

# Stephen Dongmin Kang

## List of Publications by Year in descending order

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38  
papers

3,106  
citations

279798

23  
h-index

315739

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docs citations

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times ranked

3705  
citing authors

#	ARTICLE	IF	CITATIONS
1	Contact Resistance of Carbon <sup>1</sup> Li <sub>x</sub> (Ni,Mn,Co)O <sub>2</sub> Interfaces. Advanced Energy Materials, 2022, 12, .	19.5	7
2	Fictitious phase separation in Li layered oxides driven by electro-autocatalysis. Nature Materials, 2021, 20, 991-999.	27.5	101
3	Electro-chemo-mechanical charge carrier equilibrium at interfaces. Physical Chemistry Chemical Physics, 2021, 23, 23730-23740.	2.8	2
4	Galvanostatic Intermittent Titration Technique Reinvented: Part I. A Critical Review. Journal of the Electrochemical Society, 2021, 168, 120504.	2.9	21
5	Galvanostatic Intermittent Titration Technique Reinvented: Part II. Experiments. Journal of the Electrochemical Society, 2021, 168, 120503.	2.9	10
6	Mg Deficiency in Grain Boundaries of n-Type Mg <sub>3</sub> Sb <sub>2</sub> Identified by Atom Probe Tomography. Advanced Materials Interfaces, 2019, 6, 1900429.	3.7	44
7	Intrinsic and Extrinsic Limited Thermoelectric Transport within Semiconducting Single-Walled Carbon Nanotube Networks. Advanced Electronic Materials, 2019, 5, 1800910.	5.1	29
8	Exceptional thermoelectric performance in Mg <sub>3</sub> Sb <sub>0.6</sub> Bi <sub>1.4</sub> for low-grade waste heat recovery. Energy and Environmental Science, 2019, 12, 965-971.	30.8	177
9	Effect of Two-Dimensional Crystal Orbitals on Fermi Surfaces and Electron Transport in Three-Dimensional Perovskite Oxides. Angewandte Chemie, 2019, 131, 5557-5566.	2.0	8
10	Effect of Two-Dimensional Crystal Orbitals on Fermi Surfaces and Electron Transport in Three-Dimensional Perovskite Oxides. Angewandte Chemie - International Edition, 2019, 58, 5503-5512.	13.8	17
11	Resonant Bonding, Multiband Thermoelectric Transport, and Native Defects in n-Type BaBiTe <sub>3</sub> (x =) Tj ETQq <sub>1.1</sub> 0.784314 rgB <sub>13</sub>	6.7	13
12	Grain boundary dominated charge transport in Mg <sub>3</sub> Sb <sub>2</sub> -based compounds. Energy and Environmental Science, 2018, 11, 429-434.	30.8	253
13	Improving the thermoelectric performance in Mg <sub>3</sub> Sb <sub>1.5</sub> Bi <sub>0.49</sub> Te <sub>0.01</sub> by reducing excess Mg. APL Materials, 2018, 6, .	5.1	51
14	Enhancement of average thermoelectric figure of merit by increasing the grain-size of Mg <sub>3.2</sub> Sb <sub>1.5</sub> Bi <sub>0.49</sub> Te <sub>0.01</sub> . Applied Physics Letters, 2018, 112, .	3.3	126
15	Band engineering in Mg <sub>3</sub> Sb <sub>2</sub> by alloying with Mg <sub>3</sub> Bi <sub>2</sub> for enhanced thermoelectric performance. Materials Horizons, 2018, 5, 59-64.	12.2	177
16	Phase Boundary Mapping to Obtain n-type Mg <sub>3</sub> Sb <sub>2</sub> -Based Thermoelectrics. Joule, 2018, 2, 141-154.	24.0	274
17	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. Science Advances, 2018, 4, eaau5849.	10.3	208
18	A practical field guide to thermoelectrics: Fundamentals, synthesis, and characterization. Applied Physics Reviews, 2018, 5, 021303.	11.3	223

#	ARTICLE	IF	CITATIONS
19	Thermopower-conductivity relation for distinguishing transport mechanisms: Polaron hopping in CeO <sub>2</sub> and band conduction in SrTiO <sub>3</sub> . <i>Physical Review B</i> , 2018, 97, .	3.2	26
20	Enhancing the thermoelectric performance of SnSe <sub>1-x</sub> Te <sub>x</sub> nanoplates through band engineering. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10713-10721.	10.3	94
21	Enhanced stability and thermoelectric figure-of-merit in copper selenide by lithium doping. <i>Materials Today Physics</i> , 2017, 1, 7-13.	6.0	93
22	Optimization principles and the figure of merit for triboelectric generators. <i>Science Advances</i> , 2017, 3, eaap8576.	10.3	133
23	High thermoelectric performance in (Bi <sub>0.25</sub> Sb <sub>0.75</sub> ) <sub>2</sub> Te <sub>3</sub> due to band convergence and improved by carrier concentration control. <i>Materials Today</i> , 2017, 20, 452-459.	14.2	151
24	Charge-transport model for conducting polymers. <i>Nature Materials</i> , 2017, 16, 252-257.	27.5	412
25	Apparent critical phenomena in the superionic phase transition of Cu <sub>2-x</sub> Se. <i>New Journal of Physics</i> , 2016, 18, 013024.	2.9	48
26	YCuTe <sub>2</sub> : a member of a new class of thermoelectric materials with CuTe <sub>4</sub> -based layered structure. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2461-2472.	10.3	52
27	Dislocation strain as the mechanism of phonon scattering at grain boundaries. <i>Materials Horizons</i> , 2016, 3, 234-240.	12.2	108
28	Thermoelectric imaging of structural disorder in epitaxial graphene. <i>Nature Materials</i> , 2013, 12, 913-918.	27.5	55
29	Microstructure evolution of sputtered BiSbTe thermoelectric films during post-annealing and its effects on the thermoelectric properties. <i>Journal of Alloys and Compounds</i> , 2013, 553, 343-349.	5.5	19
30	Interface-controlled thermal transport properties in nano-clustered phase change materials. <i>Journal of Applied Physics</i> , 2012, 111, 073528.	2.5	1
31	Interfacial Thermal Conductance Observed to be Higher in Semiconducting than Metallic Carbon Nanotubes. <i>ACS Nano</i> , 2012, 6, 3853-3860.	14.6	14
32	Microstructure Evolution of Sputtered Bi-Te Films during Post-Annealing: Phase Transformation and Its Effects on the Thermoelectric Properties. <i>Journal of the Electrochemical Society</i> , 2011, 158, H808.	2.9	9
33	Assessing the thermal conductivity of non-uniform thin-films: Nanocrystalline Cu composites incorporating carbon nanotubes. <i>Journal of Applied Physics</i> , 2011, 110, 023506.	2.5	3
34	Controlled recrystallization for low-current RESET programming characteristics of phase-change memory with Ge-doped SbTe. <i>Applied Physics Letters</i> , 2011, 99, 143505.	3.3	15
35	Enhanced thermal efficiency for amorphization in nano-structured Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> TiO <sub>x</sub> films. <i>Current Applied Physics</i> , 2010, 10, e83-e86.	2.4	3
36	Formation of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> TiO <sub>x</sub> Nanostructures for Phase Change Random Access Memory Applications. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, K8.	2.2	20

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37	Direct evidence of phase separation in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in phase change memory devices. Applied Physics Letters, 2009, 94, .	3.3	81
38	Electric-Field-Induced Mass Movement of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in Bottleneck Geometry Line Structures. Electrochemical and Solid-State Letters, 2009, 12, H155.	2.2	28