

Thermoelectric properties of AMg_2X_2 , AZn_2Sb_2 ($\text{A} = \text{Ca}, \text{Sr}, \text{Ba}$; $\text{X} = \text{Sb}, \text{Bi}$), and Ba_2ZnX_2 ($\text{X} = \text{Sb}, \text{Bi}$) Zintl compounds (Supplementary information)

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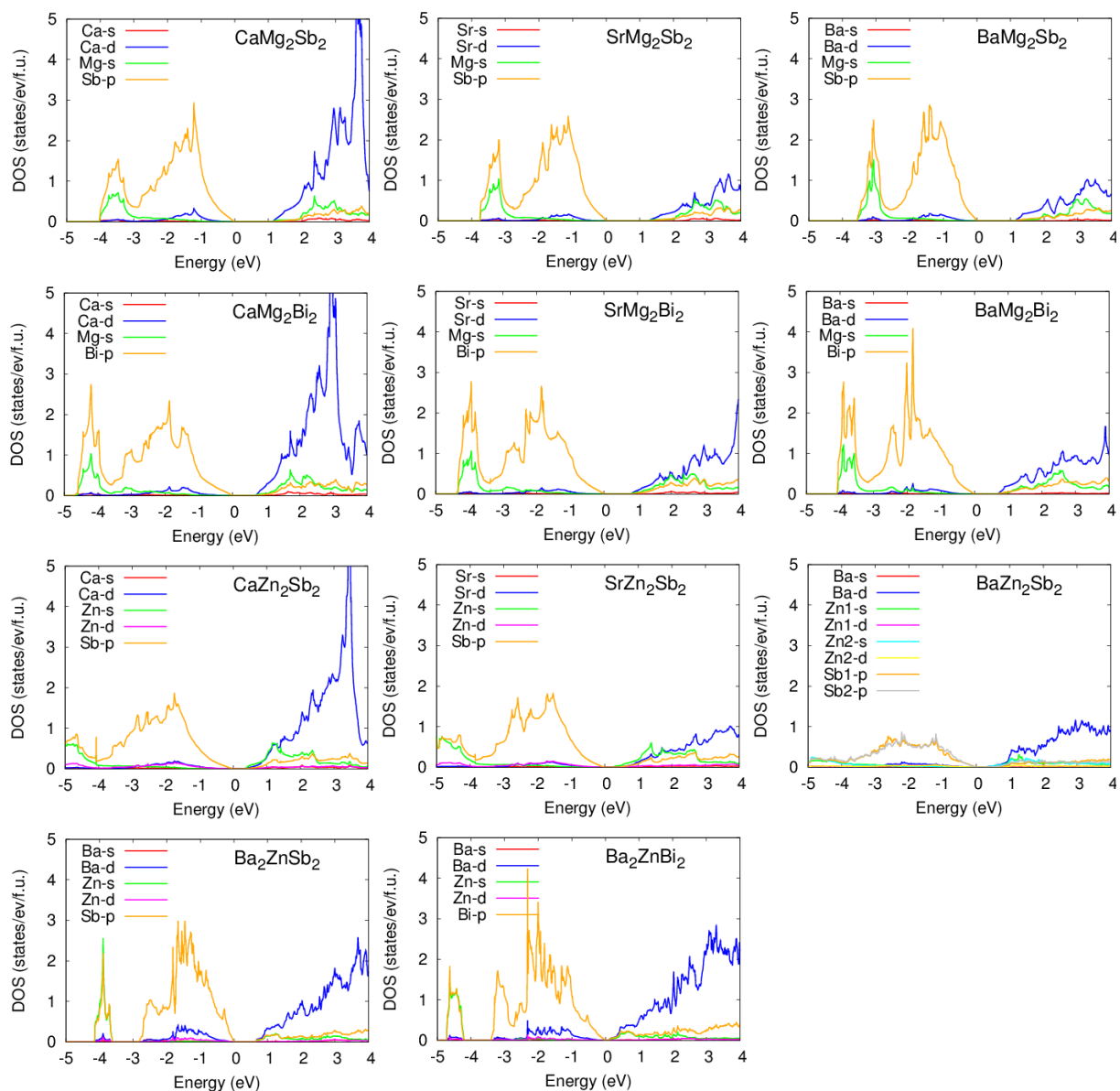


FIG. S1: Calculated projected density of states of the eleven compounds using mBJ and SOC.

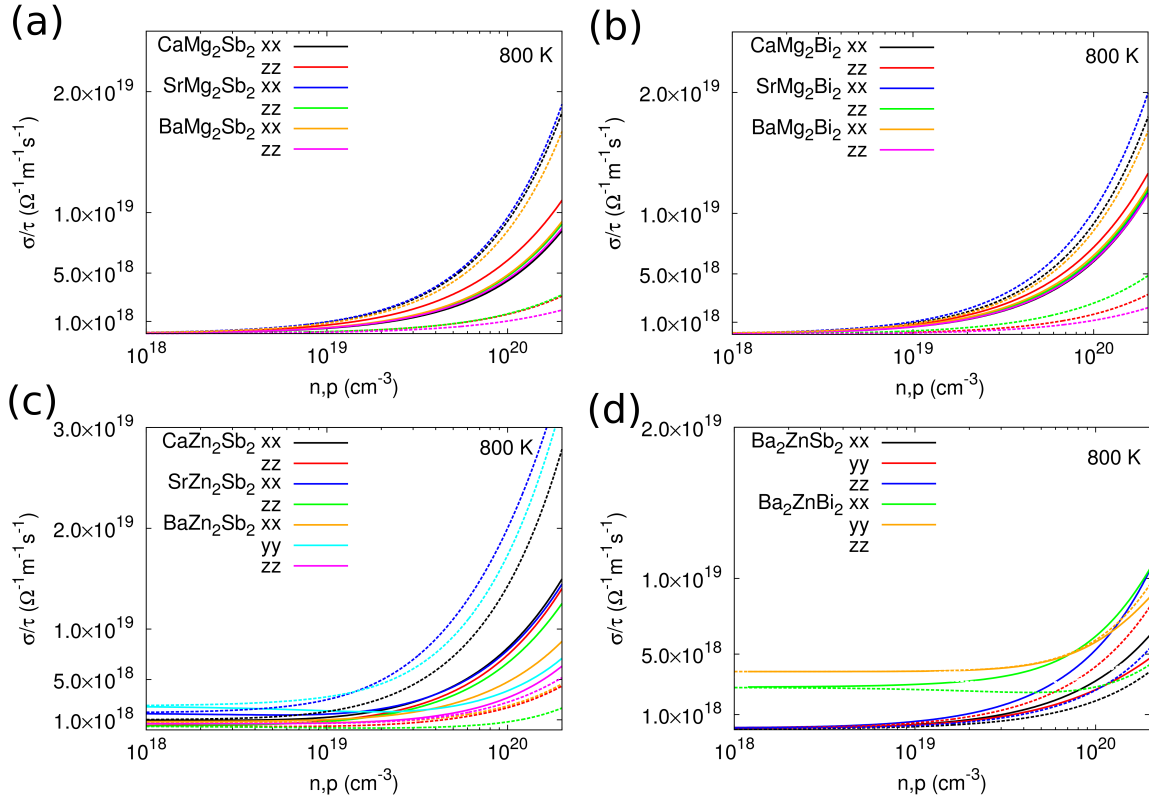


FIG. S2: Calculated relaxation-time-related electrical conductivity along different directions at 800 K for the $[\text{Mg}_2\text{Sb}_2]^{2-}$ compounds (a), the $[\text{Mg}_2\text{Bi}_2]^{2-}$ (b), the $[\text{Zn}_2\text{Sb}_2]^{2-}$ (c), and the 212 phases (d). Solid lines are p -type and dashed lines are n -type materials.

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