

Supporting Information

Two Wheel-Like Polytungstates Obtained by Incorporation of Two {Cu₄} Clusters and Two Molybdenum Centers in the {W₄₈} Wheel

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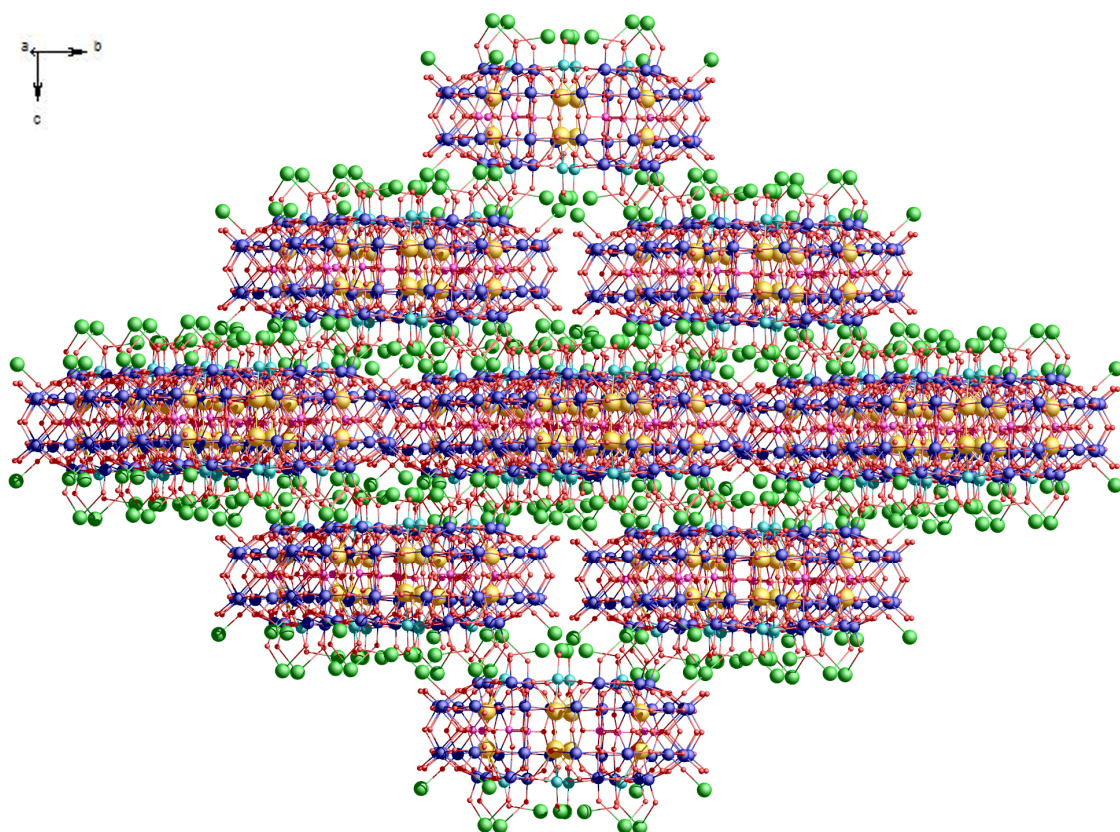


Fig. S1. The 3D supramolecular framework in **2**, Color codes: K, Na, W, Mo, P and O, yellow, bright green, blue, turquoise, pink and red spheres, respectively.

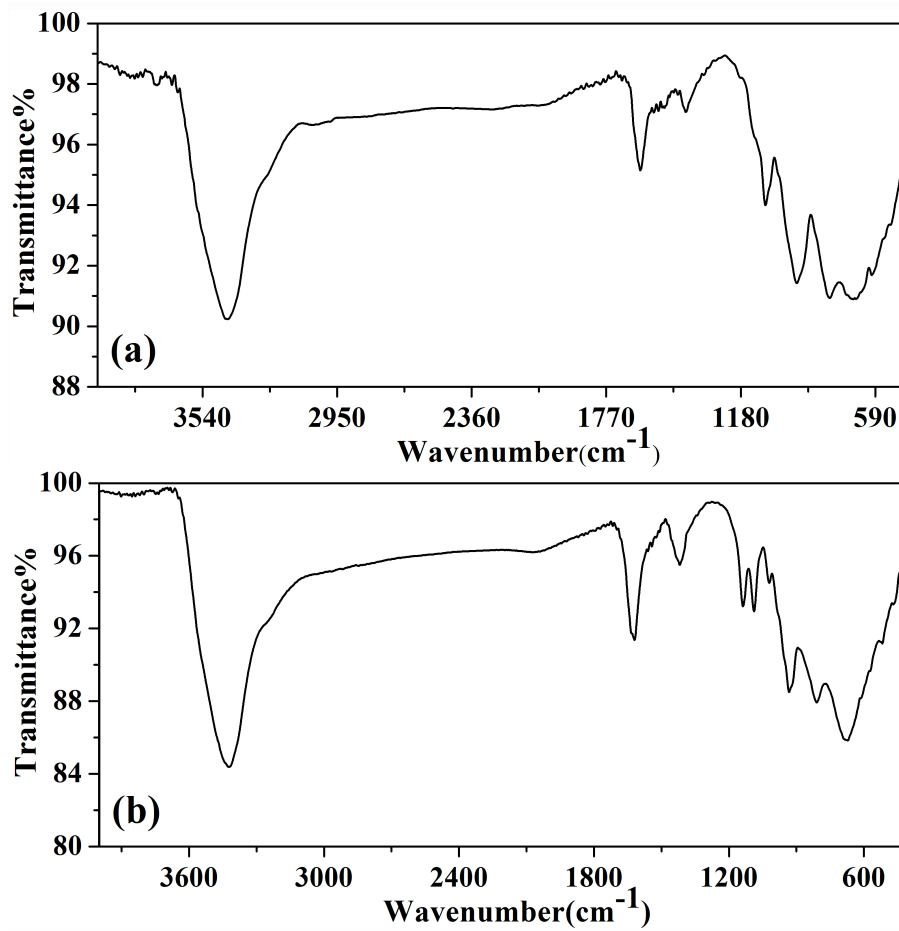


Fig. S2. (a) FT-IR spectrum of **1**; (b) FT-IR spectrum of **2**.

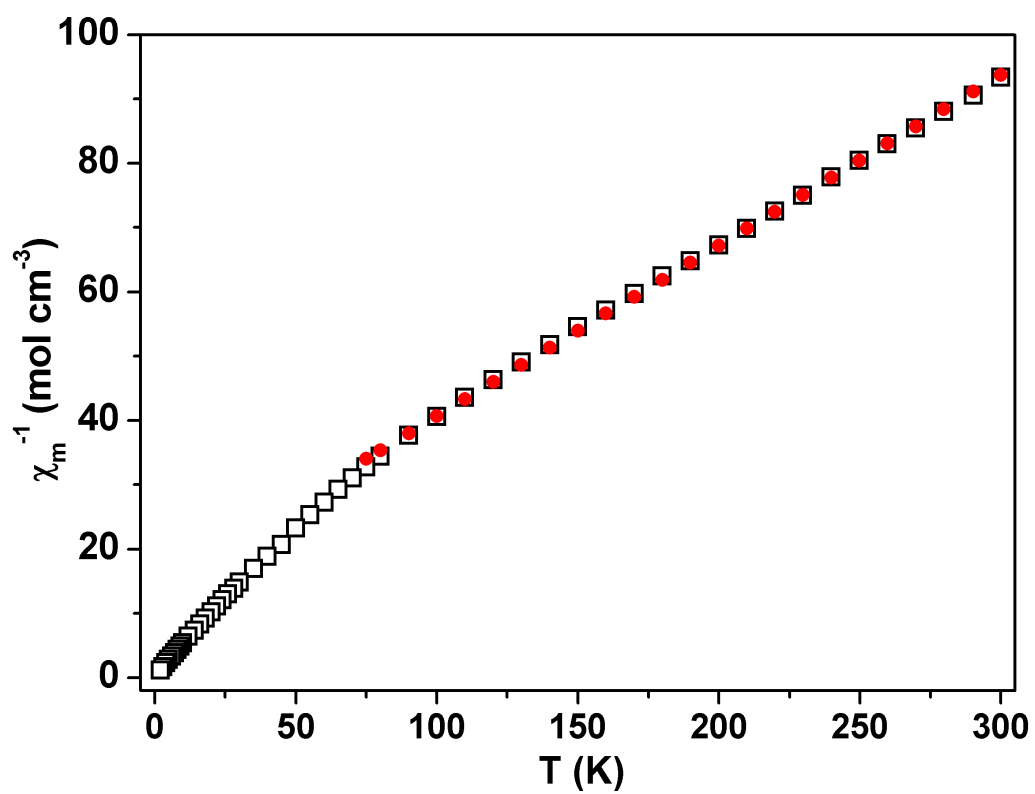


Fig. S3. The red line is the best fit with the Curie-Weiss law.

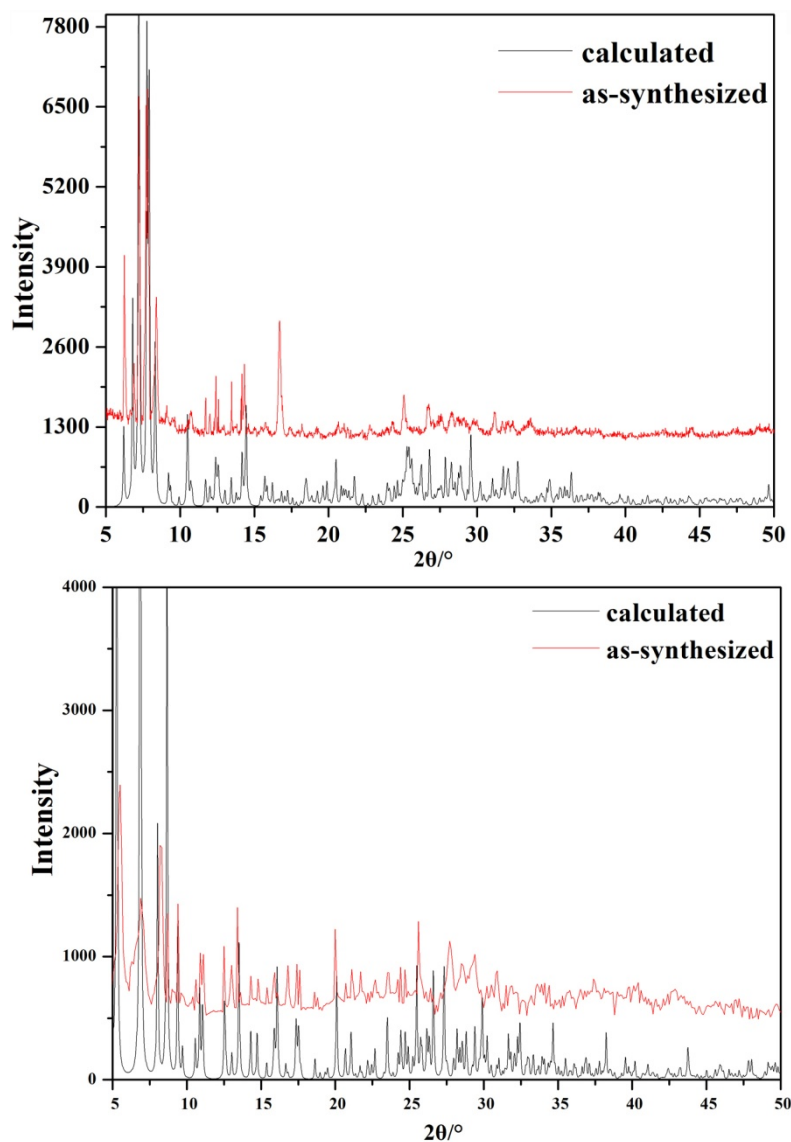


Fig. S4. XPRD patterns of **1** and **2**. Top: **1**, Bottom: **2**. The X-ray powder diffraction pattern of the as-synthesized is almost identical to the calculated pattern from single-crystal diffraction data, indicating the purity of the product.

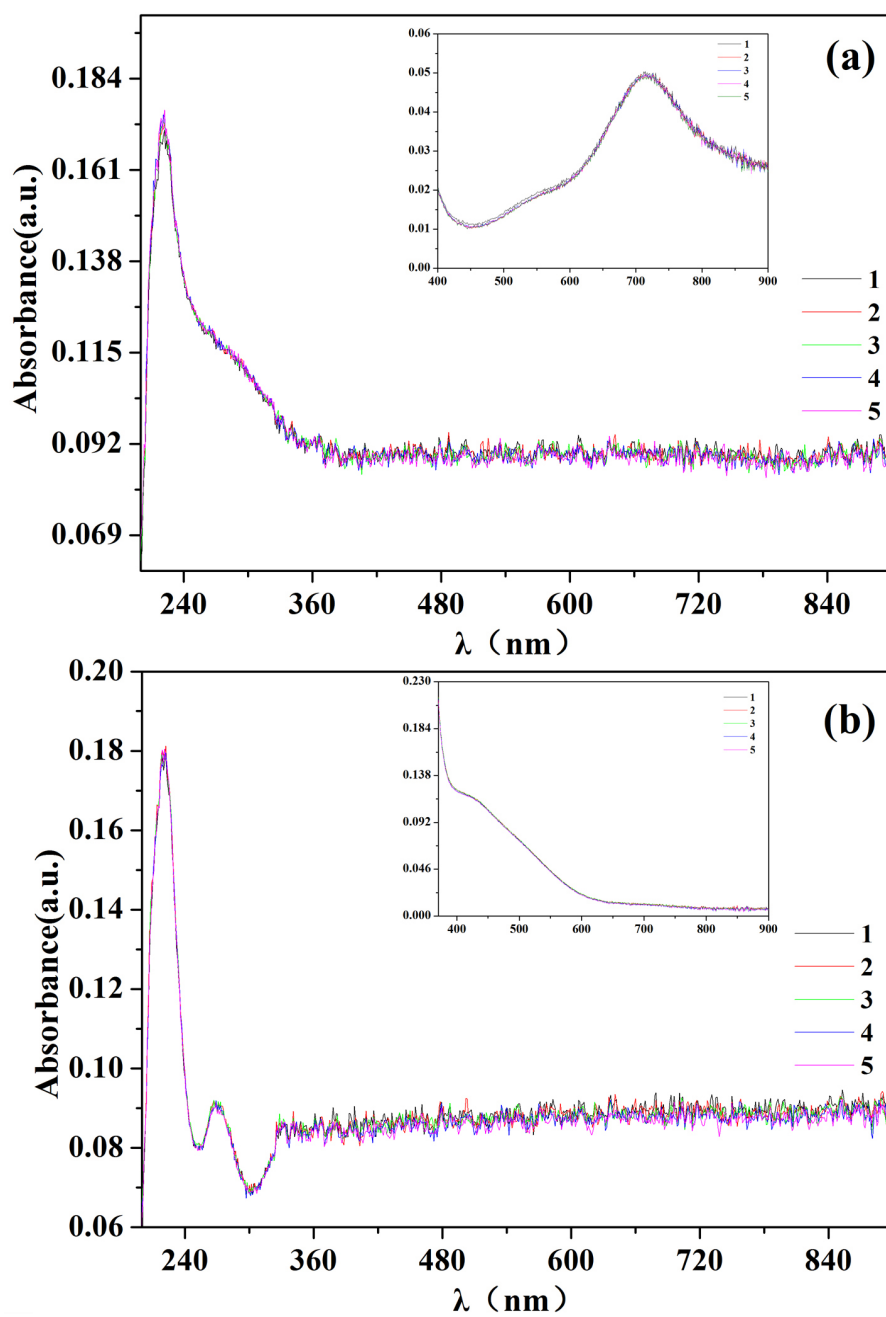


Fig. S5. (a) UV-vis spectrum of **1**; (b) UV-vis spectrum of **2**.

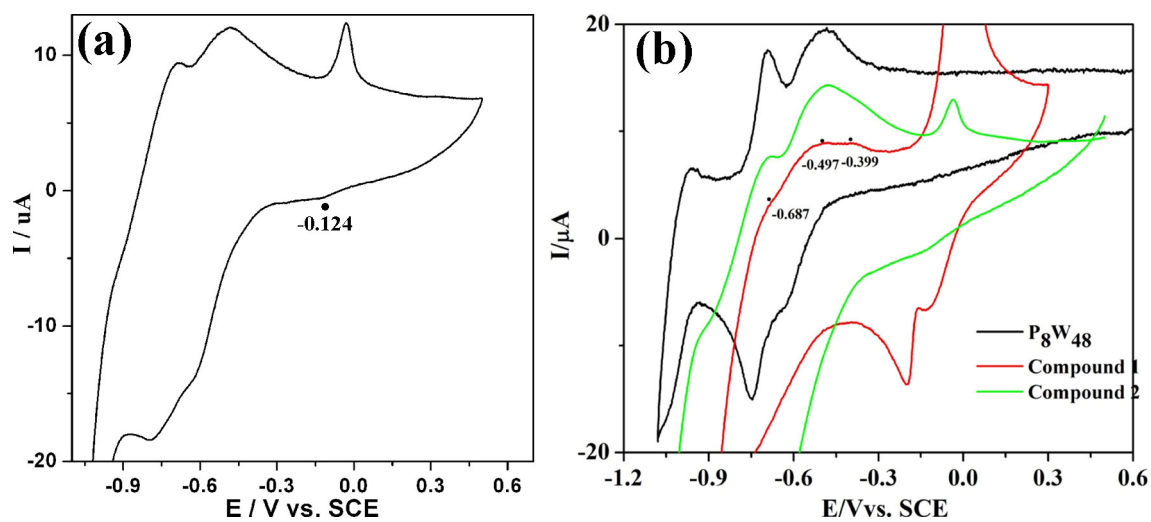


Fig. S6. (a) CV of *t* 2 with the same concentration of 2.5×10^{-4} M in a pH 4 buffer solution at the scan rate of 10 mV/s; (b) CV of the P_8W_{48} , **1** and **2** in a pH 4 buffer solution at the scan rate of 100mV/s.

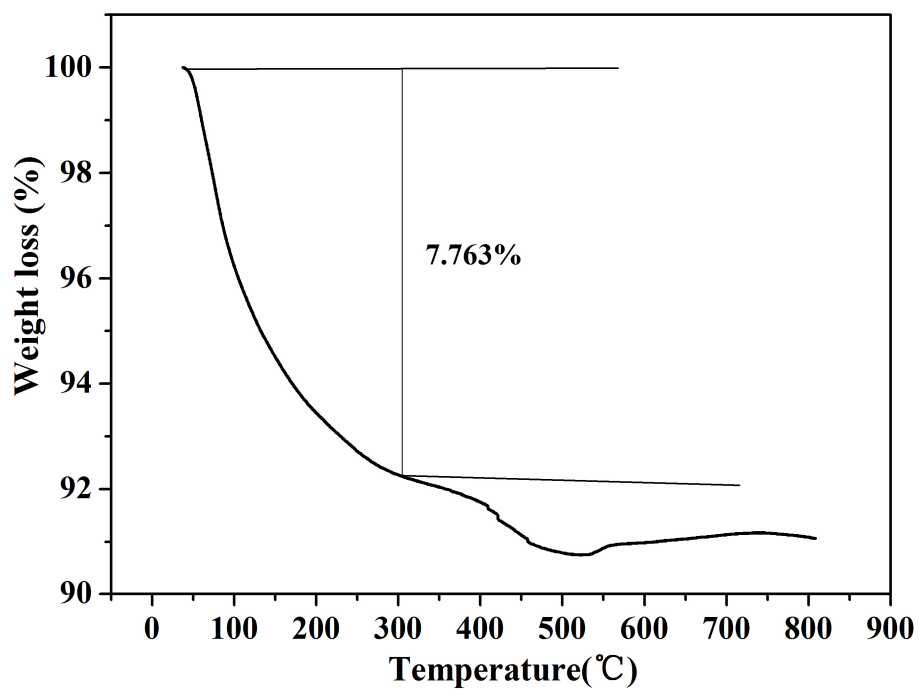


Fig. S7. TG curve of **2**. The TG curve of **2** shows a total weight loss of 7.763% in the temperature range of 20 - 300°, which corresponds to the loss of the lattice water molecules in **2**.

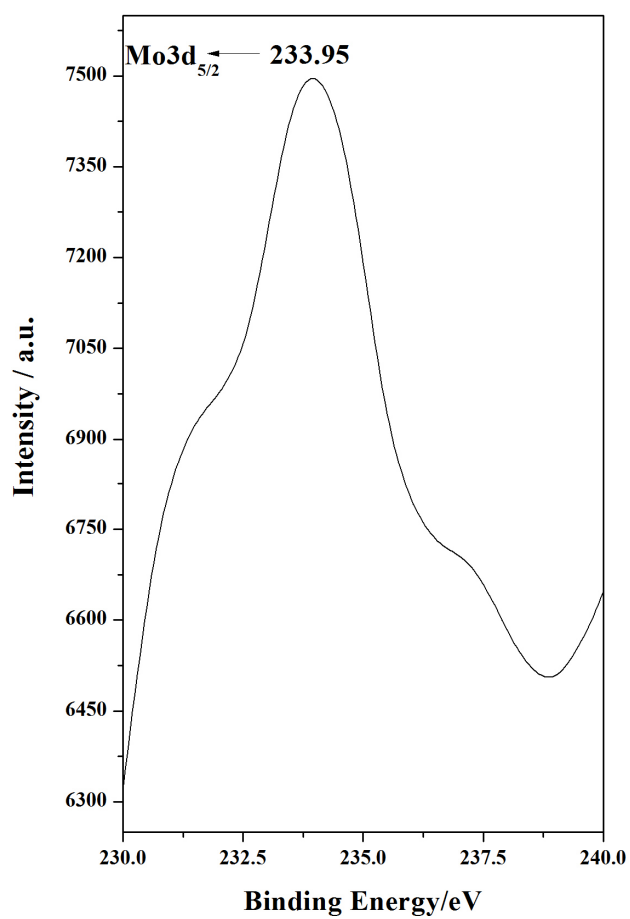


Fig. S8. (a) XPS spectrum of Mo(V) of compound **2**.

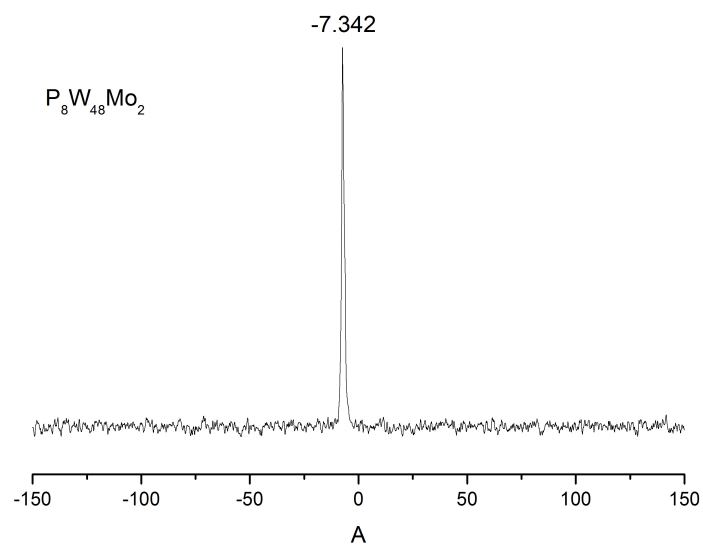


Fig. S9. ^{31}P MAS-NMR Spectrum of **2**.