

SUPPLEMENTARY INFORMATION

**High Thermoelectric Performance of Co-doped Tin Telluride due to
Synergistic Effect of Magnesium and Indium**

D Krishna Bhat* and Sandhya Shenoy U

Department of Chemistry, National Institute of Technology Karnataka, Surathkal
Mangalore - 575025, India

*Corresponding author email: denthajekb@gmail.com

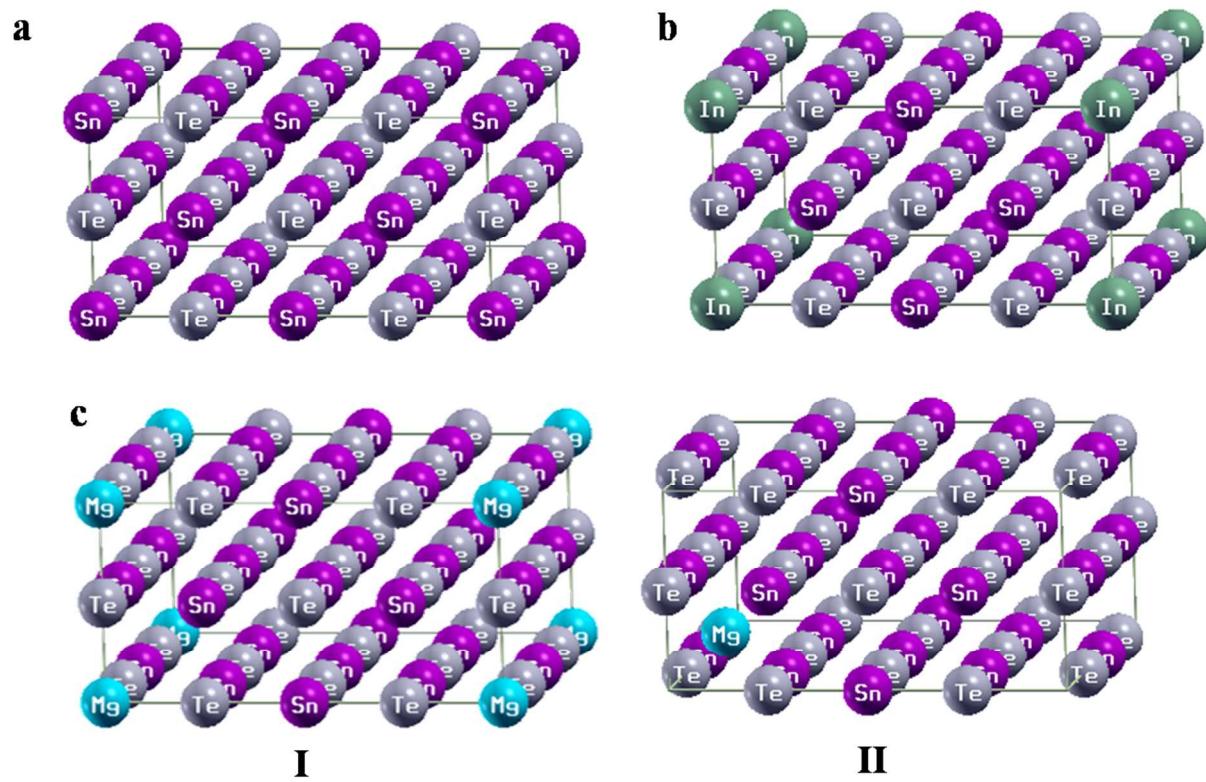


Figure S1. Crystal structures of a) $\text{Sn}_{16}\text{Te}_{16}$, b) $\text{Sn}_{15}\text{In}\text{Te}_{16}$ (In in rock salt site), c) $\text{Sn}_{15}\text{Mg}\text{Te}_{16}$ (I- Mg in rock salt site, II- Mg in zinc blende site).

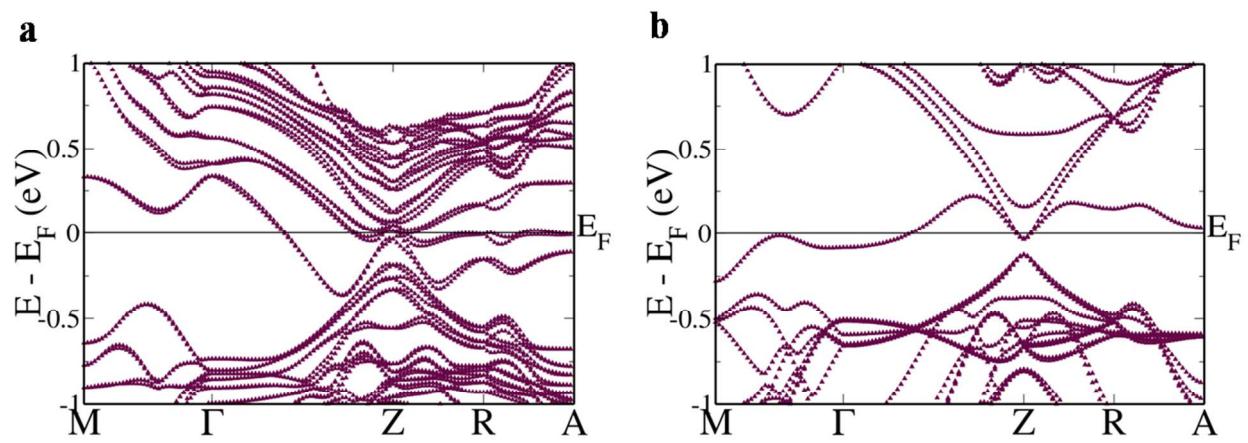


Figure S2. Electronic structures of a) $\text{Sn}_{15}\text{InTe}_{16}$ (In in zinc blende site), b) $\text{Pb}_{15}\text{InTe}_{16}$ showing resonance level in conduction band.

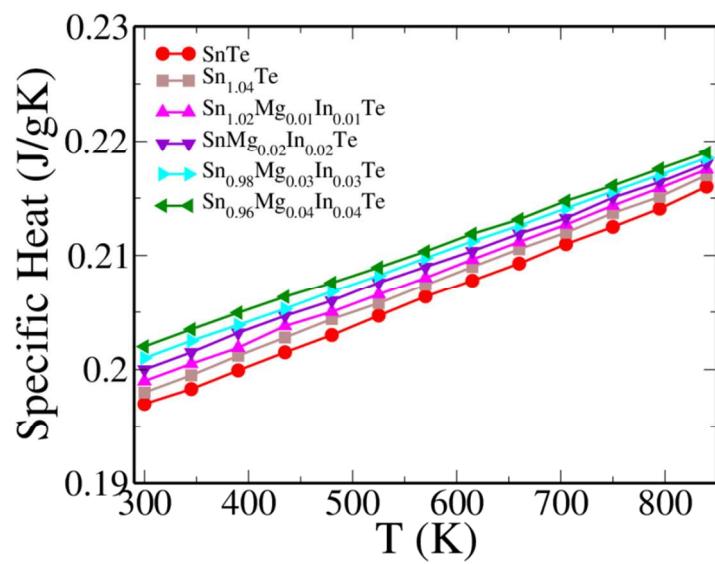


Figure S3. Temperature dependent heat capacity data of synthesized samples.

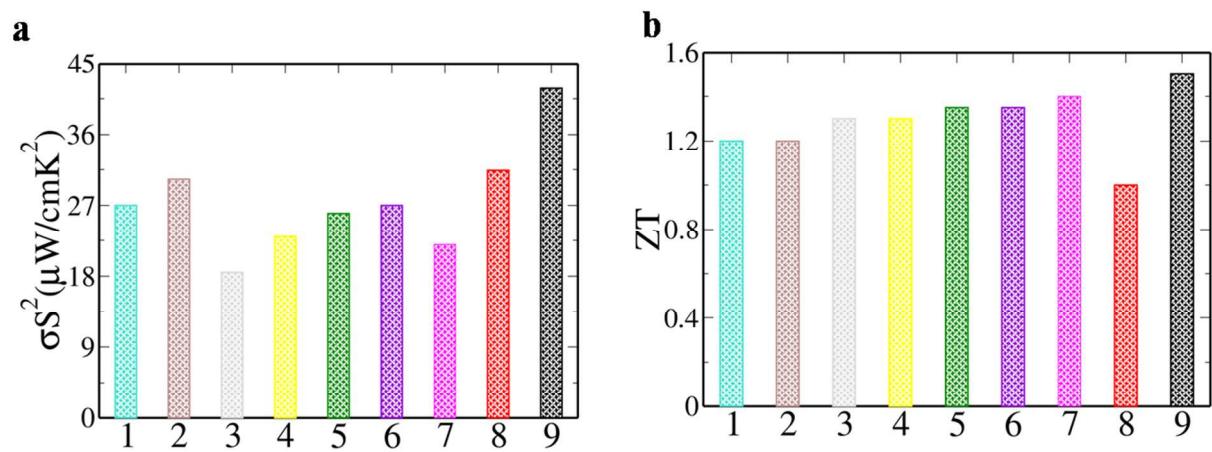


Figure S4. Comparison of a) Power factors, b) ZT values of SnTe based materials. Numbers in x-axis denote reference number corresponding to SnTe doped with *Sr*(1), *Mg*(2), *Cd*(3), *Mn*(4), *Ca*(5), *Hg*(6), *Cd-In*(7), *Ag-In*(8), *Mg-In*(9-present work).

References

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