplates through band engineering. Journal of Materials Chemistry A, 2017, 5, 10713-10721.	10.3	94
14	Enhanced stability and thermoelectric figure-of-merit in copper selenide by lithium doping. Materials Today Physics, 2017, 1, 7-13.	6.0	93
15	Direct evidence of phase separation in Ge2Sb2Te5 in phase change memory devices. Applied Physics Letters, 2009, 94, .	3.3	81
16	Thermoelectric imaging of structural disorder in epitaxial graphene. Nature Materials, 2013, 12, 913-918.	27.5	55
17	YCuTe₂: a member of a new class of thermoelectric materials with CuTe₄-based layered structure. Journal of Materials Chemistry A, 2016, 4, 2461-2472.	10.3	52
18	Improving the thermoelectric performance in Mg3+xSb1.5Bi0.49Te0.01 by reducing excess Mg. APL Materials, 2018, 6, .	5.1	51

#	Article	IF	Citations
19	Apparent critical phenomena in the superionic phase transition of Cu_{2-x}Se. New Journal of Physics, 2016, 18, 013024.	2.9	48
20	Mg Deficiency in Grain Boundaries of nâ€Type Mg₃Sb₂ Identified by Atom Probe Tomography. Advanced Materials Interfaces, 2019, 6, 1900429.	3.7	44
21	Intrinsic and Extrinsically Limited Thermoelectric Transport within Semiconducting Singleâ€Walled Carbon Nanotube Networks. Advanced Electronic Materials, 2019, 5, 1800910.	5.1	29
22	Electric-Field-Induced Mass Movement of Ge[sub 2]Sb[sub 2]Te[sub 5] in Bottleneck Geometry Line Structures. Electrochemical and Solid-State Letters, 2009, 12, H155.	2.2	28
23	Thermopower-conductivity relation for distinguishing transport mechanisms: Polaron hopping in CeO2 and band conduction in SrTiO3. Physical Review B, 2018, 97, .	3.2	26
24	Galvanostatic Intermittent Titration Technique Reinvented: Part I. A Critical Review. Journal of the Electrochemical Society, 2021, 168, 120504.	2.9	21
25	Formation of Ge[sub 2]Sb[sub 2]Te[sub 5]â€“TiO[sub x] Nanostructures for Phase Change Random Access Memory Applications. Electrochemical and Solid-State Letters, 2010, 13, K8.	2.2	20
26	Microstructure evolution of sputtered BiSbâ€“Te thermoelectric films during post-annealing and its effects on the thermoelectric properties. Journal of Alloys and Compounds, 2013, 553, 343-349.	5.5	19
27	Effect of Twoâ€Dimensional Crystal Orbitals on Fermi Surfaces and Electron Transport in Threeâ€Dimensional Perovskite Oxides. Angewandte Chemie - International Edition, 2019, 58, 5503-5512.	13.8	17
28	Controlled recrystallization for low-current RESET programming characteristics of phase-change memory with Ge-doped SbTe. Applied Physics Letters, 2011, 99, 143505.	3.3	15
29	Interfacial Thermal Conductance Observed to be Higher in Semiconducting than Metallic Carbon Nanotubes. ACS Nano, 2012, 6, 3853-3860.	14.6	14
30	Resonant Bonding, Multiband Thermoelectric Transport, and Native Defects in n-Type BaBiTe3â€“xSex (x =) Tj ETQq0 0 0 rgBT /Overlock	6.7	13
31	Galvanostatic Intermittent Titration Technique Reinvented: Part II. Experiments. Journal of the Electrochemical Society, 2021, 168, 120503.	2.9	10
32	Microstructure Evolution of Sputtered Bi-Te Films during Post-Annealing: Phase Transformation and Its Effects on the Thermoelectric Properties. Journal of the Electrochemical Society, 2011, 158, H808.	2.9	9
33	Effect of Twoâ€Dimensional Crystal Orbitals on Fermi Surfaces and Electron Transport in Threeâ€Dimensional Perovskite Oxides. Angewandte Chemie, 2019, 131, 5557-5566.	2.0	8
34	Contact Resistance of Carbonâ€“Li_x(Ni,Mn,Co)O₂ Interfaces. Advanced Energy Materials, 2022, 12, .	19.5	7
35	Enhanced thermal efficiency for amorphization in nano-structured Ge2Sb2Te5â€“TiOx films. Current Applied Physics, 2010, 10, e83-e86.	2.4	3
36	Assessing the thermal conductivity of non-uniform thin-films: Nanocrystalline Cu composites incorporating carbon nanotubes. Journal of Applied Physics, 2011, 110, 023506.	2.5	3

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37	Electro-chemo-mechanical charge carrier equilibrium at interfaces. Physical Chemistry Chemical Physics, 2021, 23, 23730-23740.	2.8	2
38	Interface-controlled thermal transport properties in nano-clustered phase change materials. Journal of Applied Physics, 2012, 111, 073528.	2.5	1