

High-pressure Synthesis and Electronic Structure of a New Superconducting Strontium Germanide SrGe_3 Containing Ge_2 Dumbbells

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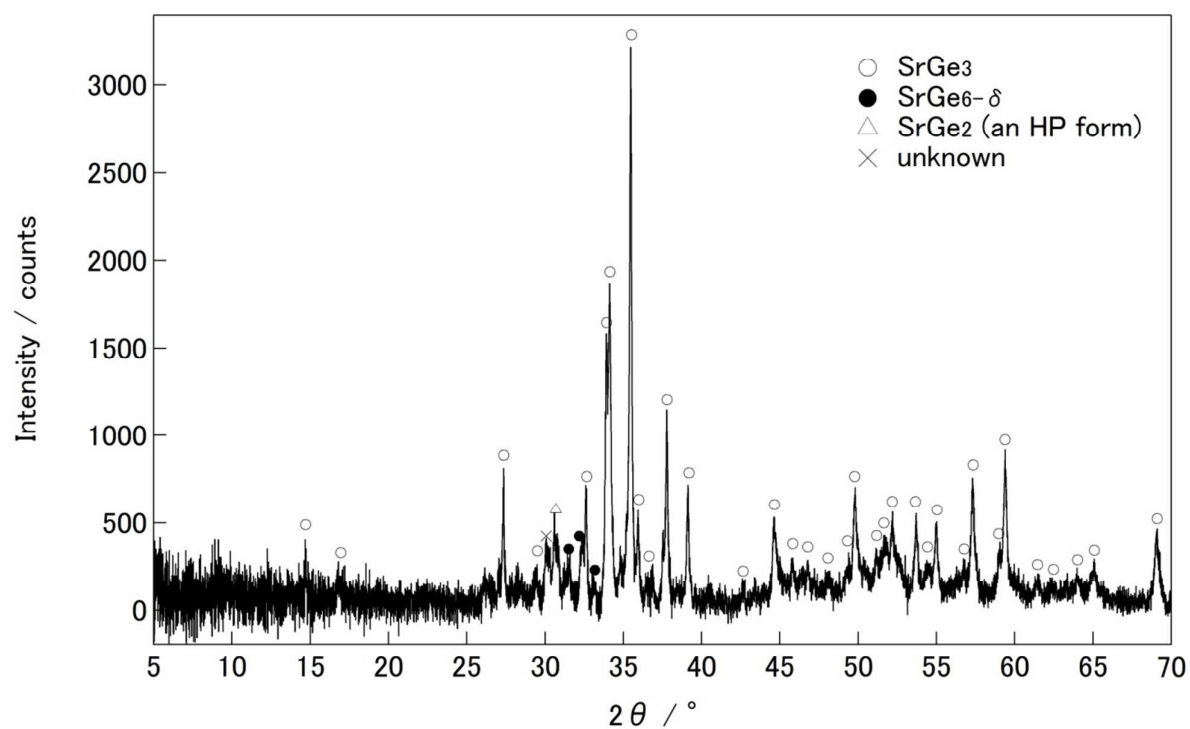
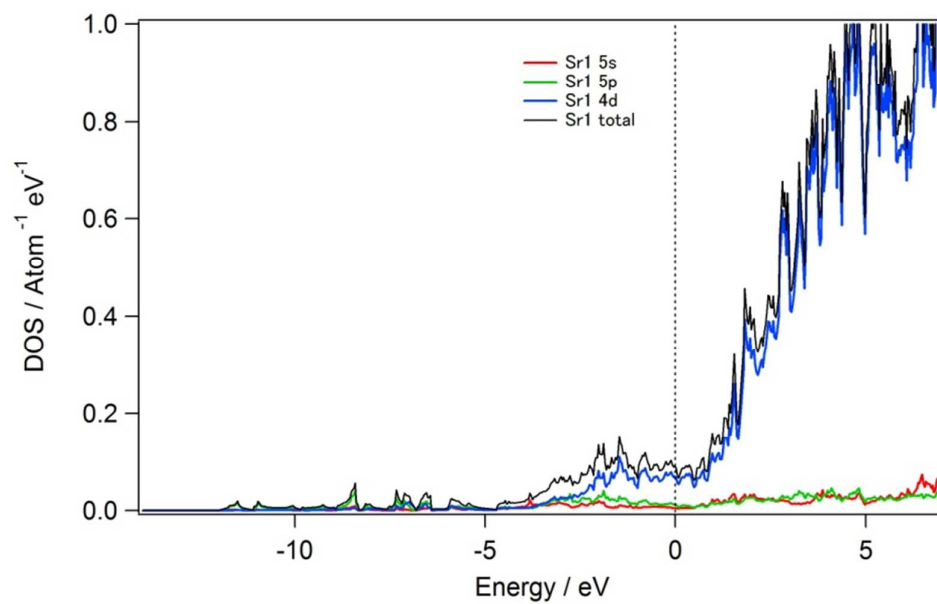
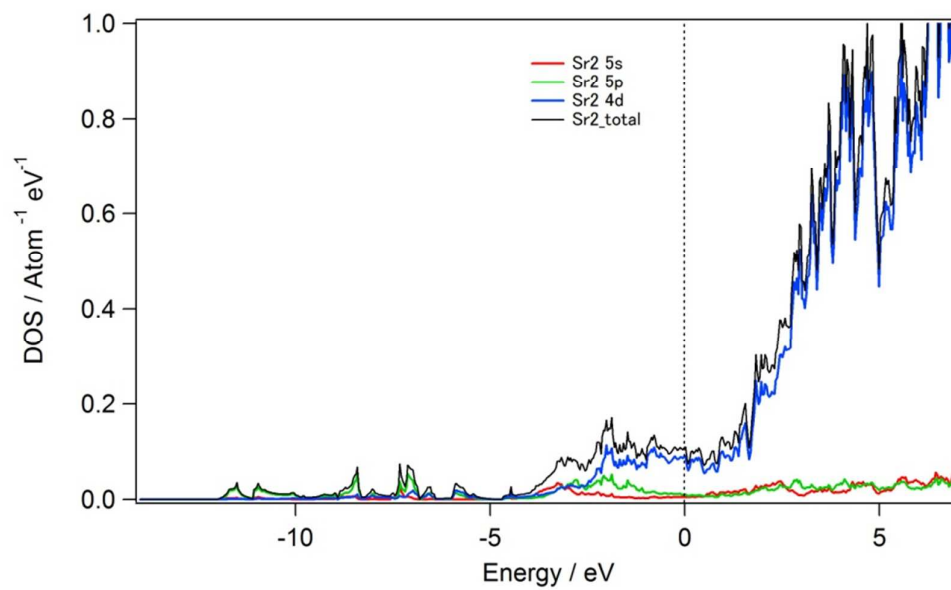


Figure S1. Powder XRD pattern of an as-prepared sample. Open and filled circles show the diffraction peaks from SrGe₃ and SrGe_{6-δ}, respectively. The sample also contains small amount of SrGe₂ with an HP form and an unknown phase.



(a)



(b)

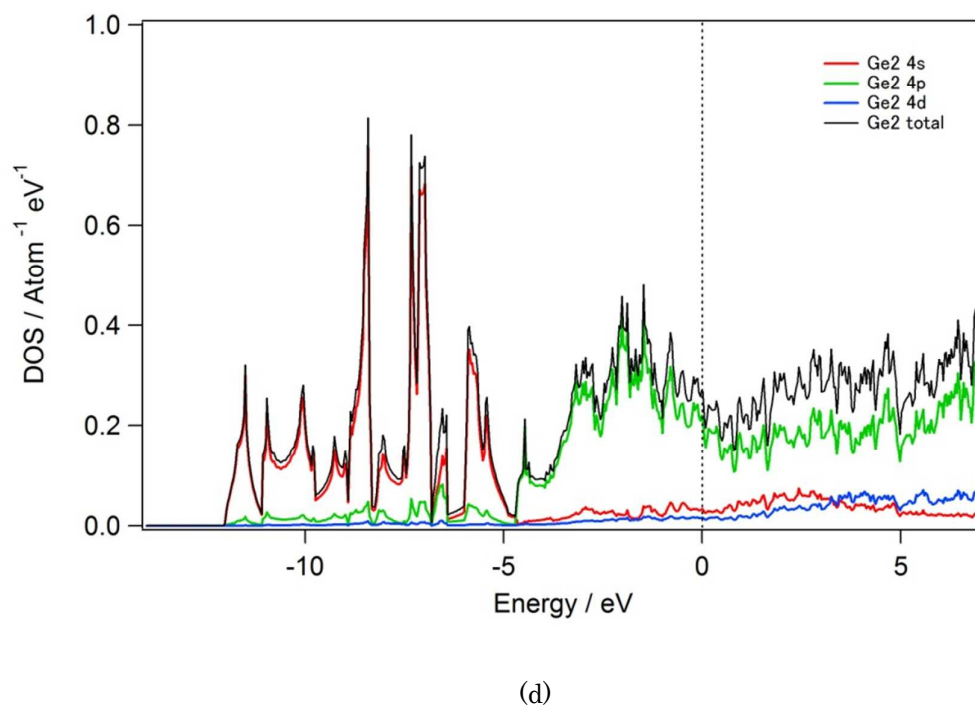
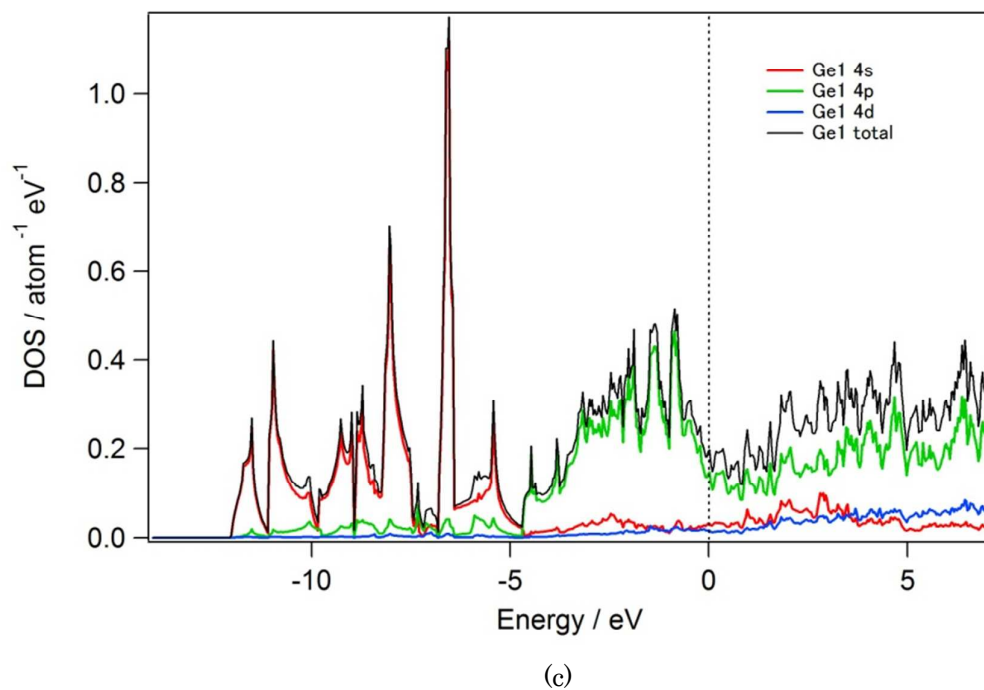


Figure S2. Partial DOS diagrams ($\text{DOS} / \text{Atom}^{-1} \text{eV}^{-1}$) of each sites; (a) Si1, (b) Sr2, (3) Ge1, and (4) Ge4. The red, green, and blue lines show s, p, and d orbitals contributions, respectively, and the black lines are the total of them.