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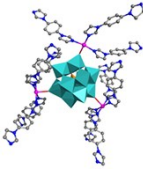
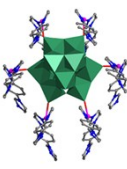
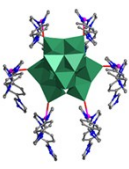
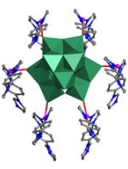
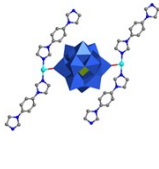
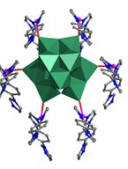
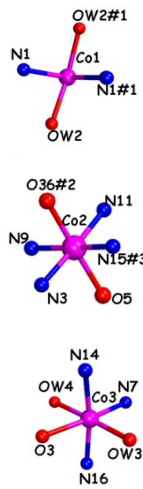
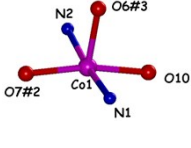
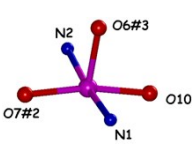
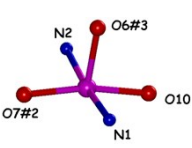
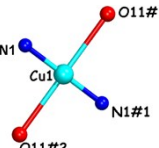
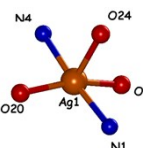
The Factors Affecting on the Assembly of Keggin-Metal-Bimb System: Charge/Polarity of Keggin Polyanions and Coordination modes of Metal Cations

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Table S1. A summarization of the coordination modes of POM clusters and the coordination geometries of metal cations in compounds **1-6**

Compound	1	2	3	4	5	6
Coordination mode						
POM cluster	 tritopic PW ₁₂	 hexadentate W ₁₂	 hexadentate W ₁₂	 hexadentate W ₁₂	 ditopic BW ₁₂	 hexadentate BW ₁₂
Metal cation	 Three crystallographic-ally independent Co ²⁺	 One crystallographic-ally independent Co ²⁺	 One crystallographically-ally independent Co ²⁺	 One crystallographically-ally independent Co ²⁺	 One crystallographic-ally independent Cu ⁺	 One crystallographic-ally independent Ag ⁺

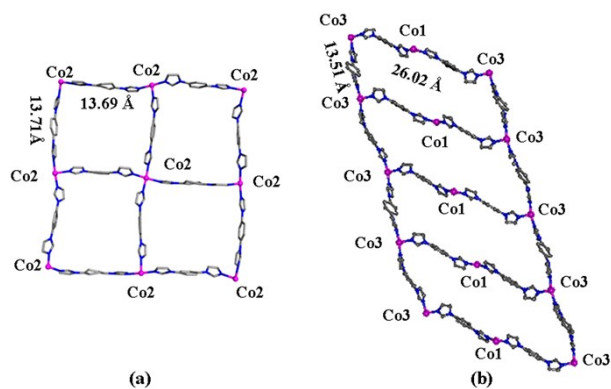


Fig. S1. (a) Ball-and-stick representation of the (4,4) sheet structure in **1**. (b) The ladder-like chain in **1**.

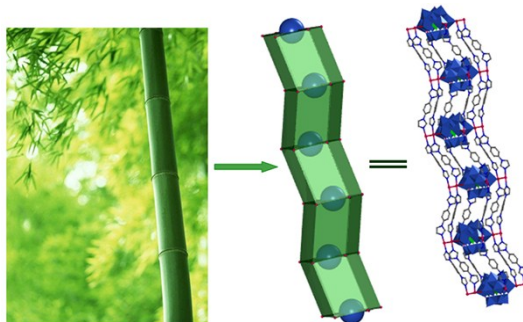


Fig. S2. View of bamboo-shaped cylinder in **2**.

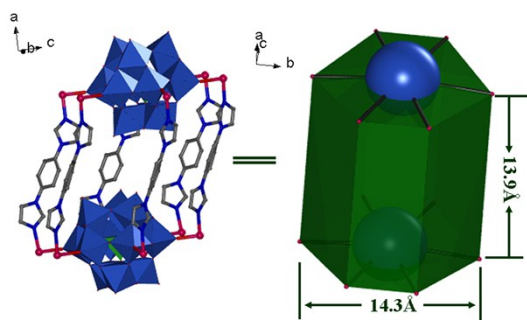


Fig. S3. View of per joint in the bamboo-shaped cylinder in **2**.

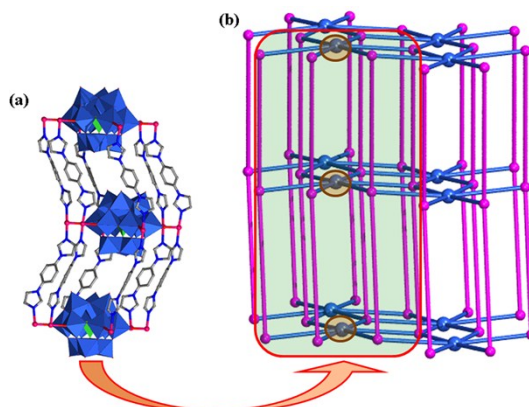


Fig. S4. View of the 1D undulated chain in **2**. (b) the topology of the 3D framework in **2**. Color codes: pink, connected nodes of Co cations, blue, connected nodes of GeW_{12} anions.

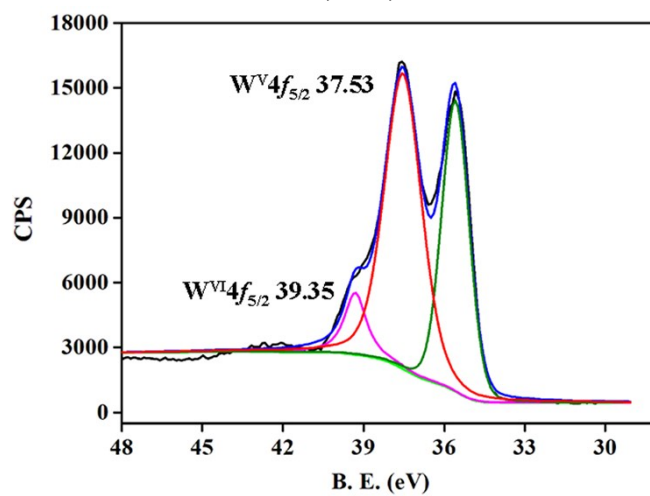


Fig. S5. XPS of compound **1**.

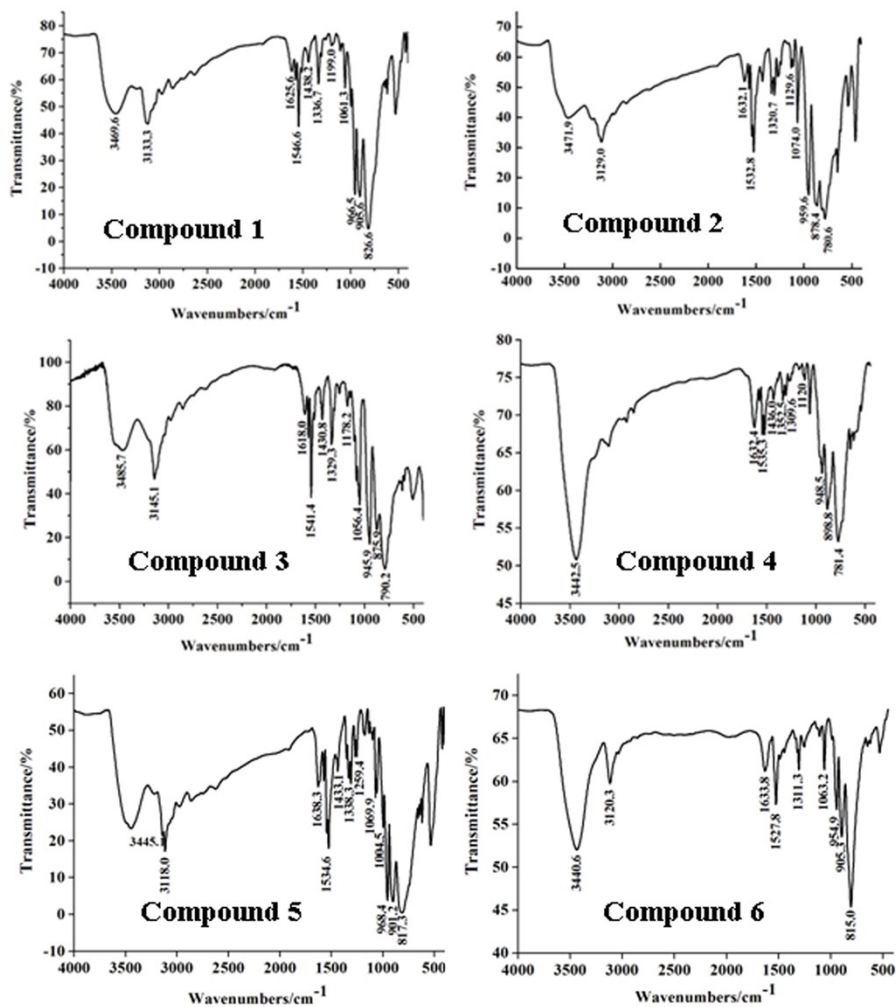


Figure S6. The IR spectra of compounds 1-6.

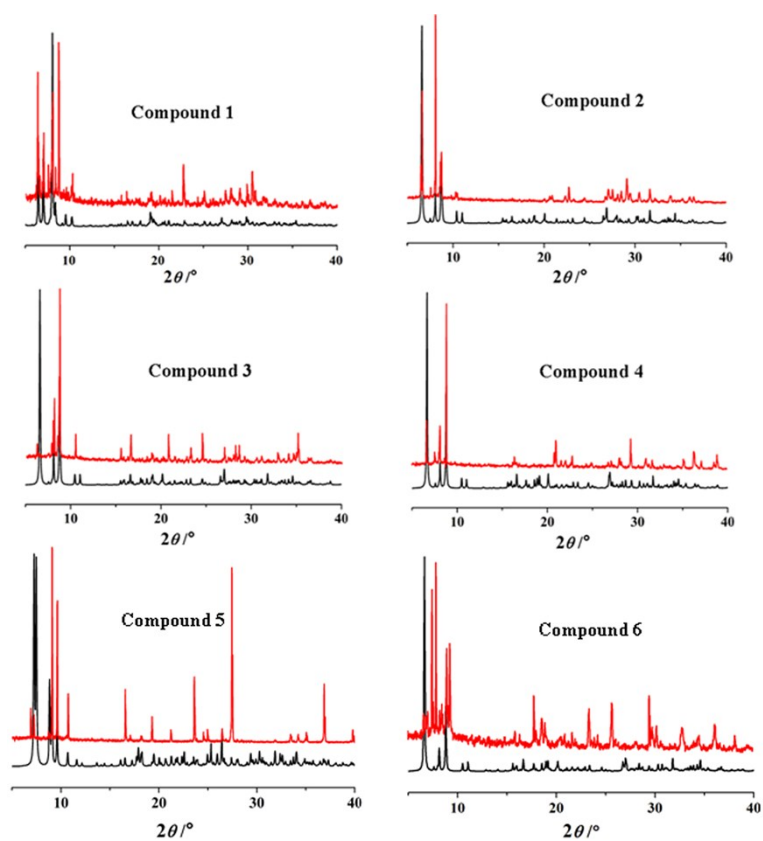


Fig. S7. The simulative (red) and experimental (black) powder X-ray diffraction patterns for **1-6**.

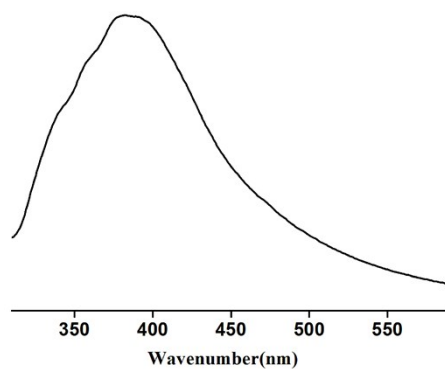


Fig. S8. Solid-state emission spectrum of bimb ($\lambda_{\text{ex}} = 310 \text{ nm}$) at room temperature.