

Electronic Supplementary Information (ESI)

Structure-Property Relations in Hexagonal and Monoclinic $\text{BiPO}_4\text{:Eu}^{3+}$

Nanoparticles Synthesized by Polyol-mediated Method

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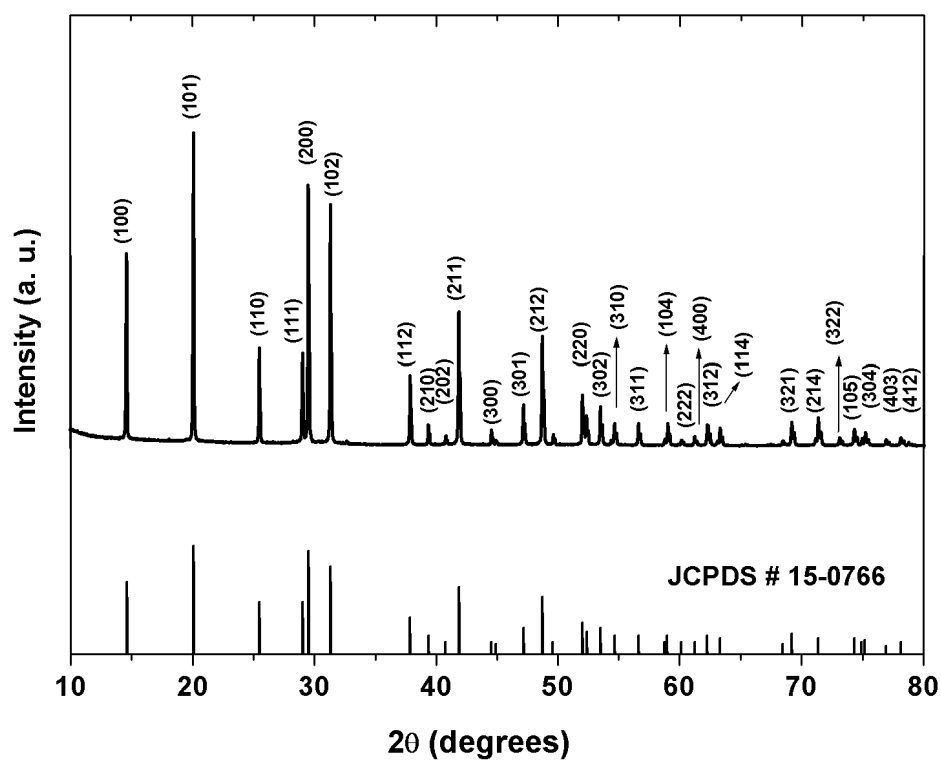


Figure S1. Powder XRD pattern of hexagonal $\text{BiPO}_4\cdot x\text{H}_2\text{O}$ obtained by precipitation method.

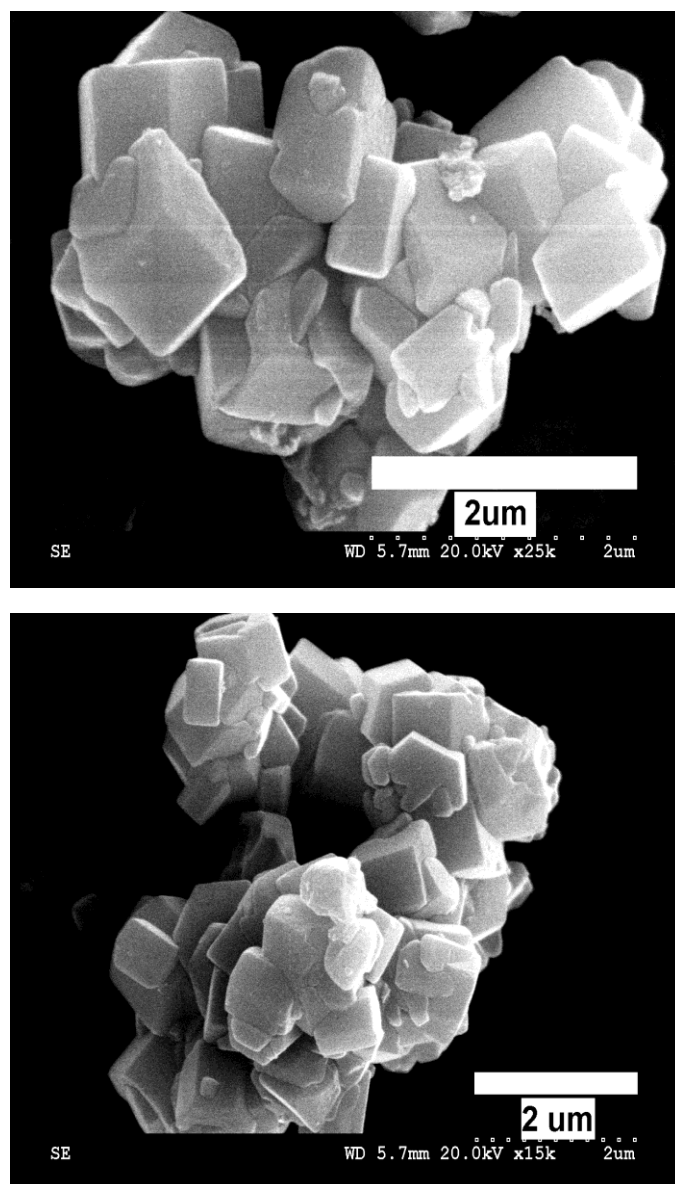


Figure S2. SEM images of hexagonal $\text{BiPO}_4 \cdot x\text{H}_2\text{O}$ obtained by precipitation method.

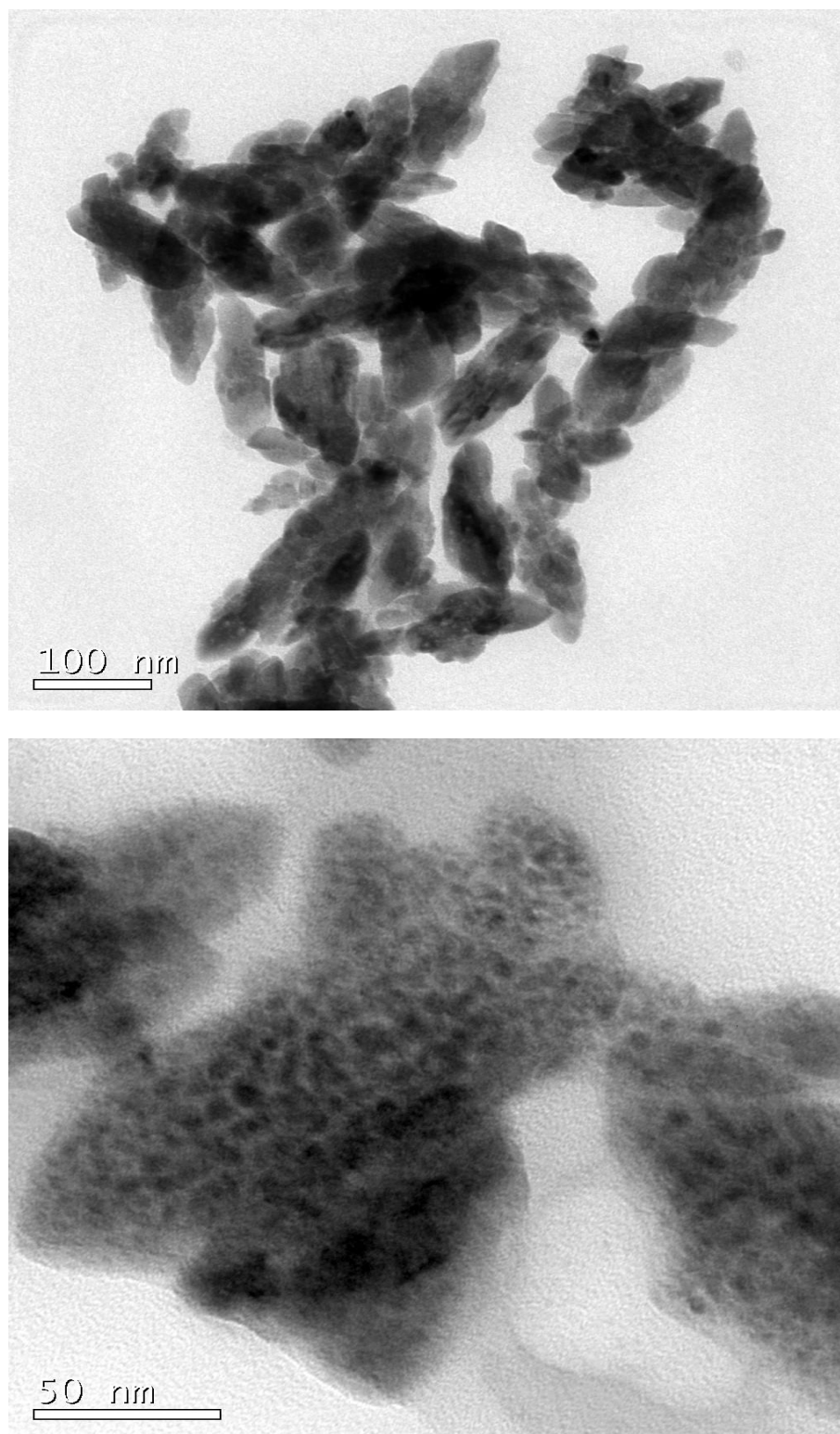


Figure S3. TEM images of hexagonal $\text{Bi}_{0.95}\text{Eu}_{0.05}\text{PO}_4 \cdot x\text{H}_2\text{O}$.

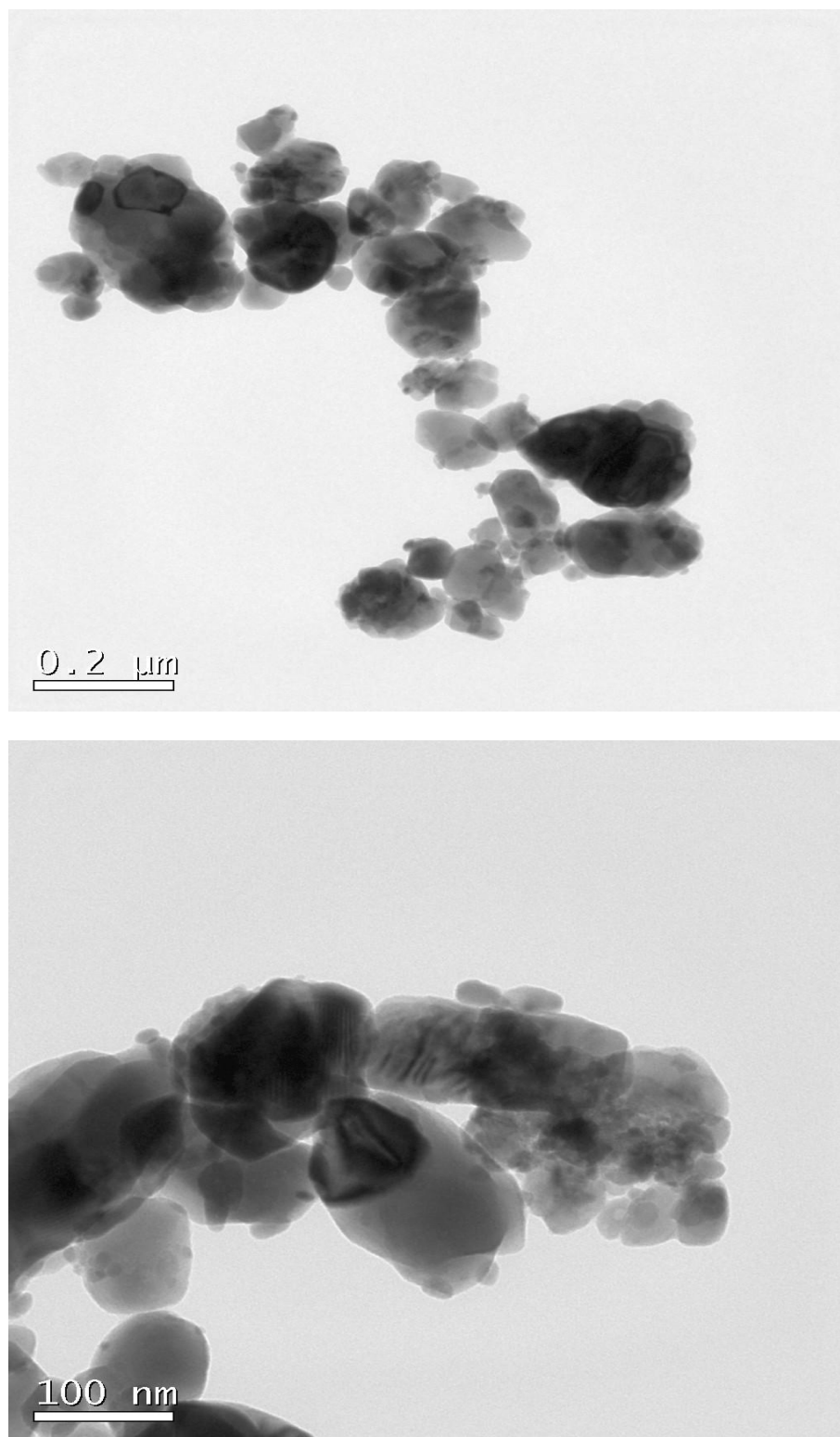


Figure S4. TEM images of monoclinic $\text{Bi}_{0.95}\text{Eu}_{0.05}\text{PO}_4$

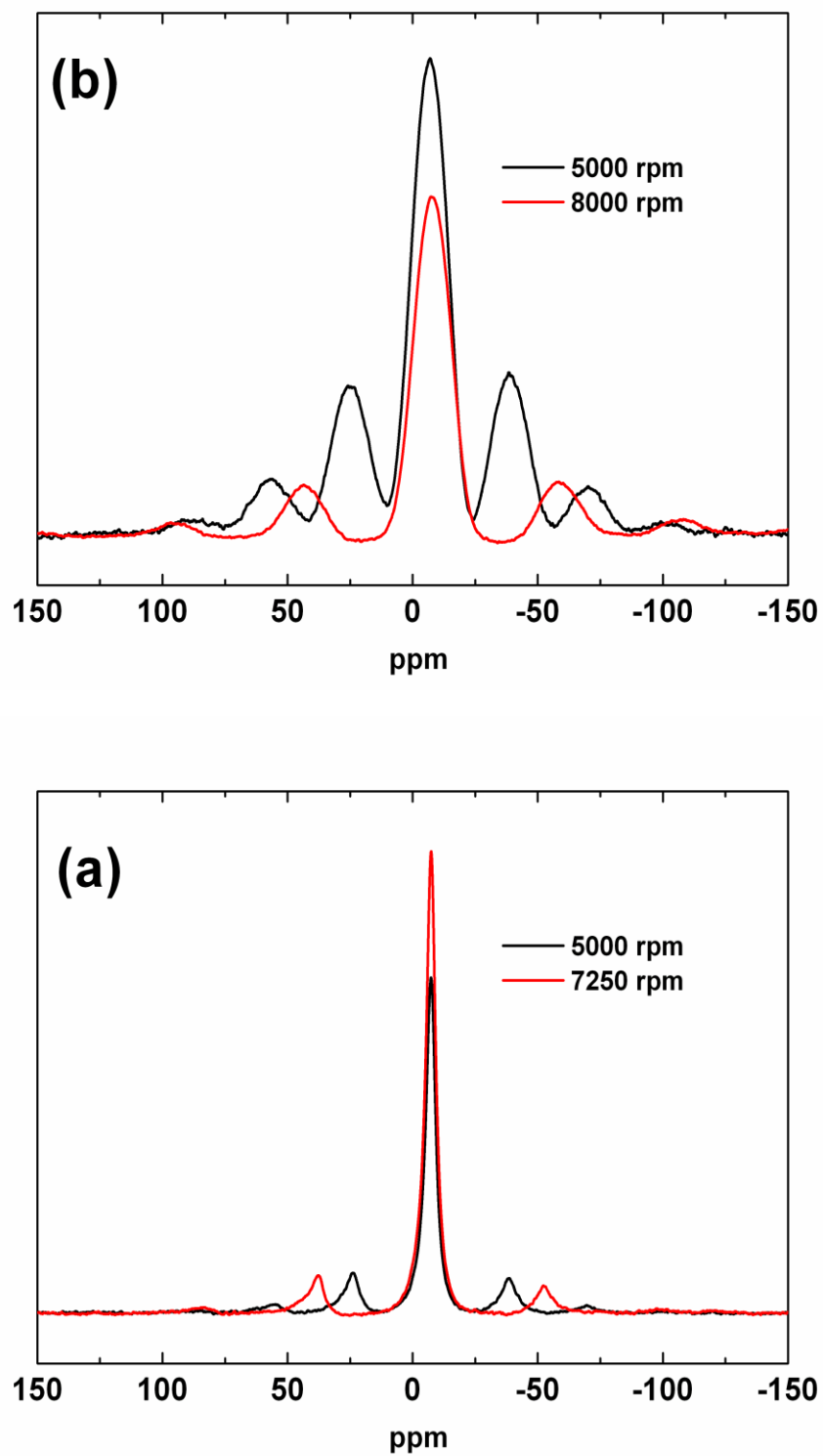


Figure. S5. The shift in the position of spinning side bands in the ^{31}P MAS-NMR spectra of (a) hexagonal $\text{Bi}_{0.95}\text{Eu}_{0.05}\text{PO}_4 \cdot x\text{H}_2\text{O}$ and (b) monoclinic $\text{Bi}_{0.95}\text{Eu}_{0.05}\text{PO}_4$ under different spinning rates.

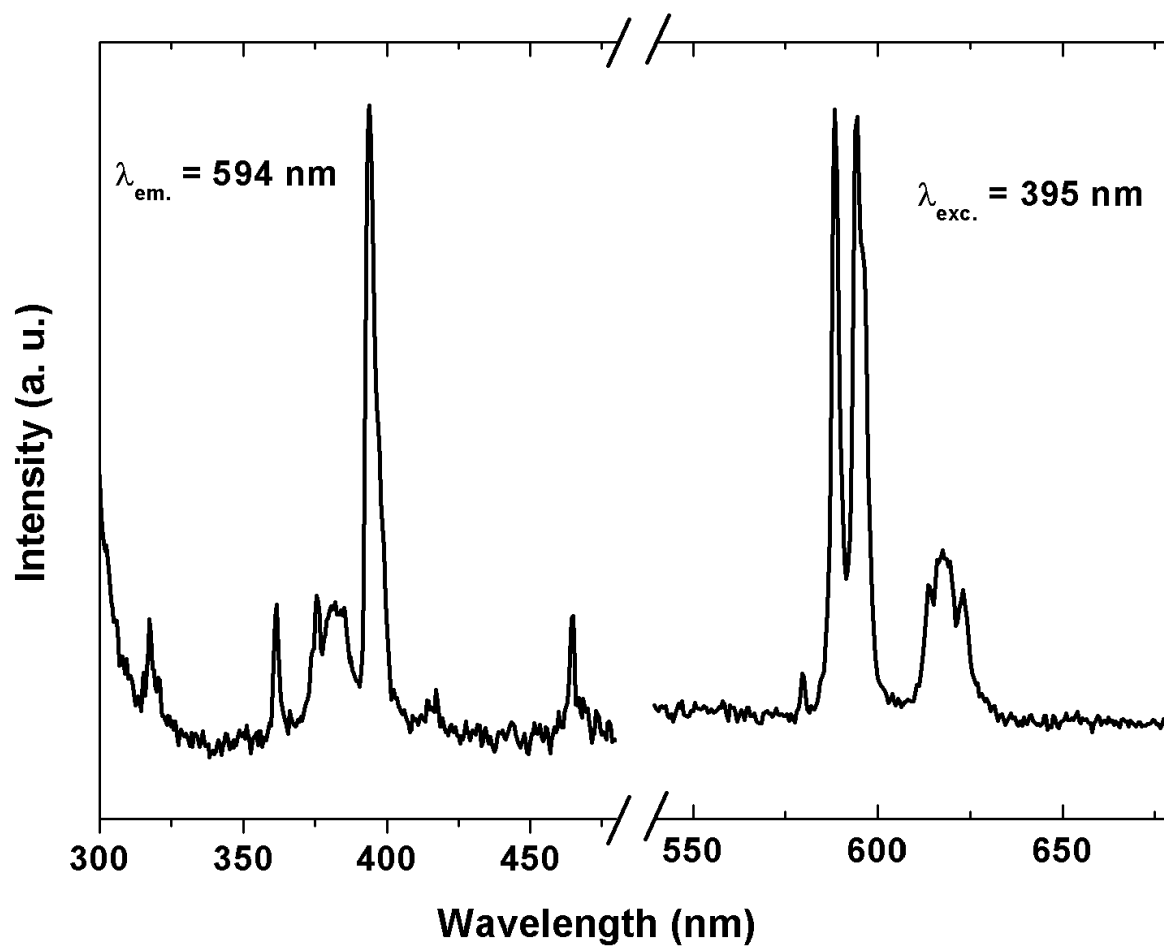


Figure S6. PL excitation and emission spectra of monoclinic $\text{Bi}_{0.95}\text{Eu}_{0.05}\text{PO}_4$ obtained by conventional solid state reaction method.