

Publications List – Dana Ben-Ayoun

Peer reviewed journals

1. D. Ben-Ayoun, Y. Gelbstein, Electronic properties of co-doped nonstoichiometric GeTe, *Intermetallics*, 131 (2021) 107118.
2. Y.Sadia, D. Ben-Ayoun, Y. Gelbstein, PbO-SiO₂ – based glass doped with B₂O₃ and Na₂O for coating of thermoelectric materials, *Journal of Materials Research*, 34(20) (2019) 3563-3572, Cambridge University Press.
3. D. Ben-Ayoun, Y. Gelbstein, Co-doping effect on the electronic properties of nonstoichiometric tin telluride, *MRS Advances*, 4(30) (2019) 1699-1707.
4. D. Ben-Ayoun, Y. Gelbstein, Bismuth telluride solubility limit and dopant effects on the electronic properties of lead telluride, *Memon S editor, Advanced Thermoelectric Materials for Energy Harvesting Application, IntechOpen* (2019) 4(12).
5. G. Guttman, R. Gertner, S. Samuha, D. Ben-Ayoun, S. Haroush, Y. Gelbstein, Thermoelectric and mechanical properties of Ag and Cu doped (GeTe)_{0.96}(Bi₂Te₃)_{0.04}, *MRS communication*, 8(30) (2018) 1292-1299.
6. D. Ben-Ayoun, Y.Sadia ,Y. Gelbstein, Compatibility between cobalt metalized PbTe thermoelectric legs and an Ag-Cu-In brazing alloy, *Materials*, 11 (2018) 99.
7. Y.Sadia, D. Ben-Ayoun, Y. Gelbstein, Evaporation-Condensation effects on the thermoelectric performance of PbTe based couples, *Physical Chemistry Chemical Physics*, 19(29) (2017) 19326-19333.
8. D. Ben-Ayoun, Y.Sadia ,Y. Gelbstein, High temperature thermoelectric properties evolution of Pb_{1-x}Sn_xTe based alloys, *Journal of Alloys and Compounds*, 722 (2017) 33-38.
9. O. Meroz, D. Ben-Ayoun, O. Beeri, Y. Gelbstein, Development of Bi₂Te_{2.4}Se_{0.6} alloy for thermoelectric power generation applications, *Journal of Alloys and Compounds*, 679 (2016) 196-201.

Oral presentations

1. September 2019, "Electronic mechanisms for optimizing the thermoelectric properties of PbTe alloys", ECT, Limassol, Cyprus.
2. April 2019, "Electronic mechanisms for optimizing the thermoelectric properties of SnTe alloys", MRS, Phoenix, Arizona, USA.
3. July 2018, "Compatibility investigation between Co-Metallized PbTe thermoelectric legs and an Ag-Cu-In brazing alloy", ICT, Cean, France.

Posters

1. January 2019, "Developing specialty glasses as anti-sublimation barrier for thermoelectric materials", ICACC, Daytona Beach, FL, USA.
2. January 2019, "Modeling long-term behavior of PbTe based thermoelectric generators", EMA, Orlando, FL, USA.
3. February 2018, "Modeling the effects of degradation on the thermoelectric performance of PbTe based couples", IMEC, Dead Sea, Israel.
4. February 2018, "Compatibility between cobalt metalized PbTe thermoelectric legs and an Ag-Cu-In brazing alloy after long-term thermal treatment", IMEC, Dead Sea, Israel.
5. September 2017, "Compatibility between cobalt metalized PbTe thermoelectric legs and an Ag-Cu-In brazing alloy", EMRS, Warsaw, Poland.
6. January 2017, "Thermal stability of thermoelectric tellurides", ICACC, Daytona Beach, FL, USA.
7. January 2017, "Brazing of thermoelectric tellurides", EMA, Orlando, FL, USA.
8. September 2016, "Increasing the figure of merit $\text{Bi}_2\text{Te}_{2.4}\text{Se}_{0.6}$ alloy for thermoelectric power generation applications by optimizing of the preparation process", ECT, Lisbon, Portugal.
9. May 2016, "Development of $\text{Bi}_2\text{Te}_{2.4}\text{Se}_{0.6}$ alloy for thermoelectric power generation applications and optimizing of the figure of merit", EMRS, Lille, France.
10. February 2016, "Thermoelectric generator modeling for a Caterpillar C7 engine", IMEC, Bar-Ilan University, Ramat-Gan, Israel.
11. February 2016, "Development of $\text{Bi}_2\text{Te}_{2.4}\text{Se}_{0.6}$ alloy for thermoelectric power generation applications", IMEC, Bar-Ilan University, Ramat-Gan, Israel.
12. September 2015, "Enhancement of thermoelectric properties of *n*-type $\text{Bi}_2(\text{Te}_{0.8}\text{Se}_{0.2})_3$ by ball milling", IVS, Weizmann Institute of Science, Rehovot, Israel.