

## Curriculum Vitae

Name OH, Min-Wook  
Affiliation Department of Materials Science and Engineering,  
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### Brief Biography

Min-Wook Oh is currently an associate professor of Department of Materials Science and Engineering at Hanbat National University, where he has been since 2015. He received his Ph.D in material science and engineering from KAIST in 2006. From 2005 to 2015 he worked as a senior researcher at Korea Electrotechnology Research Institute (KERI) and served as a director of Thermoelectric Conversion Research Center at KERI from 2014 to 2015. His main research interests are the thermoelectric materials, devices, and computational materials simulations.

### Education

#### High school

March, 1993-February, 1995                      Korea Science Academy of KAIST  
(previously, Busan Science High School)  
Advanced graduation

#### University

March, 1995-February, 2000                      B.A., Department of Materials Science and Engineering  
*Korea Advanced Institute of Science and Engineering*  
(KAIST)  
March, 2000-February, 2002                      M.A., Department of Materials Science and Engineering,  
*KAIST*,  
Thesis title:  
Effects of Alloying Elements on The Phase Stability of  $L1_2$   
(Al,Cr)<sub>3</sub>Ti Coating Materials  
Supervisor; Prof. Dang-Moon Wee  
March, 2002-February, 2006                      Department of Materials Science and Engineering,

KAIST,

Thesis title:

Effects of Alloying Elements on the Thermoelectric Properties of  $\text{ReSi}_{1.75}$

Supervisor; Prof. Dang-Moon Wee

## Experiences

Jan., 1998-Feb. 1998	Visiting Staff, POSCO, Gwangyang, Korea
Mar., 2000-Feb. 2006	Research Assistant, Dept. of Materials Science and Engineering, KAIST
Oct., 2002-Mar., 2004	Visiting Research Assistant, Dept. of Materials Science and Engineering, Kyoto University, Japan
Jan., 2005-July, 2005	Visiting Research Assistant, Dept. of Materials Science and Engineering, Kyoto University, Japan
Dec., 2005-Mar, 2015	Senior researcher, Korea Electrotechnology Research Institute, Changwon, Korea
Nov., 2014-Mar, 2015	Director, Thermoelectric Conversion Research Center, Korea Electrotechnology Research Institute, Changwon, Korea
Apr., 2015-Mar, 2019	Assistant Professor, Dept. of Materials Science and Engineering, Hanbat National University, Daejeon, Korea
Apr., 2019-present	Associate Professor, Dept. of Materials Science and Engineering, Hanbat National University, Daejeon, Korea
Aug., 2020-present	Associate Vice President of Planning, Hanbat National University, Daejeon, Korea

## Honors and Awards

Feb., 1995	Samsung Heavy Industries Prizes For Outstanding Student
Oct., 2002-Mar., 2004	Monbusho-Scholarship of Ministry of Education, Science and Culture, Japan
Jan., 2005-Jul., 2005	International Research Internship-scholarship of Korea Science and Engineering Foundation
Mar., 2000-Feb. 2006	National Scholarship from KAIST
Aug.17-21, 2008	Best Paper Award in Kyoto Joint Symposium on Materials Science and Engineering for the 21C, Kyoto University, Japan
Jan. 2, 2014	Best Achievement Award in Research Achievement, Korea Electrotechnology Research Institute
May 7, 2014	Best Achievement Award in Individual Achievement, Korea Electrotechnology Research Institute

Jan. 5, 2015	Best Achievement Award in Research Achievement, Korea Electrotechnology Research Institute
Dec. 28, 2015	Good Reviewer Award, Electronic Materials Letters
2017	2017 ASPIRE nominees (APEC Science Prize for Innovation, Research and Education)
Nov. 24, 2017	Best Poster Award, International Conference on Advanced Electromaterials
Jan 2, 2019	The 2018 Hanbat National University Best Research Award
Jan 7, 2022	Minister's Award from Ministry of Education for University Innovation Support Project (교육부장관 표창)
Feb 28, 2022	The 2021 Hanbat National University Best Award for Industrial Cooperation

## Research Topic

- ▶ Development of novel thermoelectric materials: Single crystal and polycrystalline bulk materials
- ▶ Development of highly efficient thermoelectric modules
- ▶ Simulation of transport properties by using first-principles and Molecular Dynamics simulations
- ▶ Combining experiment and theory to design new energy-related materials: Li-ion batteries, thermoelectric materials, and photovoltaic cells
- ▶ Transport properties of materials: pure metals, III-V semiconductors

## Publications

### Journals

81. Abbey, Stanley; Jang, Hanhwi; Frimpong, Brakowaa; Kumar, Naveen; Nam, Woo Hyun; Nguyen, Van Quang; Park, Jong Ho; Nguyen, Chien Viet; Shin, Hosun; Song, Jae Yong; Park, Su-Dong; Cho, Sunglae; Bera, Chandan; Kang, Jaimin; Park, Byong-Guk; Malki, Muath Al; Snyder, G. Jeffrey; Jung, Yeon Sik; Hong, Ki-Ha; **Oh, Min-Wook**, "Twisted Grain Boundary Leads to High Thermoelectric Performance in Tellurium Crystal", Energy and Environmental Science, Accepted.
80. Park, Sang Hyun; Kim, Yeongseon; Jang, Hanhwi; Hwang, ChulHyun; Choi, Jaejoon; Lee, Ikjin; **Oh, Min-Wook**, "Fe-Ni-Cr Diffusion Barrier for High-temperature Operation of Bi<sub>2</sub>Te<sub>3</sub>", Journal of Alloys and Compounds 932, 167537 (2023).
79. Jang, Hanhwi; Toriyama, Michael Y; Abbey, Stanley; Frimpong, Brakowaa; Male, James P; Snyder, G Jeffrey; Jung, Yeon Sik and **Oh, Min-Wook**, "Suppressing Charged Cation Antisites via Se Vapor Annealing Enables p-Type Dopability in AgBiSe<sub>2</sub>--SnSe Thermoelectrics", Advanced Materials 34, 2204132 (2022).

78. Yoon, Jaeho; Jang, Hanhwi; **Oh, Min-Wook**; Hilberath, Thomas; Hollmann, Frank; Jung, Yeon Sik; Park, Chan Beum. “Heat-fueled enzymatic cascade for selective oxyfunctionalization of hydrocarbons”, *Nature Communications* 13, 3741 (2022).
77. Heo, Seung Hwa; Yoo, Jisu; Lee, Hyejeong; Jang, Hanhwi; Jo, Seungki; Cho, Jeongmin; Baek, Seongheon; Yang, Seong Eun; Gu, Da Hwi; Mun, Hyun Jung; **Oh, Min-Wook**; Shin, Hosun; Choi, Moon Kee; Shin, Tae Joo; Son, Jae Sung, “Solution-processed Hole-doped SnSe Thermoelectric thin-film Devices for Low-temperature Power Generation”, *ACS Energy Letters* 7, 2092 (2022).
76. Park, Kyung Tae; Cho, Young Shik; Jeong, Inho; Jang, Doojoon; Cho, Hyeon; Choi, Yoohyeon; Lee, Taemin; Ko, Youngpyo; Choi, Jaeyoo; Hong, Soo Young; **Oh, Min-Wook**; Chung, Seungjun; Park, Chong Rae; Kim, Heesuk, “Highly Integrated, Wearable Carbon-Nanotube-Yarn-Based Thermoelectric Generators Achieved by Selective Inkjet-Printed Chemical Doping”, *Advanced Energy Materials* 12, 2200256 (2022).
75. Jang, H.; Abbey, S.; Frimpong, B.; Nguyen, C. V.; Ziolkowski, P.; Oppitz, G.; Kim, M.; Song, J. Y.; Shin, H. S.; Jung, Y. S.; **Oh, Min-Wook**, “Comparative Study of Thermoelectric Properties of Sb<sub>2</sub>Si<sub>2</sub>Te<sub>6</sub> and Bi<sub>2</sub>Si<sub>2</sub>Te<sub>6</sub>”, *ACS Applied Materials and Interfaces* 14, 1270 (2022).
74. Lee, S.; Frimpong, B.; Abbey, S.; Moon, Y. S.; Yoo, K.; Oh, Y-M.; Kim, S-K.; Kim, S-J.; **Oh, Min-Wook**, “Fabrication of conductive silver paste recovered from leaching of waste catalyst using hydrochloric acid”, *RSC Advances* 12, 9698 (2022).
73. Lee, J. K.; Ryu, B.; Park, S.; Son, J. H.; Park, J.; Jang, J.; **Oh, Min-Wook**; Park, S., “Effect of microstructure on thermoelectric conversion efficiency in metastable  $\delta$ -phase AgSbTe<sub>2</sub>”, *Acta Materialia* 222, 117443 (2022).
72. Jang, H.; Park, J. H.; Lee, H. S.; Ryu, B.; Park, S-D.; Ju, H-Y.; Yang, S. H.; Kim, Y-M.; Nam, W. H.; Wang, H.; Male, J.; Snyder, G. J.; Kim, M.; Jung, Y. S.; **Oh, Min-Wook**, “Regulating Te Vacancies through Dopant Balancing via Excess Ag Enables Rebounding Power Factor and High Thermoelectric Performance in p-Type PbTe”, *Advanced Science* 8, 2100895 (2021).
71. Fu, L.; Lee, K. H.; Kim, S-I.; Lim, J-H.; Choi, W.; Cheng, Y.; **Oh, Min-Wook**; Kim, Y-M.; Kim, S. W.. “Hidden role of intrinsic Sb-rich nano-precipitates for high-performance Bi<sub>2-x</sub>Sb<sub>x</sub>Te<sub>3</sub> thermoelectric alloys”, *Acta Materialia* 215, 117058 (2021).
70. Kim, Y-M.; Lee, K. H.; Fu, L.; **Oh, Min-Wook**; Yang, S-H.; Ning, S.; Han, G.; Kim, M. Y.; Kim, J-S.; Jeong, M.; Jang, J.; Lee, E.; Okunishi, E.; Sawada, H.; Kim, S-I.; Pennycook, S. J.; Lee, Y. H.; Kim, S. W., “Atomic-scale chemical mapping of copper dopants in Bi<sub>2</sub>Te<sub>2.7</sub>Se<sub>0.3</sub> thermoelectric alloy”, *Materials Today Physics* 17, 100347 (2021).
69. Jang, H.; Abbey, S.; Nam, W. H.; Frimpong, B.; Nguyen, C. V.; Joo, S. J.; Shin, H. S.; Song, J. Y.; Cho, E. N.; Kim, M.; Jung, Y. S.; **Oh, Min-Wook**, “Order-disorder transition-induced band nestification in AgBiSe<sub>2</sub>-CuBiSe<sub>2</sub> solid solutions for superior thermoelectric performance”, *Journal of Materials Chemistry A* 9, 4648 (2021).

68. Jang, H.; Kim, J. B.; Abbey, S.; Lee, S.; Kim, Y.; Park, S. H.; **Oh, Min-Wook**, “ Fabrication of skutterudite-based tubular thermoelectric generator”, *Energies* 13, 1106 (2020).
67. Lee, M. H.; Park, J. H.; Park, S. D.; Rhyee, J. S.; **Oh, M. W.**, “ Grain Growth mechanism and thermoelectric properties of hot press and spark plasma sintered Na-doped PbTe”, *Journal of Alloys and Compounds* 786, 515-522 (2019).
66. Lee, K. H.; **Oh, M. W.**; Kim, H. S.; Shin, W. H.; Lee, K.; Lim, J. H.; Kim, J.; Kim, S.,” Enhanced thermoelectric transport properties of n-type InSe due to the emergence of the flat band by Si doping”, *Inorganic Chemistry Frontiers* 6, 1475-1481 (2019).
65. **Oh, Min-Wook**; Abbey, Stanley; Park, Su-Dong; Kim, Bong-Seo; Min, Bok-Ki; Lee, Hee-Woong, “ Fabrication and thermoelectric properties of  $\text{Na}_x\text{CoO}_2$  by polymerized complex method”, *International Journal of Nanotechnology* 15, 528-536 (2018).
64. Kim, Jeongmin; **Oh, Min-Wook**; Kim, Gwansik; Bahk, Je-Hyeong; Song, Jae Yong; Jeon, Seong Gi; Chun, Dong Won; Bae, Jee-Hwan; Shim, Wooyoung; Lee, Wooyoung;” Strain-engineered allotrope-like bismuth nanowires for enhanced thermoelectric performance”, *Acta Materialia* 144, 145-153 (2018).
63. Choi, Hyeongdo; Kim, Yong Jun; Kim, Choong Sun; Yang, Hyeong Man; **Oh, Min-Wook**; Cho, Byung Jin;” Enhancement of reproducibility and reliability in a high-performance flexible thermoelectric generator using screen-printed materials”, *Nano energy* 46, 39-44 (2018).
62. Son, Ji-Hee; **Oh, Min-Wook**; Kim, Bong-Seo; Park, Su-Dong; “Optimization of thermoelectric properties of n-type  $\text{Bi}_2(\text{Te},\text{Se})_3$  with optimizing ball milling time”, *Rare Metals* 37, no. 4, 351-359 (2018).
61. Lee, Jae Ki; Son, Ji Hui; Kim, Yong-Il; Ryu, Byungki; Cho, Byung Jin; Kim, Sookyung; Park, Su-Dong; **Oh, Min-Wook**;” Control of Carrier Concentration by Ag Doping in N-Type  $\text{Bi}_2\text{Te}_3$  Based Compounds”, *Applied Sciences* 8, no. 5, 735 (2018).
60. Lee, Jae Ki; Son, Ji-Hui; Park, Su-Dong; Park, Sungjin; **Oh, Min-Wook**; “Control of oxygen content of n-type  $\text{Bi}_2\text{Te}_3$  based compounds by sintering process and their thermoelectric properties”, *Materials Letters* 230, 211-214 (2018).
59. Seo, Sungho; Jeong, Youngkeun; **Oh, Min-Wook**; Yoo, Bongyoung; “Effect of hydrogen annealing of ball-milled  $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$  powders on thermoelectric properties”, *Journal of Alloys and Compounds* 706, 576-583 (2017).
58. Lee, Jae Ki; **Oh, Min-Wook**; Ryu, Byungki; Lee, Ji Eun; Kim, Bong-Seo; Min, Bok-Ki; Joo, Sung-Jae; Lee, Hee-Woong; Park, Su-Dong; “Enhanced thermoelectric properties of  $\text{AgSbTe}_2$  obtained by controlling heterophases with Ce doping”, *Scientific reports* 7, no. 1, 4496 (2017).
57. Choi, Hyeongdo; Kim, Sun Jin; Kim, Yongjun; We, Ju Hyung; **Oh, Min-Wook**; Cho, Byung Jin; “Enhanced thermoelectric properties of screen-printed  $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$  and  $\text{Bi}_{2.7}\text{Te}_{0.3}$ ”, *Journal of Alloys and Compounds* 706, 576-583 (2017).

- thick films using a post annealing process with mechanical pressure”, *Journal of Materials Chemistry C* 5, no. 33, 8559-8565 (2017).
56. Kim, Byoung-Jik; **Oh, Min-Wook**;” Reduction of Radioactive Cesium in Contaminated Soil Through Heat Treatment”, *Science of Advanced Materials* 9, no. 12, 2161-2165 (2017).
55. Kim, Chungman; Kim, Soohyun; Hong, Yang-Ki; **Oh, Min-Wook**; Jung, Myung-Hwa; “Correlation between the magnetic and thermoelectric properties in  $Mg_{2-x}Mn_xSi$ ”, *Journal of Alloys and Compounds* 690, 51-56 (2017).
54. Kim, Sun Jin; Choi, Hyeongdo; Kim, Yongjun; We, Ju Hyung; Shin, Ji Seon; Lee, Han Eol; **Oh, Min-Wook**; Lee, Keon Jae; Cho, Byung Jin; “Post ionized defect engineering of the screen-printed  $Bi_2Te_{2.7}Se_{0.3}$  thick film for high performance flexible thermoelectric generator”, *Nano Energy* 31, 258-263 (2017).
53. Seo, Sungho; **Oh, Min-Wook**; Jeong, Youngkeun; Yoo, Bongyoung; “A hybrid method for the synthesis of small  $Bi_{0.5}Sb_{1.5}Te_3$  alloy particles”, *Journal of Alloys and Compounds* 696, 1151-1158 (2017).
52. Ahn, Jun Yeon; Hwang, Jae-Yeol; Ryu, Byung Ki; **Oh, Min-Wook**; Lee, Kyu Hyoung; Kim, Sung Wng; “Importance of crystal chemistry with interstitial site determining thermoelectric transport properties in pavonite homologue Cu–Bi–S compounds”, *CrystEngComm* 18, no. 8, 1453-1461 (2016).
51. Min, Bok-Ki; Kim, Bong-Seo; **Oh, Min-Wook**; Ryu, Byung-Ki; Lee, Ji-Eun; Joo, Sung-Jae; Park, Su-Dong; Lee, Hee-Woong; Lee, Ho-seong; “Effect of La-doping on  $AgSbTe_2$  thermoelectric compounds”, *Journal of the Korean Physical Society* 68, no.1, 164-169 (2016).
50. Ryu, Byungki; Kim, Bong-Seo; Lee, Ji Eun; Joo, Sung-Jae; Min, Bok-Ki; Lee, Hee-Woong; Park, Sudong; **Oh, Min-Wook**; “Prediction of the band structures of  $Bi_2Te_3$ -related binary and Sb/Se-doped ternary thermoelectric materials”, *Journal of the Korean Physical Society* 68, no. 1, 115-120 (2016).
49. Park, Seong-Yeob; Bae, Jong-Seong; Kim, Jin-Gyu; **Oh, Min-Wook**; Kim, Jungsoo; Nam, Dae-Geun; Yeum, Jeong Hyun; Oh, Weontae; “Anisotropic thermal characteristics of graphene-embedded polyimide composite Sheets”, *Polymers & Polymer Composites* 24, no. 5, 315 (2016).
48. Ryu, Byungki; **Oh, Min-Wook**; “Computational simulations of thermoelectric transport properties”, *Journal of the Korean Ceramic Society* 53, no. 3, 273-281 (2016).
47. Lee, Ho Seong; Kim, Bong-Seo; Cho, Chang-Woo; **Oh, Min-Wook**; Min, Bok-Ki; Park, Su-Dong; Lee, Hee-Woong; “Herringbone structure in GeTe-based thermoelectric materials”, *Acta Materialia* 91, 83-90, (2015).
46. Ryu, Byungki; **Oh, Min-Wook**; Lee, Jae Ki; Lee, Ji Eun; Joo, Sung-Jae; Kim, Bong-Seo; Bok-Ki Min; Hee-Woong Lee; Su-Dong Park; “Defects responsible for abnormal n-type conductivity in Ag-excess doped PbTe thermoelectrics”, *Journal of Applied Physics* 118, no. 1, 15705 (2015).

45. Seo, Sungho; Lee, Kyungseok; Jeong, Youngkeun; **Oh, Min-Wook**; Yoo, Bongyoung; “Method of efficient Ag doping for Fermi level tuning of thermoelectric  $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$  alloys using a chemical displacement reaction”, *The Journal of Physical Chemistry C* 119, no. 32, 18038-18045 (2015).
44. **Oh, Min-Wook**; Ryu, B; Lee, JE; Joo, SJ; Kim, BS; Park, SD; Min, BK; Lee, HW; “Electronic structures and Seebeck coefficients of  $\text{Bi}_2\text{Te}_3$ ,  $\text{Sb}_2\text{Te}_3$ , and  $(\text{Bi}_{0.25}\text{Sb}_{0.75})_2\text{Te}_3$ : A first-principles calculation study”, *Journal of Nanoelectronics and Optoelectronics* 10, no. 3, 391-396 (2015).
43. Wang, Hsin; Bai, Shengqiang; Chen, Lidong; Cuenat, Alexander; Joshi, Giri; Kleinke, Holger; König, Jan; Lee, Hee Woong; Martin, Joshua; **Oh, Min-Wook**; “International round-robin study of the thermoelectric transport properties of an n-Type half-Heusler compound from 300 K to 773 K”, *Journal of Electronic Materials* 44, no. 11, 4482 (2015).
42. Joo, Sung-Jae; Kim, Bong Seo; Min, Bok-Ki; **Oh, Min Wook**; Lee, Ji-Eun; Ryu, Byung Ki; Lee, Hee Woong; Park, Su Dong; “Deposition of n-Type  $\text{Bi}_2\text{Te}_3$  thin films on polyimide by using RF magnetron co-sputtering method”, *Journal of nanoscience and nanotechnology* 15, no. 10, 8299-8304 (2015).
41. Hwang, Jae-Yeol; **Oh, Min-Wook**; Lee, Kyu Hyoung; Kim, Sung Wng; “Strong correlation between the crystal structure and the thermoelectric properties of pavonite homologue  $\text{Cu}_{x+y}\text{Bi}_{5-y}\text{Ch}_8$  (Ch= S or Se) compounds”, *Journal of Materials Chemistry C* 3, no. 43, 11271-11285, (2015).
40. Thiyagarajan, Pradheep; Yan, Zhong; Yoon, Jong-Chul; **Oh, Min-Wook**; Jang, Ji-Hyun; “Thermal conductivity reduction in three dimensional graphene-based nanofoam”, *RSC Advances* 5, no.120, 99394-99397 (2015).
39. Park, Ji Hun; Lee, Seunghun; Kim, Bum-Su; Kim, Won-Kyung; Cho, Yong- Chan; **Oh, Min-Wook**; Cho, Chae-Ryong; Jeong, Se-Young; “Effects of Al doping on the magnetic properties of  $\text{ZnCoO}$  and  $\text{ZnCoO:H}$ ”, *Applied Physics Letters* 104, no. 5, 52412 (2014).
38. Park, Kunsu; Son, Jae Sung; Woo, Sung Ill; Shin, Kwangsoo; **Oh, Min-Wook**; Park, Su-Dong; Hyeon, Taeghwan; “Colloidal synthesis and thermoelectric properties of La-doped  $\text{SrTiO}_3$  nanoparticles”, *Journal of Materials Chemistry A* 2, no. 12, 4217-4224 (2014).
37. **Oh, Min-Wook**; Son, JH; Kim, BS; Park, SD; Min, BK; Lee, HW; “Antisite defects in n-type  $\text{Bi}_2(\text{Te, Se})_3$ : Experimental and theoretical studies”, *Journal of Applied Physics* 115, no. 13, 133706 (2014).
36. Lim, Jae-Hong; Shin, Gyeong-Jin; Hwang, Tae-Yeon; Lim, Hyo-Ryoung; Lee, Young-In; Lee, Kyu-Hwan; Kim, Sung-Dae; **Oh, Min-Wook**; Park, Su-Dong; Myung, Nosang V; “Three-dimensional hierarchical Te-Si nanostructures”, *Nanoscale* 6, no. 20, 11697-11702 (2014).
35. Kim, Ji Young; **Oh, Min-Wook**; Lee, Seunghun; Cho, Yong Chan; Yoon, Jang-Hee; Lee, Geun Woo; Cho, Chae-Ryong; Park, Chul Hong; Jeong, Se-Young; “Abnormal drop in electrical resistivity with impurity doping of single-crystal Ag”, *Scientific reports* 4, 5450 (2014).

34. Thiyagarajan, Pradheep; **Oh, Min-Wook**; Yoon, Jong-Chul; Jang, Ji-Hyun; “Thermoelectric properties of nanoporous three-dimensional graphene networks”, *Applied Physics Letters* 105, no. 3, 33905 (2014).
33. Lee, JK; **Oh, Min-Wook**; Kim, BS; Min, BK; Lee, HW; Park, SD; “Influence of Mn on crystal structure and thermoelectric properties of GeTe compounds”, *Electronic Materials Letters* 10, no. 4, 813-817 (2014).
32. Lee, Ji Eun; Cho, Sang-Hum; **Oh, Min-Wook**; Ryu, Byungi; Joo, Sung-Jae; Kim, Bong-Seo; Min, Bok-Ki; Lee, Hee-Woong; Park, Su-Dong; “Enhancement of thermoelectric properties of Mg<sub>2</sub>Si compounds with Bi doping through carrier concentration tuning”, *Electronic Materials Letters* 10, no. 4, 807-811 (2014).
31. Lee, Seunghun; Kim, Ji Young; Lee, Tae-Woo; Kim, Won-Kyung; Kim, Bum-Su; Park, Ji Hun; Bae, Jong-Seong; Cho, Yong Chan; Kim, Jungdae; **Oh, Min-Wook**; “Fabrication of high-quality single-crystal Cu thin films using radio-frequency sputtering”, *Scientific reports* 4, 6230 (2014).
30. Ko, Young-Ho; **Oh, Min-Wook**; Lee, Jae Ki; Park, Su-Dong; Kim, Kwang-Joo; Choi, Yoon-Soo; “Structural studies of AgSbTe<sub>2</sub> under pressure: Experimental and theoretical analyses”, *Current Applied Physics* 14, no. 11, 1538-1542 (2014).
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28. Son, JH; **Oh, Min-Wook**; Kim, BS; Park, SD; Min, BK; Kim, MH; Lee, HW; “Effect of ball milling time on the thermoelectric properties of p-type (Bi, Sb)<sub>2</sub>Te<sub>3</sub>”, *Journal of Alloys and Compounds* 566, 168-174 (2013).
27. Park, Kwang-Tae; Shin, Sun-Mi; Tazebay, Abdullah S; Um, Han-Don; Jung, Jin-Young; Jee, Sang-Won; **Oh, Min-Wook**; Park, Su-Dong; Yoo, Bongyoung; Yu, Choongho; “Lossless hybridization between photovoltaic and thermoelectric devices”, *Scientific reports* 3, 2123 (2013).
26. Kim, Bongseo; Kim, Inhye; Min, Bok-ki; **Oh, Min-Wook**; Park, Sudong; Lee, Heewoong; “Thermoelectric properties of non-stoichiometric MnTe compounds”, *Electronic Materials Letters* 9, no. 4, 477-480 (2013).
25. Kim, Kyung-Ho; Um, Doo-Seung; Lee, Hochan; Lim, Seongdong; Chang, Joonyeon; Koo, Hyun Cheol; **Oh, Min-Wook**; Ko, Hyunhyub; Kim, Hyung-jun; “Gate-controlled spin-orbit interaction in InAs high-electron mobility transistor layers epitaxially transferred onto Si substrates”, *ACS nano* 7, no. 10, 9106-9114 (2013).
24. Doh, Chil-hoon; **Oh, Min-Wook**; Han, Byung-chan; “Lithium alloying potentials of silicon as anode of lithium secondary batteries”, *Asian journal of chemistry* 25, no. 10, 5739 (2013).



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22. Ahn, JH; **Oh, Min-Wook**; Kim, BS; Park, SD; Min, BK; Lee, HW; Shim, YJ; “Thermoelectric properties of  $\text{Zn}_4\text{Sb}_3$  prepared by hot pressing”, *Materials Research Bulletin* 46, no. 9, 1490-1495 (2011).
21. Kang, Yong-Mook; Kim, Yong-II; **Oh, Min-Wook**; Yin, Ri-Zhu; Lee, Youngmin; Han, Dong-Wook; Kwon, Hyuk-Sang; Kim, Jung Ho; Ramanath, Ganpati; “Structurally stabilized olivine lithium phosphate cathodes with enhanced electrochemical properties through Fe doping”, *Energy & Environmental Science* 4, no. 12, 4978-4983 (2011).
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19. Doh, Chil-Hoon; Veluchamy, Angathevar; **Oh, Min-Wook**; Han, Byung-Chan; “Analysis on the formation of  $\text{Li}_4\text{SiO}_4$  and  $\text{Li}_2\text{SiO}_3$  through first principle calculations and comparing with experimental data related to lithium battery”, *Journal of Electrochemical Science and Technology* 2, no. 3, 146-151 (2011).
18. Dow, HS; **Oh, Min-Wook**; Kim, BS; Park, SD; Min, BK; Lee, HW; Wee, DM; “Effect of Ag or Sb addition on the thermoelectric properties of  $\text{PbTe}$ ”, *Journal of Applied Physics* 108, no. 11, 113709 (2010).
17. Lee, JK; Park, SD; Kim, BS; **Oh, Min-Wook**; Cho, SH; Min, BK; Lee, HW; Kim, MH; “Control of thermoelectric properties through the addition of Ag in the  $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$  Alloy”, *Electronic Materials Letters* 6, no. 4, 201-207 (2010).
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