

## Synthesis of Metal Iodates from an Energetic Salt

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### Supplementary Information

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### S1. XRD spectra of product species from annealed AIH + CuO mixture at indicated temperatures

Figure S1 (a) and (b) represent the PXRD scans of product species from annealed AIH + CuO at 360°C and 800°C respectively.

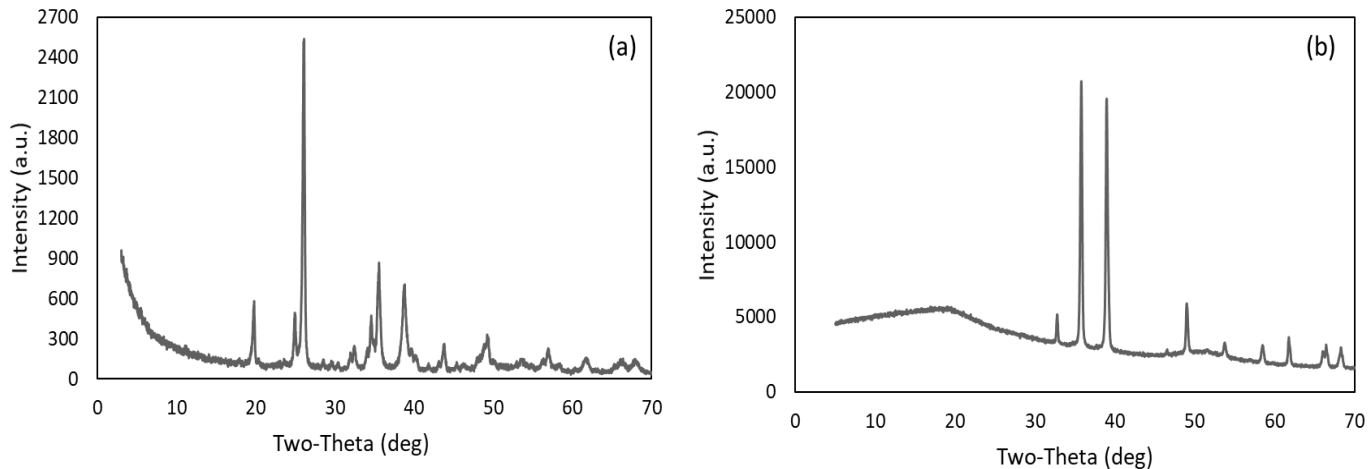


Figure S1. PXRD pattern of identified product species from AIH + CuO mixture annealed at (a) 360°C and (b) 800°C

### S2. XRD spectra of product species from annealed AIH + Fe<sub>2</sub>O<sub>3</sub> mixture at indicated temperatures

Figure S2 (a) and (b) represent the PXRD scans of product species from annealed AIH + Fe<sub>2</sub>O<sub>3</sub> at 360°C and 800°C respectively.

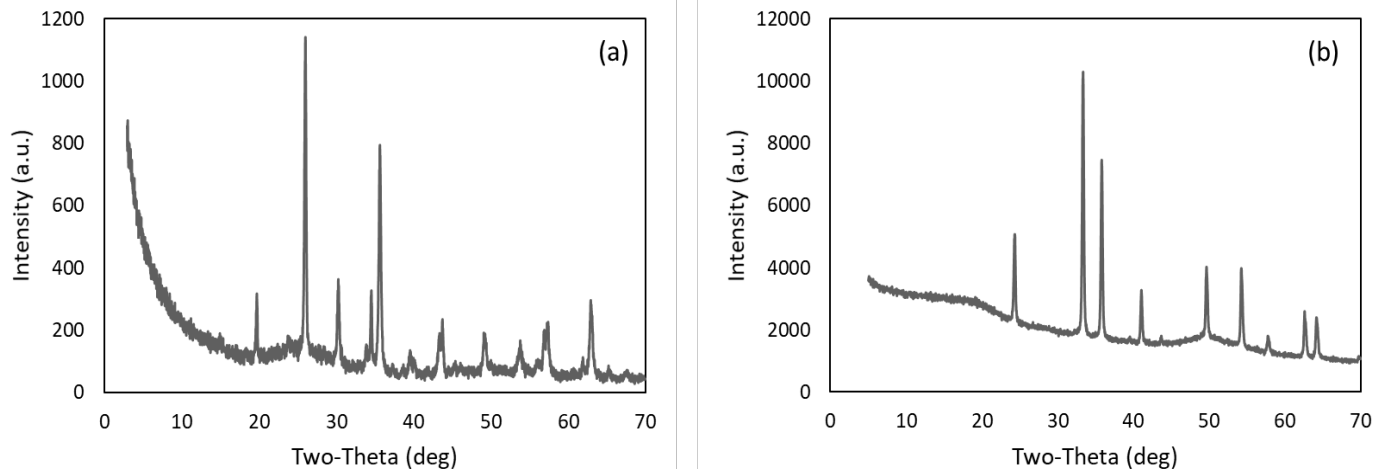
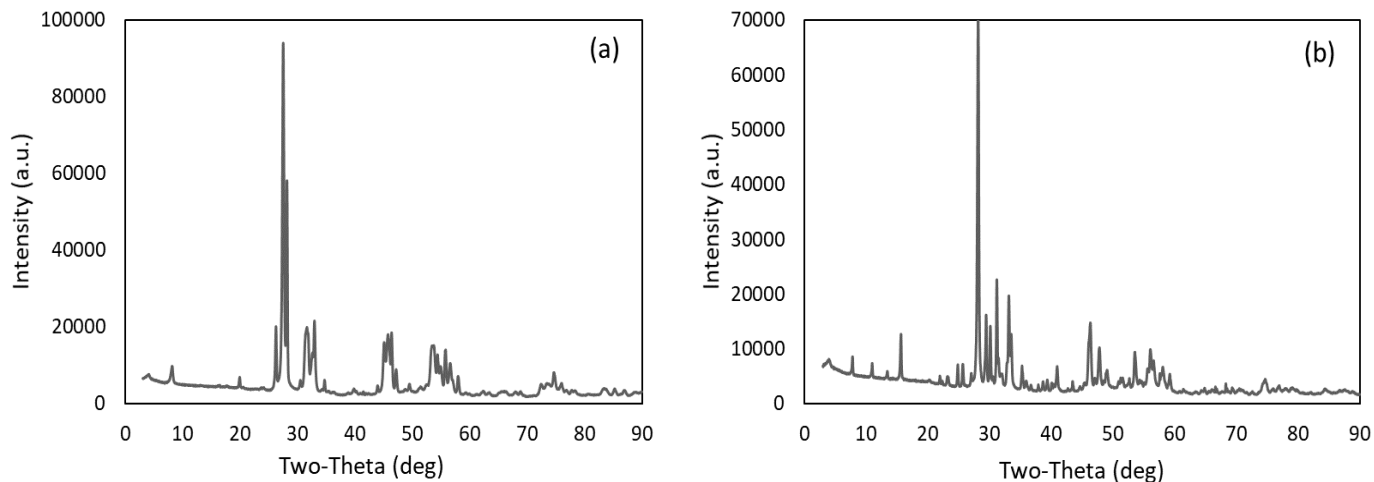


Figure S2. PXRD pattern of identified product species from AIH + Fe<sub>2</sub>O<sub>3</sub> mixture annealed at (a) 360°C and (b) 800°C

**S3. XRD spectra of product species from annealed AIH + Bi<sub>2</sub>O<sub>3</sub> mixture at indicated temperatures**

**Figure S3 (a) and (b)** represent the PXRD scans of product species from annealed AIH + Bi<sub>2</sub>O<sub>3</sub> at 420°C and 800°C respectively.



**Figure S3.** PXRD pattern of identified product species from AIH + Bi<sub>2</sub>O<sub>3</sub> mixture annealed at (a) 420°C and (b) 800°C