



STRUCTURAL
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Supporting information for article:

The mixed-valent 10-manganese(III/IV)-containing 36-tungsto-4-arsenate(V), $[\text{Mn}^{\text{III}}_6\text{Mn}^{\text{IV}}_4\text{O}_4(\text{OH})_{12}(\text{H}_2\text{O})_{12}(\text{A-}\beta\text{-AsW}_9\text{O}_{34})_4]^{22-}$

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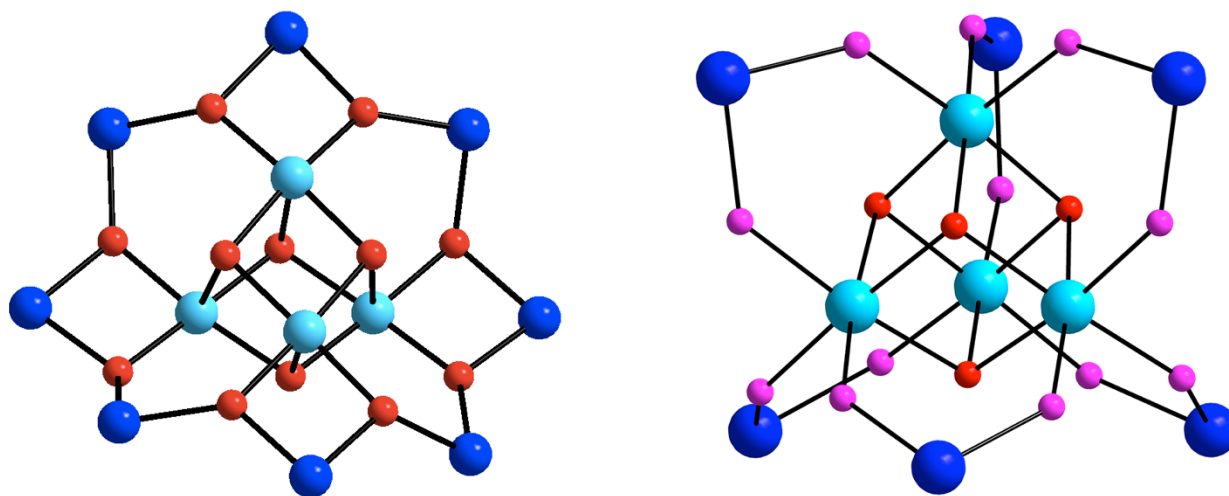


Figure S1. Ball-and-stick representation of the $\{\text{Mn}^{\text{III}}_8\text{Mn}^{\text{IV}}_4\text{O}_{12}\}$ core in the Mn_{12} precursor (left) and the $\{\text{Mn}^{\text{III}}_6\text{Mn}^{\text{IV}}_4\text{O}_4(\text{OH})_{12}\}$ core in polyanion **1** (right).

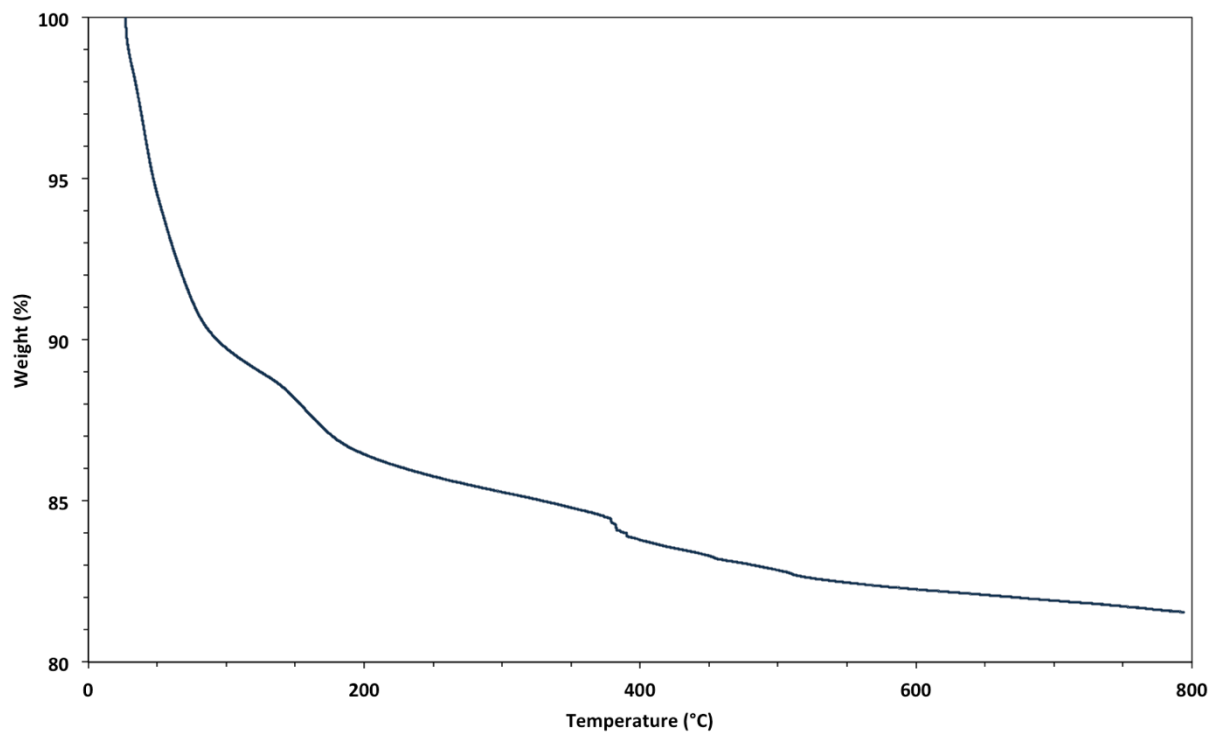


Figure S2. Thermogram of **KNa-1** from room temperature to 800 °C.

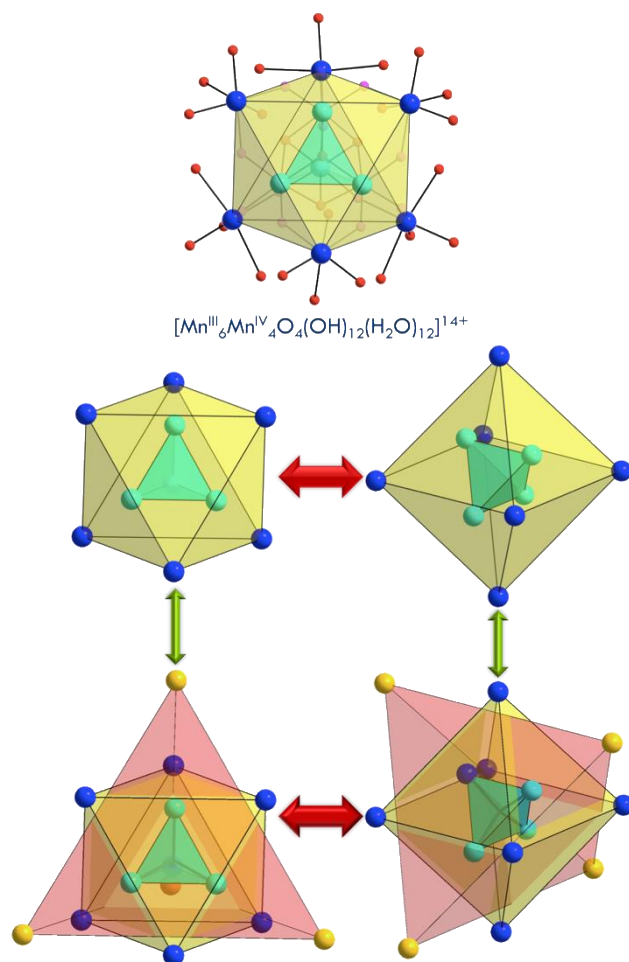


Figure S3. Top: Ball-and-stick representation of the cationic 10-manganese-oxo core $[\text{Mn}^{\text{III}}_6\text{Mn}^{\text{IV}}_4\text{O}_4(\text{OH})_{12}(\text{H}_2\text{O})_{12}]^{14+}$; color code, balls: Mn^{III} (blue), Mn^{IV} (light-blue), O (red), OH (pink), As (yellow). Bottom: different views of the central tetra- Mn^{IV} tetrahedron in **1** connected via hydroxo bridges to six external manganese(III) ions forming an octahedron, which is capped by four trilacunary $[\text{A}-\beta\text{-AsW}_9\text{O}_{34}]^{9-}$ Keggin units, with their As^{V} hetero atoms forming a tetrahedron, overall leading to a perfect "Golden Ratio" of three encapsulated 'Platonic Solids', a tetrahedron within an octahedron within a tetrahedron.