# Hee-Seok Kim

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 27 papers | 2,280 citations | 19 h-index | 29 g-index |
| 29 ext. papers | 2,729 ext. citations | 12.3 avg, IF | 5.34 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 27 | A Thermoelectric Energy Harvester Based on Microstructured Quasicrystalline Solar Absorber. *Micromachines*, **2021**, 12, | 3.3 | 3 |
| 26 | Breathable, large-area epidermal electronic systems for recording electromyographic activity during operant conditioning of H-reflex. *Biosensors and Bioelectronics*, **2020**, 165, 112404 | 11.8 | 13 |
| 25 | System efficiency and power: the bridge between the device and system of a thermoelectric power generator. *Energy and Environmental Science*, **2020**, 13, 3514-3526 | 35.4 | 13 |
| 24 | Advanced Soft Materials, Sensor Integrations, and Applications of Wearable Flexible Hybrid Electronics in Healthcare, Energy, and Environment. *Advanced Materials*, **2020**, 32, e1901924 | 24 | 305 |
| 23 | Wearable Flexible Hybrid Electronics: Advanced Soft Materials, Sensor Integrations, and Applications of Wearable Flexible Hybrid Electronics in Healthcare, Energy, and Environment (Adv. Mater. 15/2020). *Advanced Materials*, **2020**, 32, 2070116 | 24 | 5 |
| 22 | A rapid method to extract Seebeck coefficient under a large temperature difference. *Review of Scientific Instruments*, **2017**, 88, 094902 | 1.7 | 5 |
| 21 | The bridge between the materials and devices of thermoelectric power generators. *Energy and Environmental Science*, **2017**, 10, 69-85 | 35.4 | 115 |
| 20 | Achieving high power factor and output power density in p-type half-Heuslers Nb1-xTixFeSb. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13576-13581 | 11.5 | 164 |
| 19 | Transport and mechanical properties of the double-filled p-type skutterudites La0.68Ce0.22Fe4□CoxSb12. *Acta Materialia*, **2016**, 117, 13-22 | 8.4 | 18 |
| 18 | Engineering Thermal Conductivity for Balancing Between Reliability and Performance of Bulk Thermoelectric Generators. *Advanced Functional Materials*, **2016**, 26, 3678-3686 | 15.6 | 17 |
| 17 | Enhancement of thermoelectric performance of phase pure Zintl compounds Ca1□Yb Zn2Sb2, Ca1□Eu Zn2Sb2, and Eu1□Yb Zn2Sb2 by mechanical alloying and hot pressing. *Nano Energy*, **2016**, 25, 136-144 | 17.1 | 54 |
| 16 | New insight into the material parameter B to understand the enhanced thermoelectric performance of Mg2Sn1□□GexSby. *Energy and Environmental Science*, **2016**, 9, 530-539 | 35.4 | 68 |
| 15 | Thermoelectric properties of Bi-based Zintl compounds Ca1□YbxMg2Bi2. *Journal of Materials Chemistry A*, **2016**, 4, 4312-4320 | 13 | 69 |
| 14 | High thermoelectric performance of n-type PbTe1□ due to deep lying states induced by indium doping and spinodal decomposition. *Nano Energy*, **2016**, 22, 572-582 | 17.1 | 49 |
| 13 | Thermoelectric properties of materials near the band crossing line in Mg2Sn□Mg2Ge□Mg2Si system. *Acta Materialia*, **2016**, 103, 633-642 | 8.4 | 85 |
| 12 | Importance of high power factor in thermoelectric materials for power generation application: A perspective. *Scripta Materialia*, **2016**, 111, 3-9 | 5.6 | 122 |
| 11 | Thermoelectric properties of Zintl compound Ca1□NaxMg2Bi1.98. *Applied Physics Letters*, **2016**, 108, 183901 | 3.4 | 24 |

# List of Publications

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|---|---|---|---|
| 10 | n-type thermoelectric material Mg2Sn0.75Ge0.25 for high power generation. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 3269-74 | 11.5 | 152 |
| 9 | Relationship between thermoelectric figure of merit and energy conversion efficiency. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 8205-10 | 11.5 | 300 |
| 8 | High thermoelectric power factor in CuNi alloy originate from potential barrier scattering of twin boundaries. *Nano Energy*, **2015**, 17, 279-289 | 17.1 | 56 |
| 7 | Study on thermoelectric performance by Na doping in nanostructured Mg1-xNaxAg0.97Sb0.99. *Nano Energy*, **2015**, 11, 640-646 | 17.1 | 64 |
| 6 | Efficiency and output power of thermoelectric module by taking into account corrected Joule and Thomson heat. *Journal of Applied Physics*, **2015**, 118, 115103 | 2.5 | 25 |
| 5 | Thermoelectric properties of Na-doped Zintl compound: Mg3Na Sb2. *Acta Materialia*, **2015**, 93, 187-193 | 8.4 | 91 |
| 4 | Current progress and future challenges in thermoelectric power generation: From materials to devices. *Acta Materialia*, **2015**, 87, 357-376 | 8.4 | 339 |
| 3 | Investigating the thermoelectric properties of p-type half-Heusler Hfx(ZrTi)1CoSb0.8Sn0.2 by reducing Hf concentration for power generation. *RSC Advances*, **2014**, 4, 64711-64716 | 3.7 | 44 |
| 2 | Design of linear shaped thermoelectric generator and self-integration using shape memory alloy. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2014**, 183, 61-68 | 3.1 | 8 |
| 1 | Design of segmented thermoelectric generator based on cost-effective and light-weight thermoelectric alloys. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2014**, 185, 45-52 | 3.1 | 72 |