

Electronic Supplementary Information (ESI) for:

**Macroscopic polarity control with cation size and coordination environment in a series of tin iodates**

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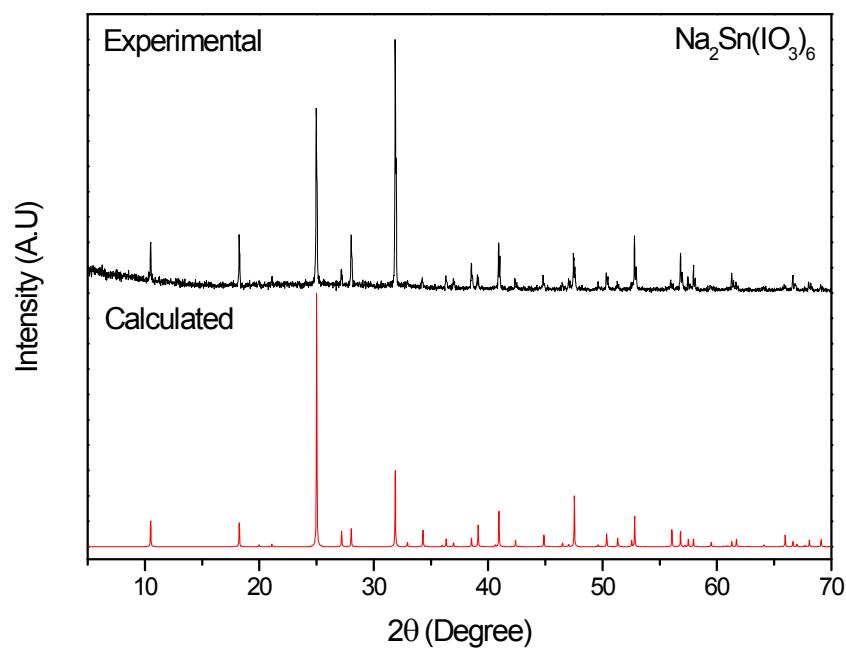
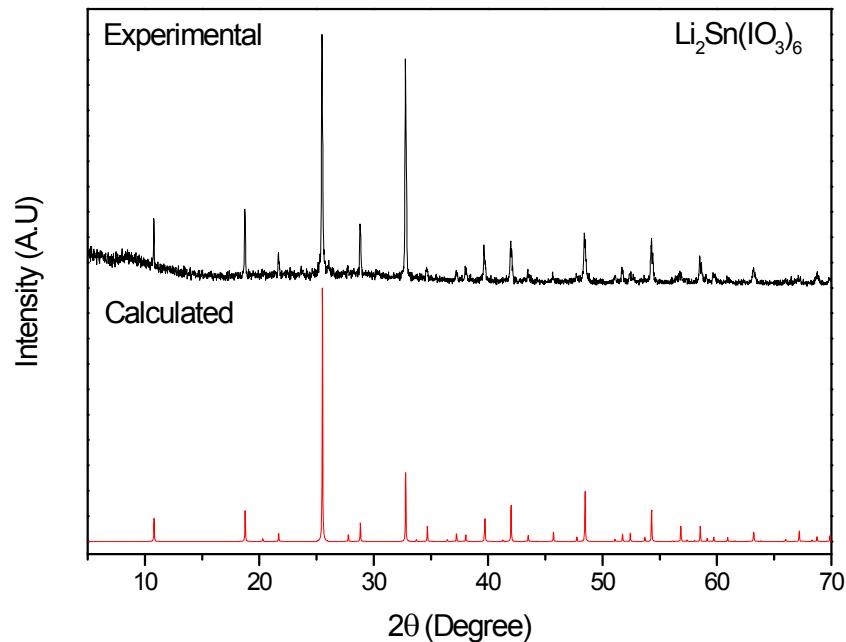
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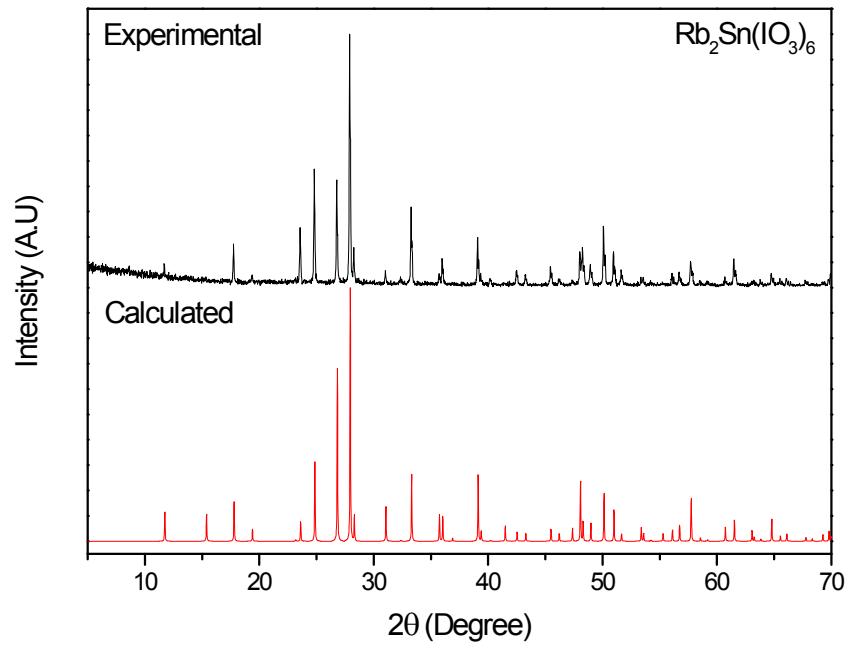
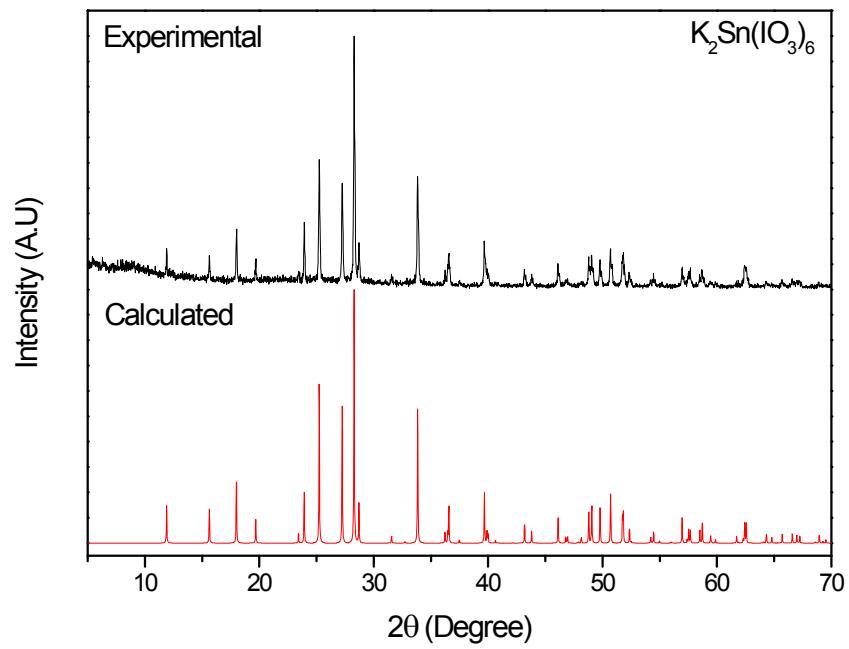
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Figure S1. Experimental and calculated powder X-ray diffraction patterns for  $A_2Sn(IO_3)_6$  ( $A = Li, Na, K, Rb, Cs$ )





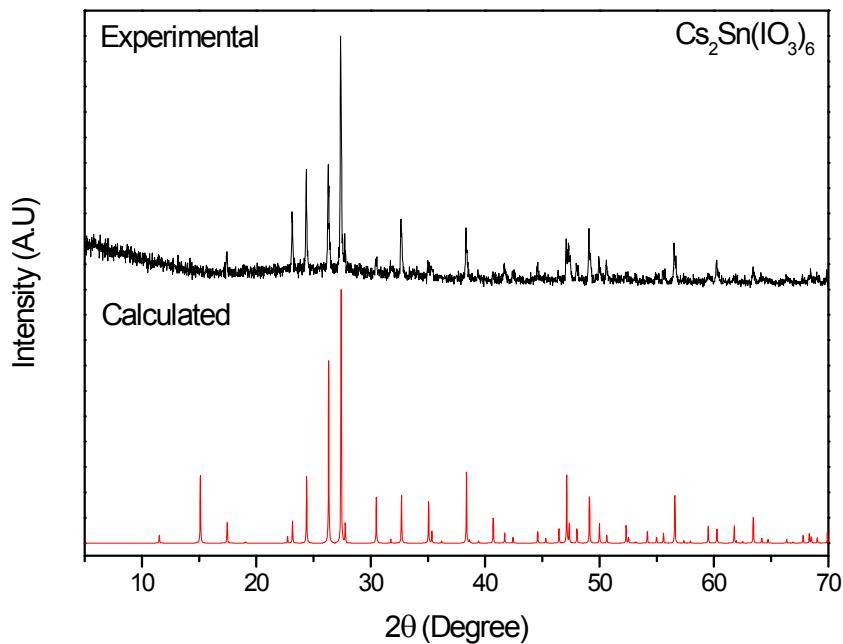


Figure S2. TGA diagrams for  $\text{A}_2\text{Sn}(\text{IO}_3)_6$  ( $\text{A} = \text{Li}, \text{Na}, \text{K}, \text{Rb}, \text{Cs}$ )

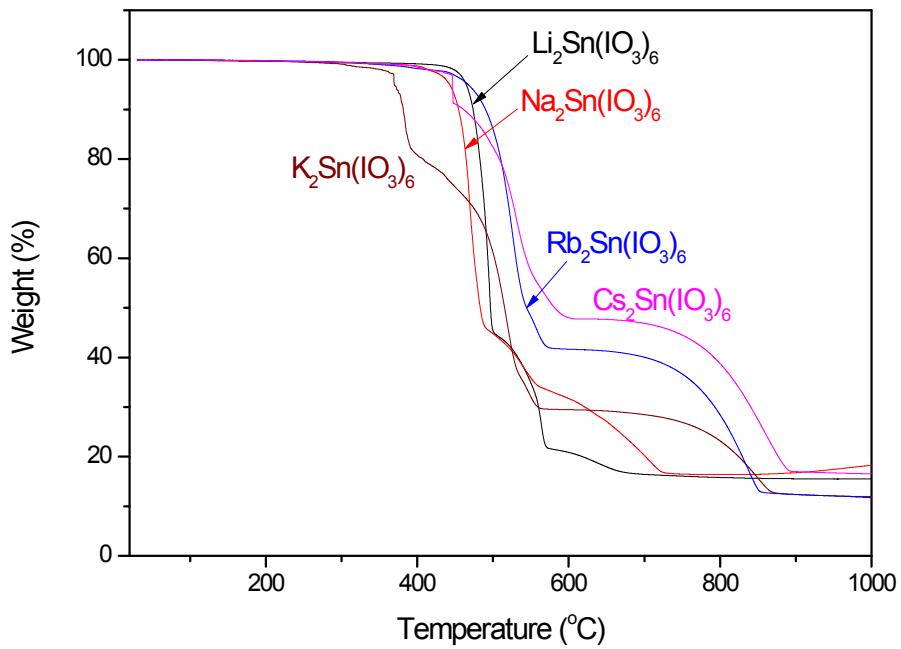


Figure S3. IR spectra for  $A_2Sn(IO_3)_6$  ( $A = Li, Na, K, Rb, Cs$ )

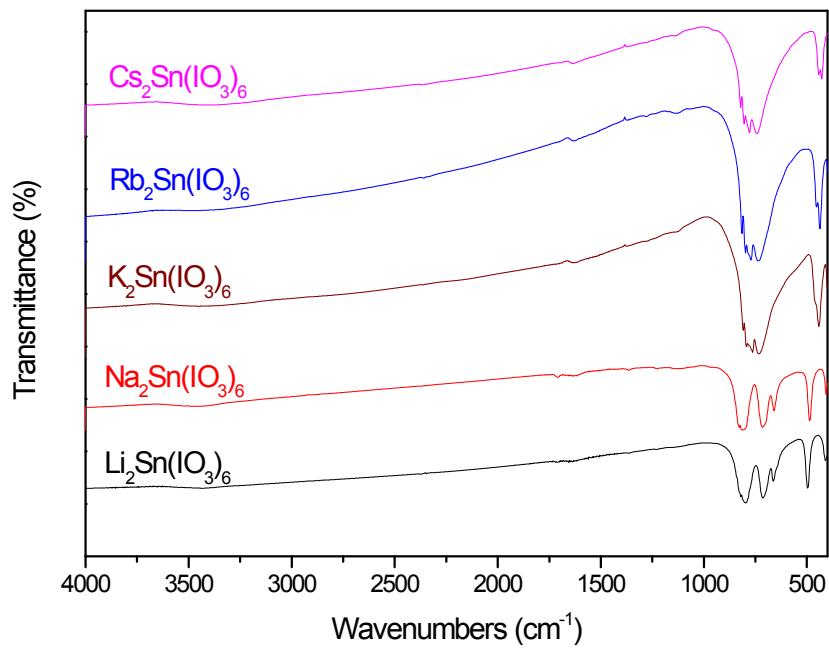


Figure S4. UV-vis diffuse reflectance spectra for  $A_2Sn(IO_3)_6$  ( $A = Li, Na, K, Rb, Cs$ )

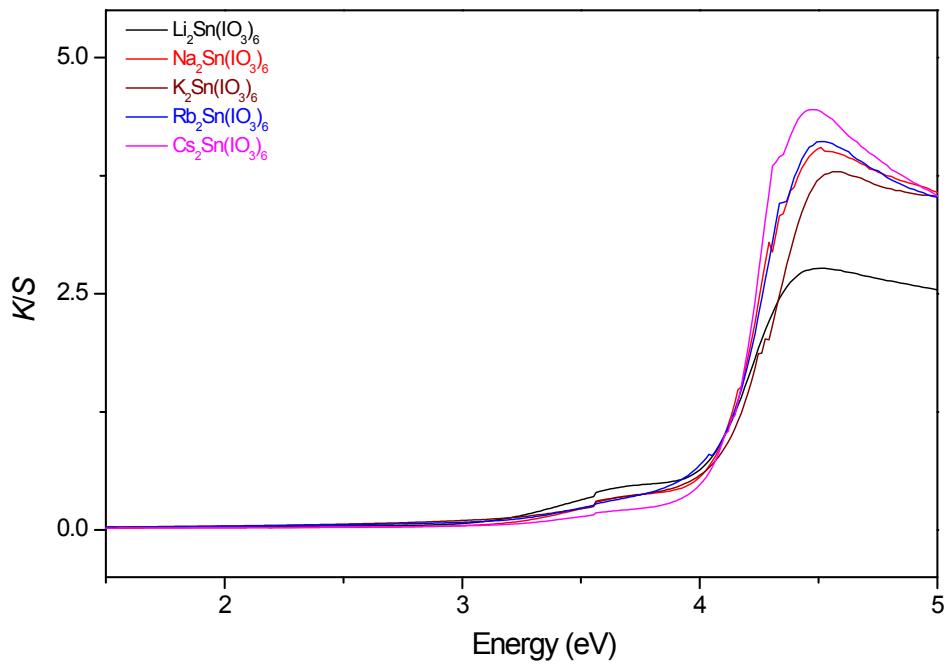


Figure S5. Piezoelectric measurement data for  $\text{Na}_2\text{Sn}(\text{IO}_3)_6$

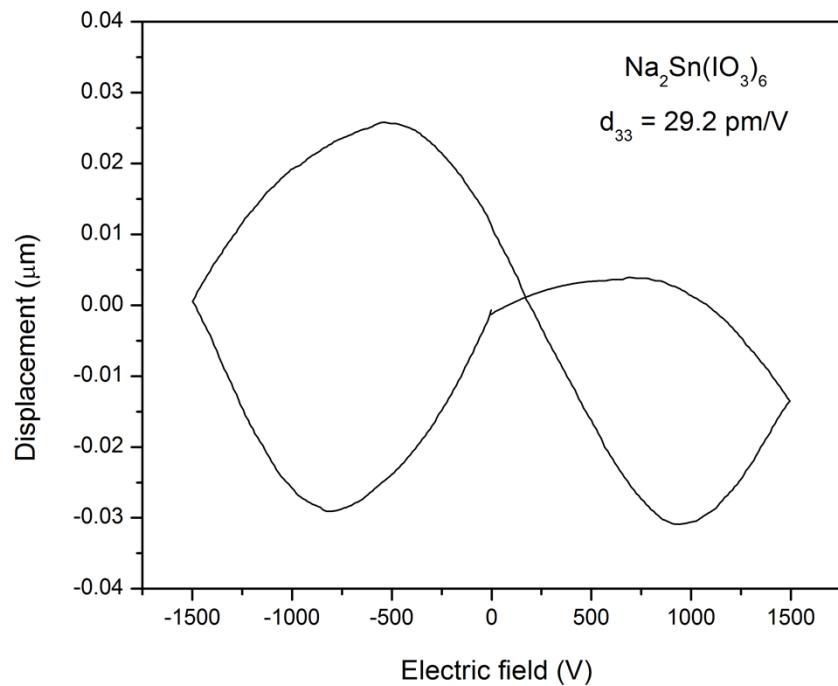


Figure S6. Polarization measurement data for  $\text{Na}_2\text{Sn}(\text{IO}_3)_6$

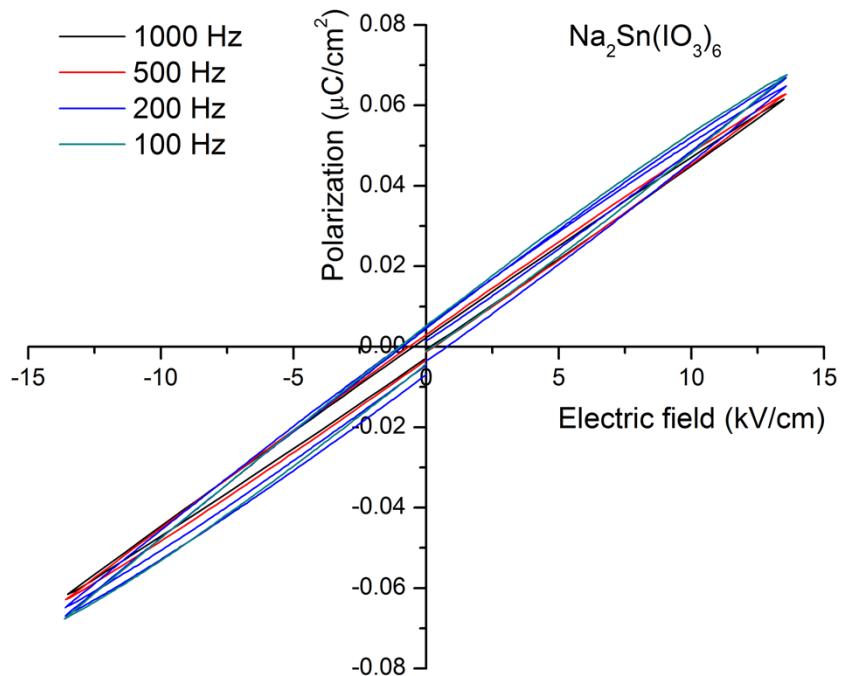


Figure S7. Pyroelectric measurement data for  $\text{Na}_2\text{Sn}(\text{IO}_3)_6$

