Pressured-induced structural phase transition and superconductivity in $NaSn_5$

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Supplementary figure legends

Fig. S1. Enthalpy difference versus pressure for competitive structures of $NaSn_5$, referenced to the *P*-42_1m phase.

Fig. S2. Electronic band structure along high symmetry lines of the Brillouin zone in the *P*-42_1m phase at ambient pressure.

Fig. S3. The projected density of states (PDOS) of (a) *P*-42_1m at 0GPa. (b) *P*6/*mmm* at 1.85 GPa.

Fig. S4. The Calculated ELF for $NaSn_5$-*P*6/*mmm* in the (a) (0 0 1) plane and (b) (001) plane.

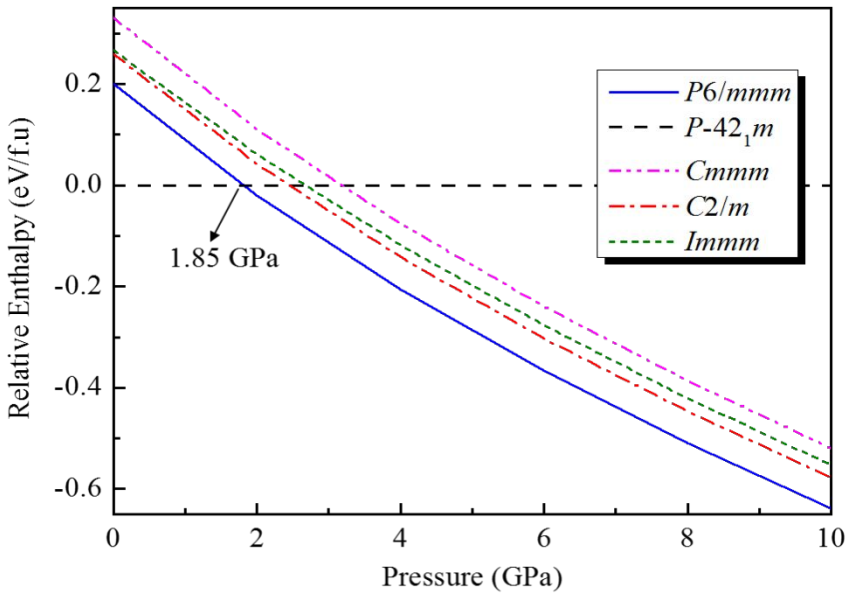

Figure S1. Enthalpy difference versus pressure for competitive structures of $NaSn_5$, referenced to the *P*-42$_1$*m* phase.

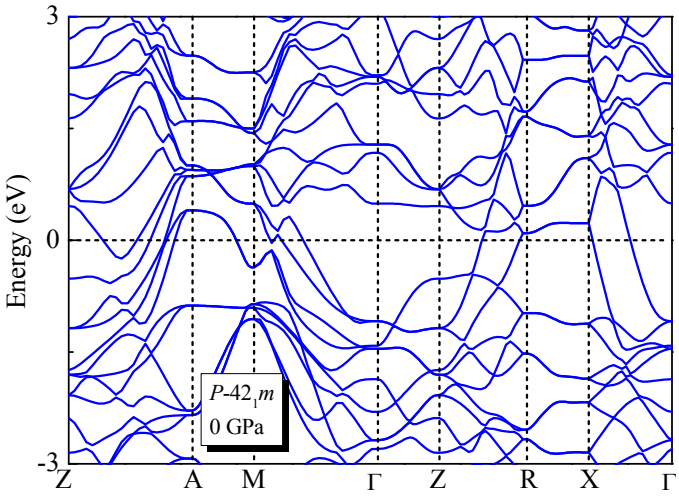

Figure S2. Electronic band structure along high symmetry lines of the Brillouin zone in the $P\text{-}42_1m$ phase at ambient pressure.

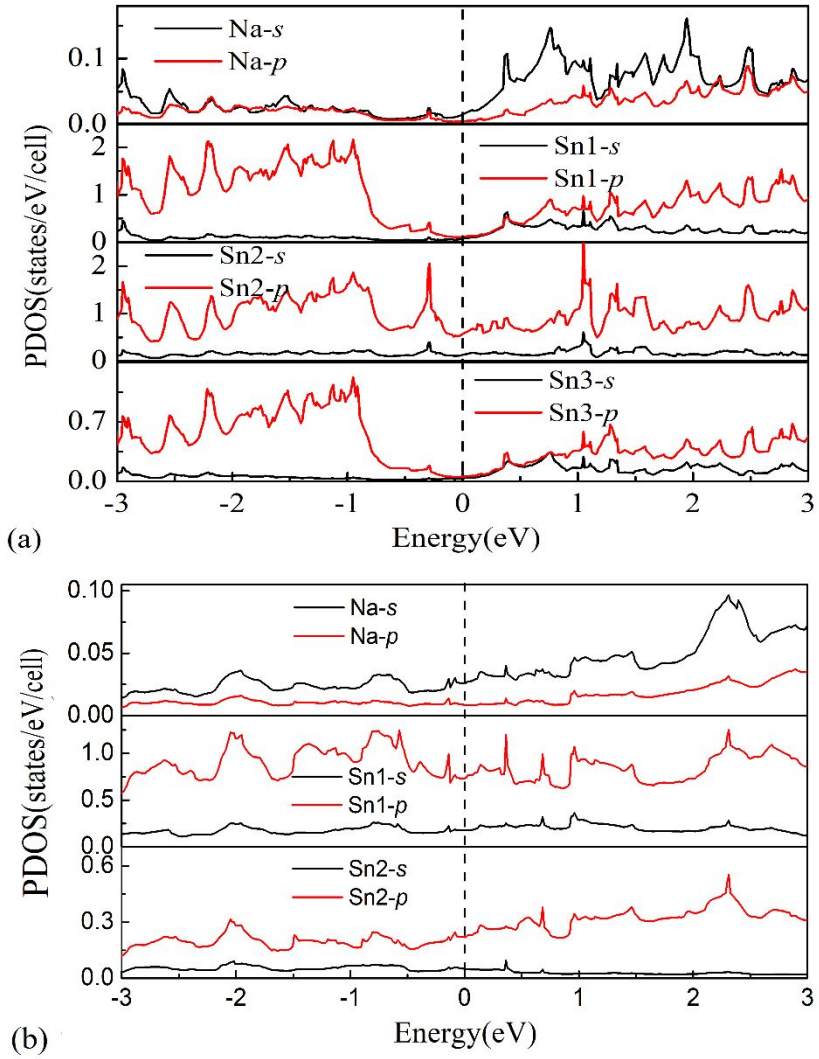

Figure S3. The projected density of states (PDOS) of (a) *P*-42$_1$*m* at 0 GPa. (b) *P*6/*mmm* at 1.85 GPa.

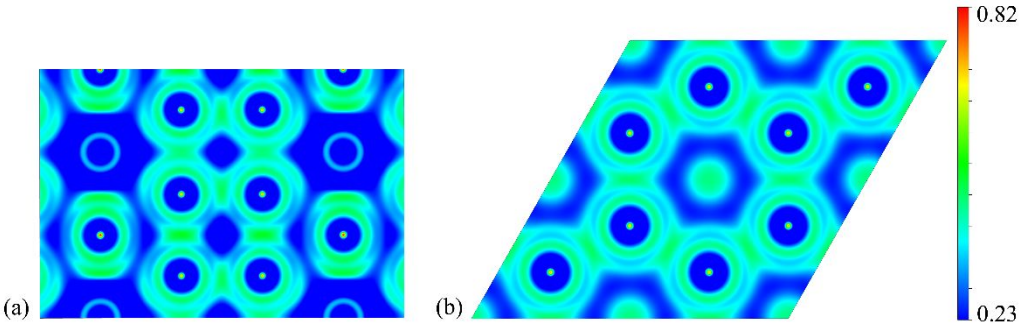

Figure S4. The calculated ELF for *P*6/*mmm*-$NaSn_5$ in the (a) (110) plane and (b) (001) plane.