References

Fahrnbauer, F., Souchay, D., Wagner, G., & Oeckler, O. (2015). High Thermoelectric Figure of Merit Values of Germanium Antimony Tellurides with Kinetically Stable Cobalt Germanide Precipitates. *Journal of the American Chemical Society, 137*(39), 12633–12638. doi: 10.1021/jacs.5b07856

Kosuga, A., Nakai, K., Matsuzawa, M., Fujii, Y., Funahashi, R., Tachizawa, T., . . . Kifune, K. (2015). Crystal structure, microstructure, and thermoelectric properties of GeSb6Te10 prepared by spark plasma sintering. *Journal of Alloys and Compounds, 618*, 463–468. doi: http://dx.doi.org/10.1016/j.jallcom.2014.08.183

Kosyakov, V. I., Shestakov, V. A., Shelimova, L. E., Kuznetsov, F. A., & Zemskov, V. S. (2000). Topological characterization of the Ge–Sb–Te phase diagram. *Inorganic Materials, 36*(10), 1004–1017. doi: 10.1007/BF02757976

Rowe, D. M. (2005). *Thermoelectrics handbook: macro to nano*: CRC press.

Shelimova, L. E., Karpinskii, O. G., Zemskov, V. S., & Konstantinov, P. P. (2000). Structural and electrical properties of layered tetradymite-like compounds in the GeTe—Bi2Te3 and GeTe—Sb2Te3 systems. *Inorganic Materials, 36*(3), 235–242. doi: 10.1007/BF02757928

Baranowski, L. L., Jeffrey Snyder, G., & Toberer, E. S. (2013). Effective thermal conductivity in thermoelectric materials. *Journal of applied physics, 113*(20), 204904.

Glosch, H., Ashauer, M., Pfeiffer, U., & Lang, W. (1999). A thermoelectric converter for energy supply. *Sensors and Actuators A: Physical, 74*(1), 246–250.

Kifune, K., Fujita, T., Kubota, Y., Yamada, N., & Matsunaga, T. (2011). Crystallization of the chalcogenide compound Sb8Te3. *Acta Crystallographica Section B, 67*(5), 381–385. doi: doi:10.1107/S0108768111033738

Kim, I.-H. (2000). (Bi, Sb) 2 (Te, Se) 3-based thin film thermoelectric generators. *Materials letters, 43*(5), 221-224.

Kosuga, A., Nakai, K., Matsuzawa, M., Fujii, Y., Funahashi, R., Tachizawa, T., . . . Kifune, K. (2015a). Crystal structure, microstructure, and thermoelectric properties of GeSb6Te10 prepared by spark plasma sintering. *Journal of Alloys and Compounds, 618*, 463-468. doi: http://dx.doi.org/10.1016/j.jallcom.2014.08.183

Kosuga, A., Nakai, K., Matsuzawa, M., Fujii, Y., Funahashi, R., Tachizawa, T., . . . Kifune, K. (2015b). Crystal structure, microstructure, and thermoelectric properties of GeSb 6 Te 10 prepared by spark plasma sintering. *Journal of Alloys and Compounds, 618*, 463-468.

Kosyakov, V. I., Shestakov, V. A., Shelimova, L. E., Kuznetsov, F. A., & Zemskov, V. S. (2000). Topological characterization of the Ge-Sb-Te phase diagram. *Inorganic Materials, 36*(10), 1004-1017. doi: 10.1007/BF02757976

Matsunaga, T., & Yamada, N. (2004). Structural investigation of GeSb 2 Te 4: A high-speed phase-change material. *Physical Review B, 69*(10), 104111.

Morales-Sanchez, E., Prokhorov, E., Mendoza-Galván, A., & González-Hernández, J. (2002). Determination of the glass transition and nucleation temperatures in Ge 2 Sb 2 Te 5 sputtered films. *Journal of applied physics, 91*(2), 697-702.

Namhongsa, W., Omoto, T., Fujii, Y., Seetawan, T., & Kosuga, A. (2017). Effect of the crystal structure on the electronic structure and electrical properties of thermoelectric GeSb 6 Te 10 prepared by hot pressing. *Scripta Materialia, 133*, 96-100.

Perumal, K. (2013). *Epitaxial growth of Ge-Sb-Te based phase change materials.* Humboldt-Universität zu Berlin, Mathematisch-Naturwissenschaftliche Fakultät I.

Riffat, S. B., & Ma, X. (2003). Thermoelectrics: a review of present and potential applications. *Applied thermal engineering, 23*(8), 913-935.

Rosenthal, T., Schneider, M. N., Stiewe, C., Döblinger, M., & Oeckler, O. (2011). Real Structure and Thermoelectric Properties of GeTe-Rich Germanium Antimony Tellurides. *Chemistry of Materials, 23*(19), 4349-4356. doi: 10.1021/cm201717z

Rowe, D. M. (1999). Thermoelectrics, an environmentally-friendly source of electrical power. *Renewable Energy, 16*(1-4), 1251-1256.

Rowe, D. M. (2005). *Thermoelectrics handbook: macro to nano*: CRC press.

Sankar, R., Wong, D. P., Chi, C.-S., Chien, W.-L., Hwang, J.-S., Chou, F.-C., . . . Chen, K.-H. (2015). Enhanced thermoelectric performance of GeTe-rich germanium antimony tellurides through the control of composition and structure. *CrystEngComm, 17*(18), 3440-3445. doi: 10.1039/C5CE00228A

Shelimova, L. E., Karpinskii, O. G., Zemskov, V. S., & Konstantinov, P. P. (2000). Structural and electrical properties of layered tetradymite-like compounds in the GeTe—Bi2Te3 and GeTe—Sb2Te3 systems. *Inorganic Materials, 36*(3), 235-242. doi: 10.1007/BF02757928

Yan, F., Zhu, T., Zhao, X., & Dong, S. (2007). Microstructures and thermoelectric properties of GeSbTe based layered compounds. *Applied Physics A: Materials Science & Processing, 88*(2), 425-428.

Yodovard, P., Khedari, J., & Hirunlabh, J. (2001). The potential of waste heat thermoelectric power generation from diesel cycle and gas turbine cogeneration plants. *Energy sources, 23*(3), 213-224.

Acott, C. (1999). "The diving "Law-ers": A brief resume of their lives." *South Pacific Underwater Medicine Society journal, 29*(1).

Andrea {Dal Corso} and Stefano de Gironcoli and Stefano Fabris and Guido Fratesi and Ralph Gebauer and Uwe Gerstmann and Christos Gougoussis and Anton Kokalj and Michele Lazzeri and Layla Martin-Samos and Nicola Marzari and Francesco Mauri and Riccardo Mazzarello and Stefano Paolini and Alfredo Pasquarello and Lorenzo

Paulatto and Carlo Sbraccia and Sandro Scandolo and Gabriele Sclauzero and Ari P Seitsonen and Alexander Smogunov and Paolo Umari and Renata M Wentzcovitch}, P. G. a. S. B. a. N. B. a. M. C. a. R. C. a. C. C. a. D. C. a. G. L. C. a. M. C. a. I. D. a. (2009). QUANTUM ESPRESSO: a modular and open-source software project for quantum simulations of materials. *Journal of Physics: Condensed Matter,, 21*, 395502 (395519pp).

Kosuga, A., Nakai, K., Matsuzawa, M., Fujii, Y., Funahashi, R., Tachizawa, T., . . . Kifune, K. (2015). Crystal structure, microstructure, and thermoelectric properties of GeSb 6 Te 10 prepared by spark plasma sintering. *Journal of Alloys and Compounds, 618*, 463-468.

Madsen, G. K., & Singh, D. J. (2006). BoltzTraP. A code for calculating band-structure dependent quantities. *Computer Physics Communications, 175*(1), 67-71.

Murasawa, N., Koseki, H., Li, X.-R., Iwata, Y., & Sakamoto, T. (2012). Study on thermal behaviour and risk assessment of biomass fuels. *International Journal of Energy Engineering, 2*(5), 242-252.

Myers, H. P. (2002). Introductory Solid State Physics. *Taylor & Francis*.

Nemoto, T., Iida, T., Sato, J., Sakamoto, T., Nakajima, T., & Takanashi, Y. (2012). Power Generation Characteristics of Mg 2 Si Uni-Leg Thermoelectric Generator. *Journal of electronic materials, 41*(6), 1312-1316.

Overview, D. D. (2013). Advanced X-ray Diffraction System for Materials Research Applications.

Pandian, M. S. (2014). X-ray Diffraction Analysis: Principle, Instrument and Applications.

Rowe, D. M. (2005). *Thermoelectrics handbook: macro to nano*: CRC press.

Setyawan, W., & Curtarolo, S. (2010). High-throughput electronic band structure calculations: Challenges and tools. *Computational Materials Science, 49*(2), 299-312. doi: http://dx.doi.org/10.1016/j.commatsci.2010.05.010

Snyder, G. J. (2008). Small thermoelectric generators. *The Electrochemical Society Interface, 17*(3), 54.

Yavorsky, B. Y., Hinsche, N. F., Mertig, I., & Zahn, P. (2011). Electronic structure and transport anisotropy of Bi${}_{2}$Te${}_{3}$ and Sb${}_{2}$Te${}_{3}$. *Physical Review B, 84*(16), 165208.