

## Solvothermal syntheses of lanthanide thiogermanates displaying three new structural moieties

Rong-Qing Zhao, Jian Zhou, Xing Liu, Li Zhang, Qiu-Ling Tang and Xiao-Feng Tan

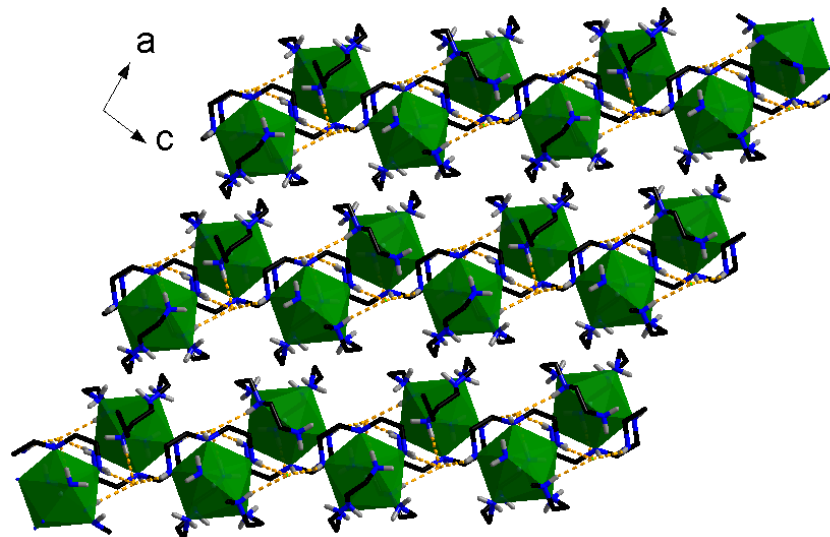


Fig. S1 The stacking mode for the layers in **Ia**.

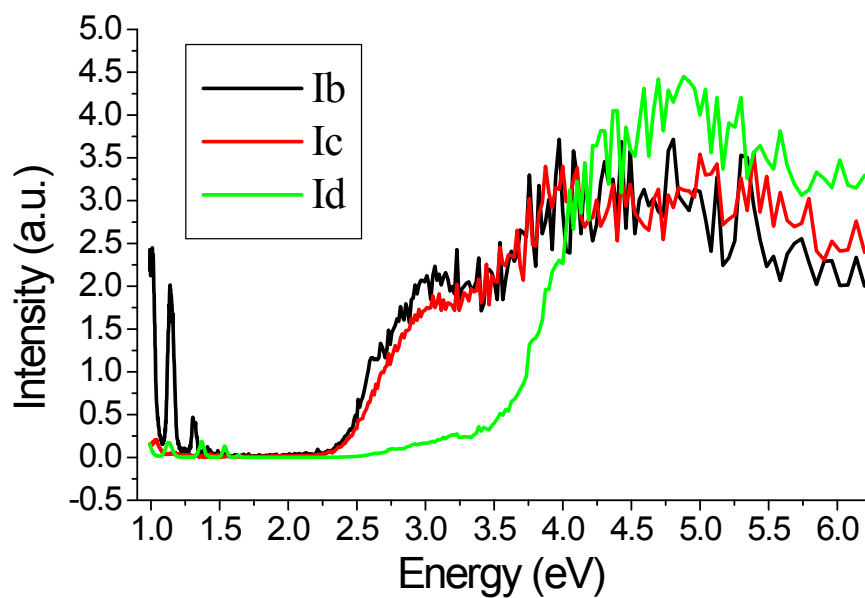


Fig. S2 The solid-state UV-vis absorption spectra of **Ib-d**.

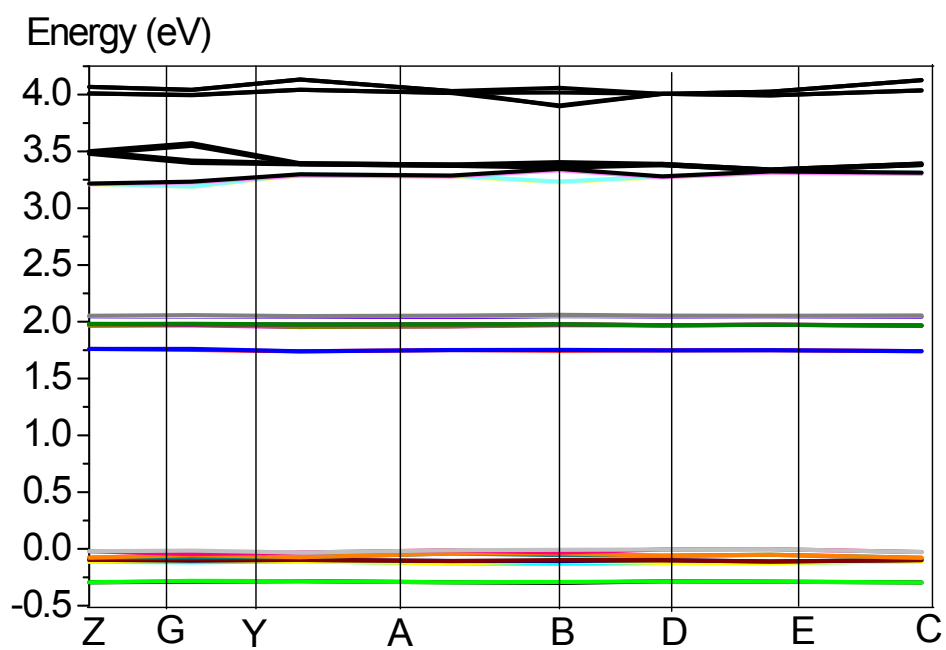
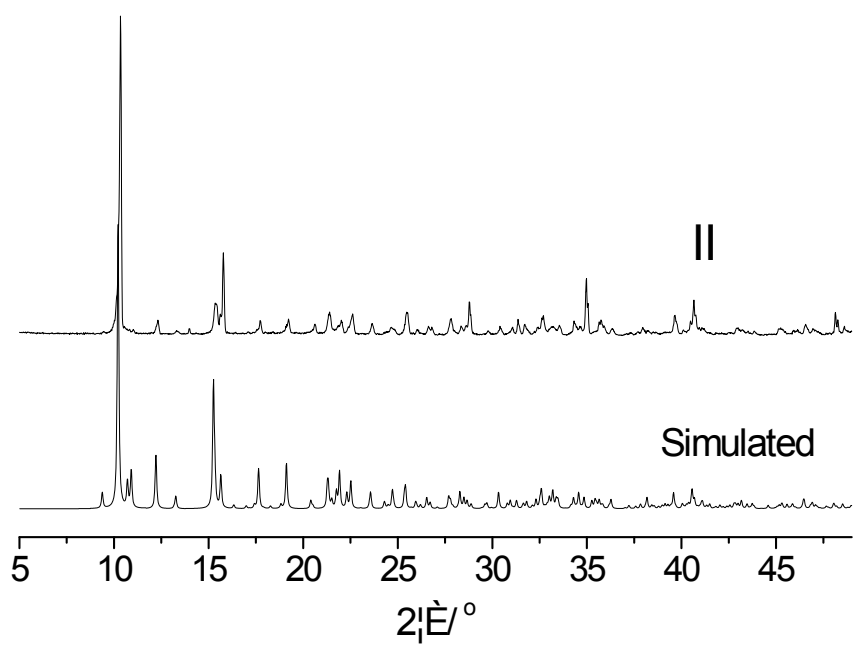


Fig. S3 Calculated band structure of **III**, the Fermi level is set at 0.0 eV.



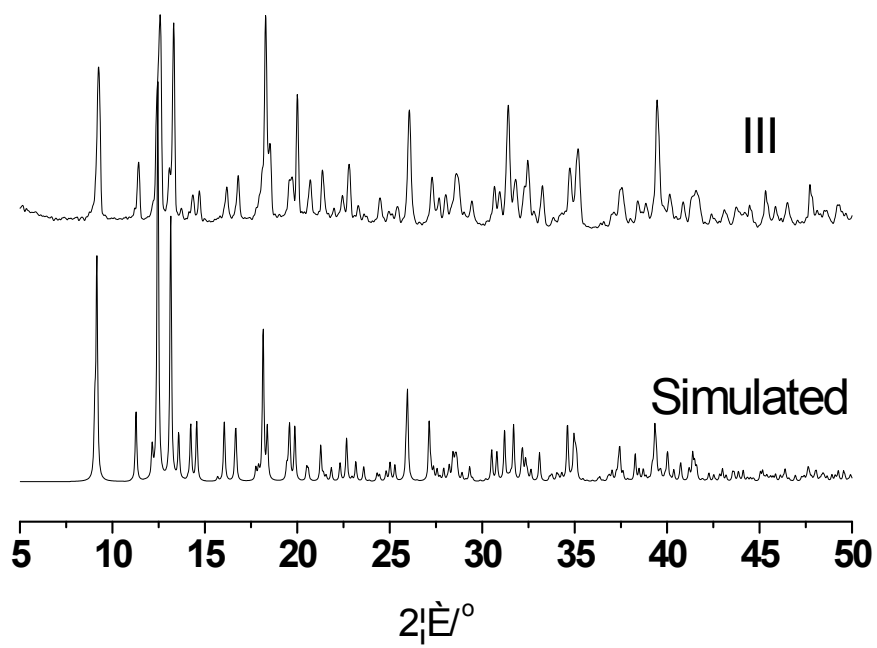


Fig. S4 Simulated and experimental powder XRD patterns of **II** and **III**.