

## Supporting Information

# L-Cysteine-Assisted Self-Assembly of Complex PbS Structures

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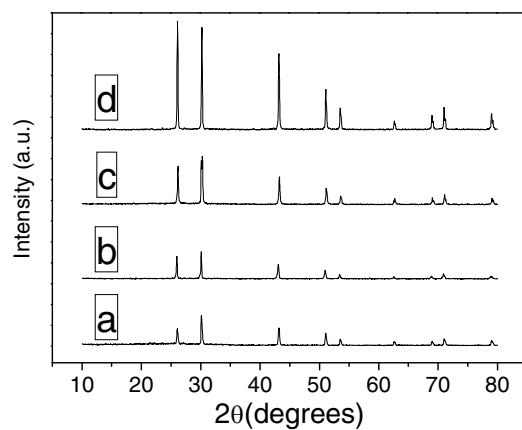


Figure S1. XRD patterns of (a): *S-3*, (b): *S-4*, (c): *S-5* and (d): *S-7*.

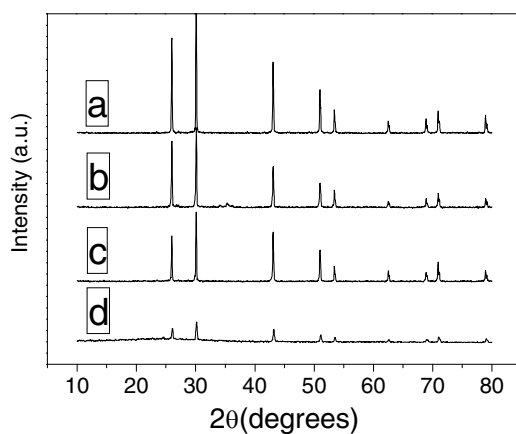


Figure S2. XRD patterns of (a): *S-8*, (b): *S-10*, (c): *S-11* and (d): *S-12*.

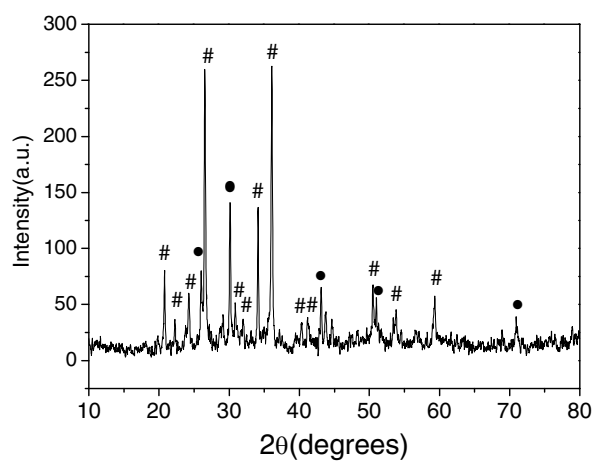


Figure S3. XRD pattern of *S-9*. •: PbS; #:  $\text{Pb}_{10}(\text{CO}_3)_6(\text{OH})_6\text{O}$ .