

Inorganic-organic Hybrids Constructed from Heteropolymolybdate Anions and Copper-organic Fragments: Syntheses, Structures and Properties

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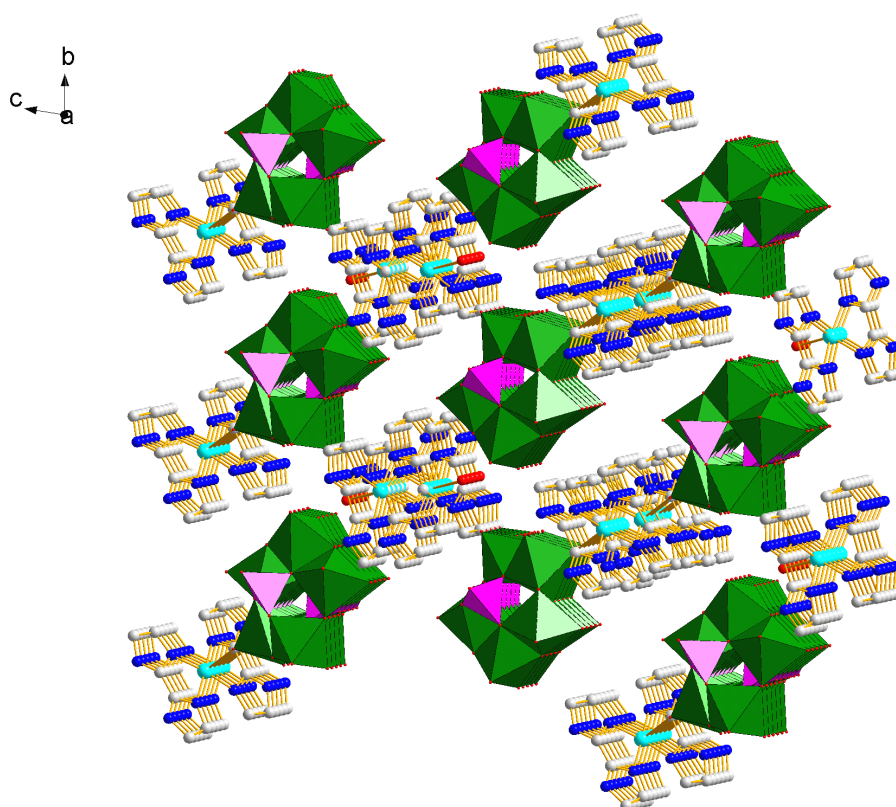


Fig. S1. View of the 3D supramolecular network of compound **1**. All the hydrogen atoms and isolated water molecules are omitted for clarity. The color codes are as follows: Cu (turquoise), O (red), C (gray), N (blue), MoO₆ octahedra (green), PO₄ tetrahedron (pink).

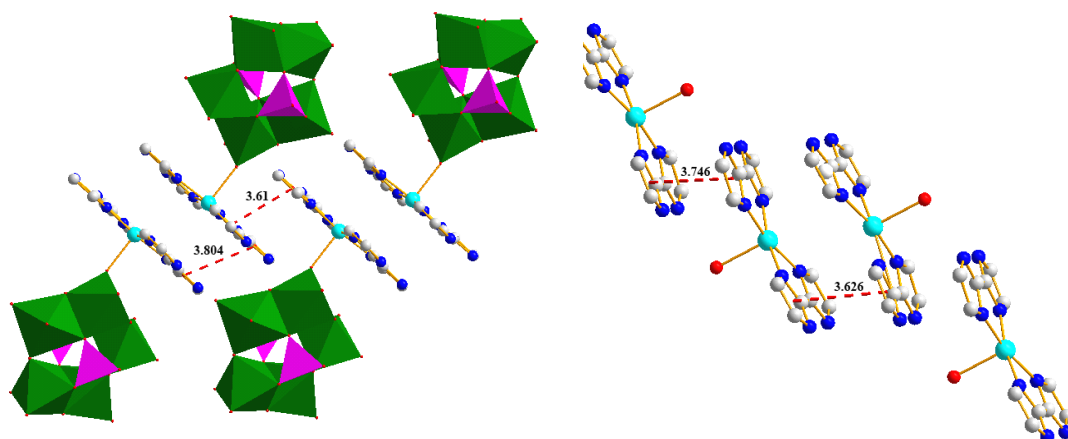


Fig. S2. View of the distances of π - π stacking interaction between imidazole rings in compound **1**. The color codes are as follows: Cu (turquoise), O (red), C (gray), N (blue), MoO₆ octahedra (green), PO₄ tetrahedron (pink).

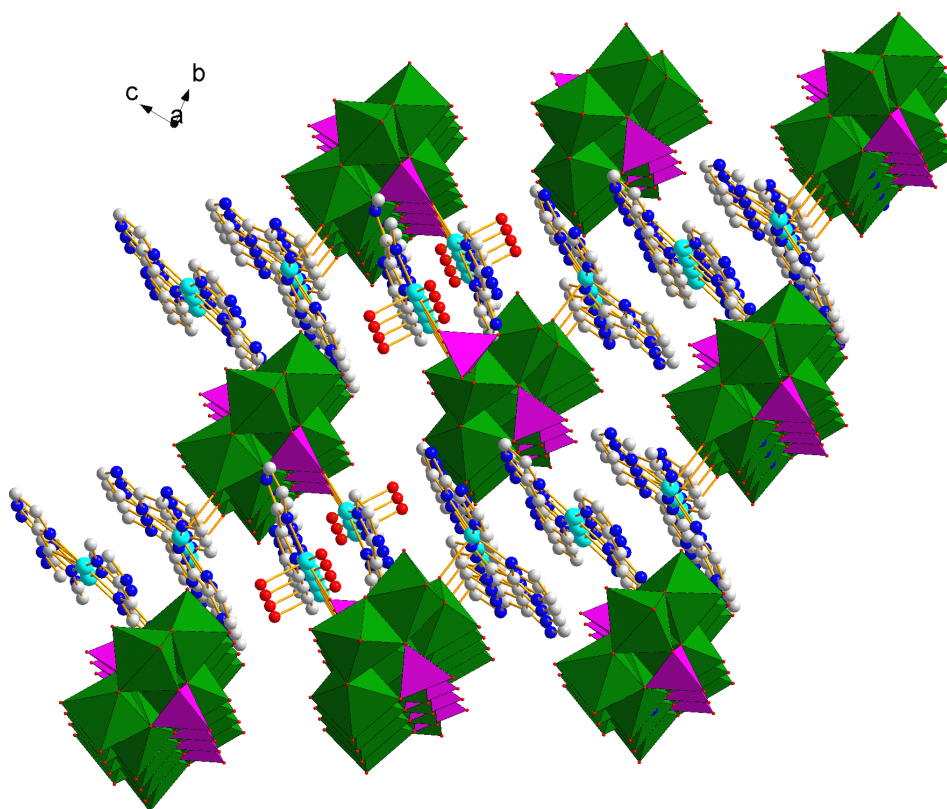


Fig. S3. View of the 3D supramolecular network of compound **2**. All the hydrogen atoms and isolated water molecules are omitted for clarity. The color codes are as follows: Cu (turquoise), O (red), C (gray), N (blue), MoO₆ octahedra (green), PO₄ tetrahedron (pink).

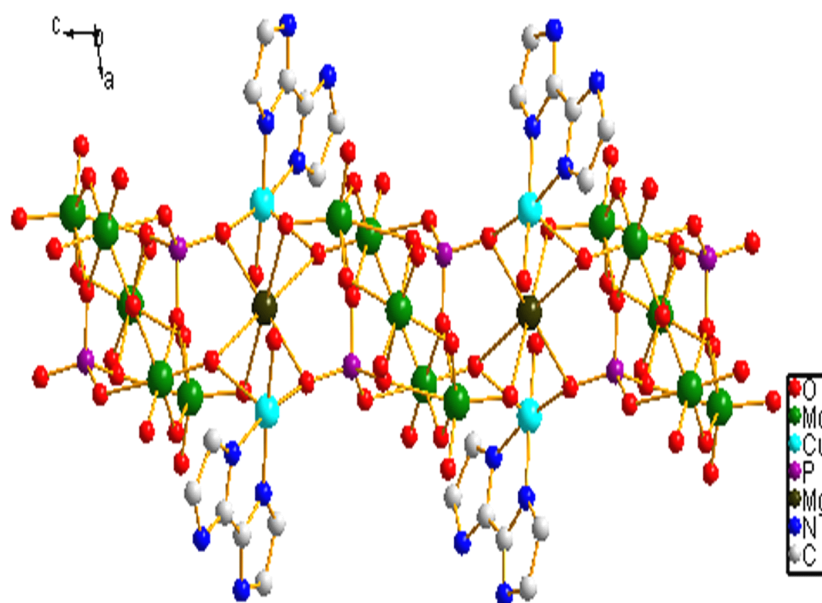


Fig. S4. View of the molecule structure of compound **4**. H atoms and free water molecules have been omitted.

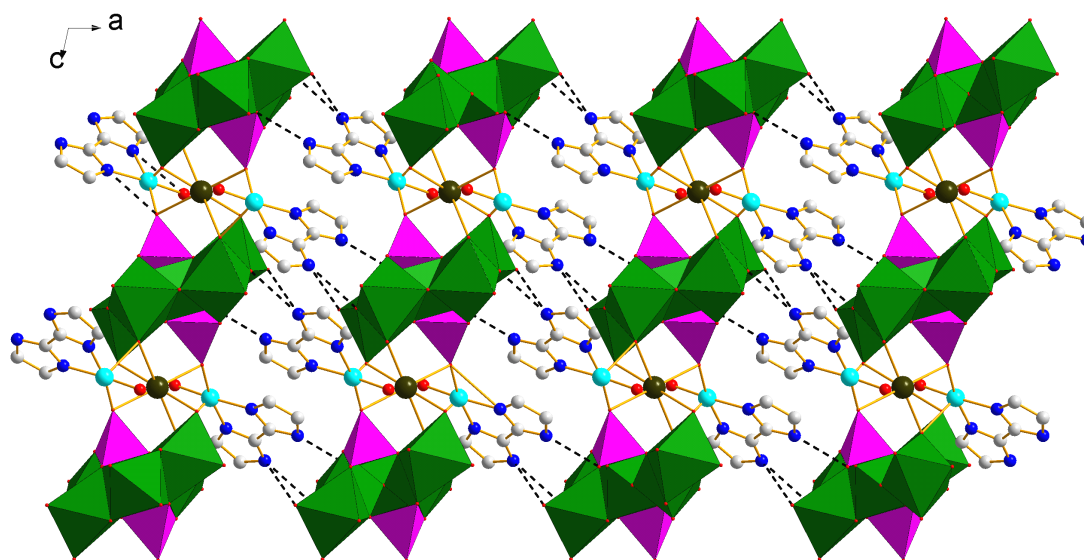


Fig. S5 View of the 2D supramolecular network of compound **4** construct from hydrogen-bonding interactions along ac plane. All the hydrogen atoms and isolated water molecules are omitted for clarity. The color codes are as follows: Cu (turquoise), Mg (olive green), O (red), C (gray), N (blue), MoO₆ octahedra (green), PO₄ tetrahedron (pink).

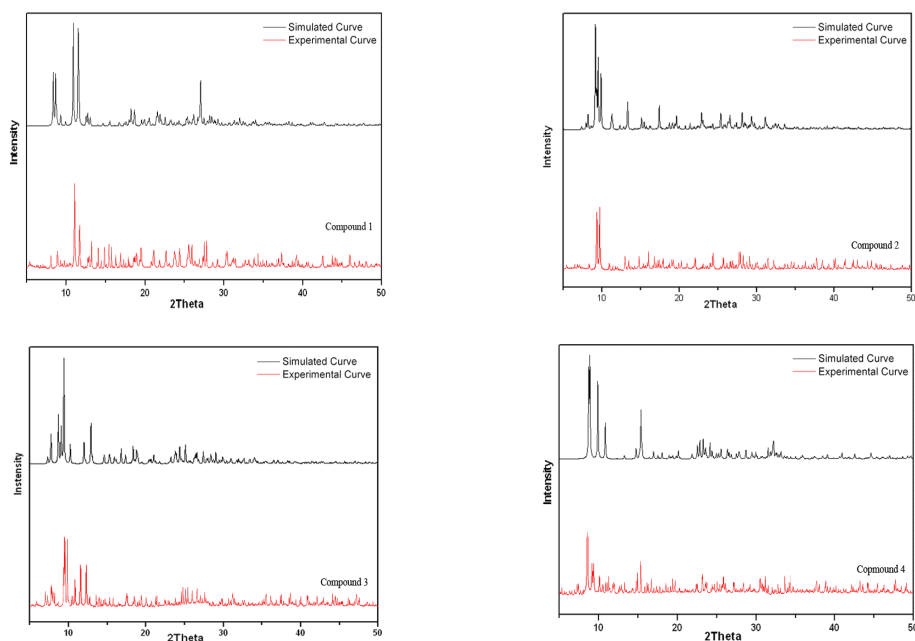


Fig. S6. The XPRD contrast curves of **1-4**.

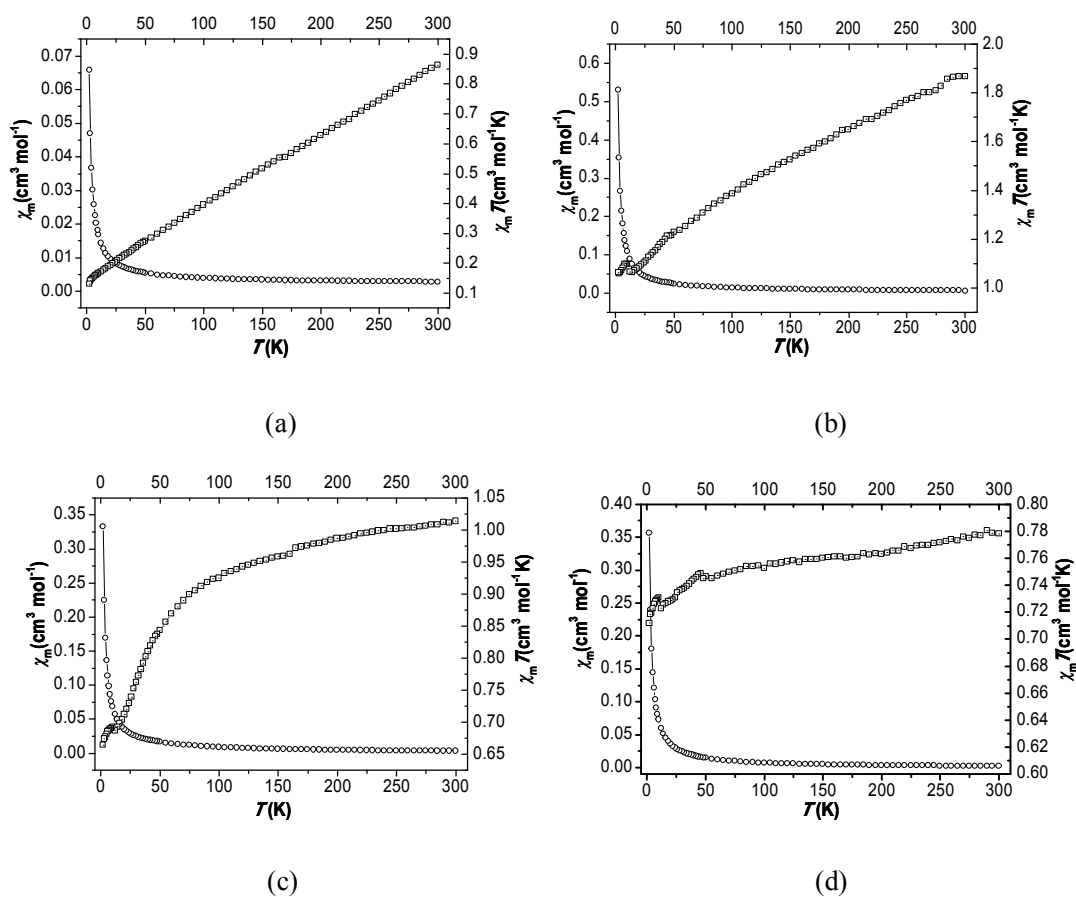


Fig. S7. Temperature dependences of χ_m and $\chi_m T$ for **1** (a), **2** (b), **3** (c) and **4** (d).

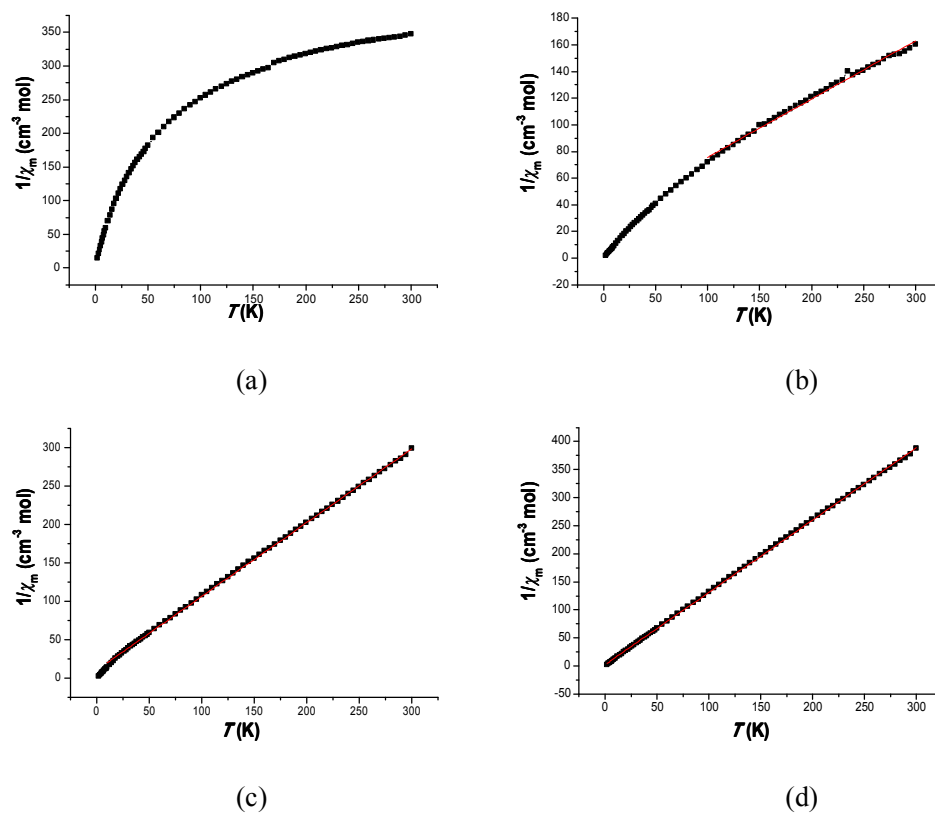


Fig. S8. Temperature dependences of χ_m^{-1} for **1** (a), **2** (b), **3** (c) and **4** (d).

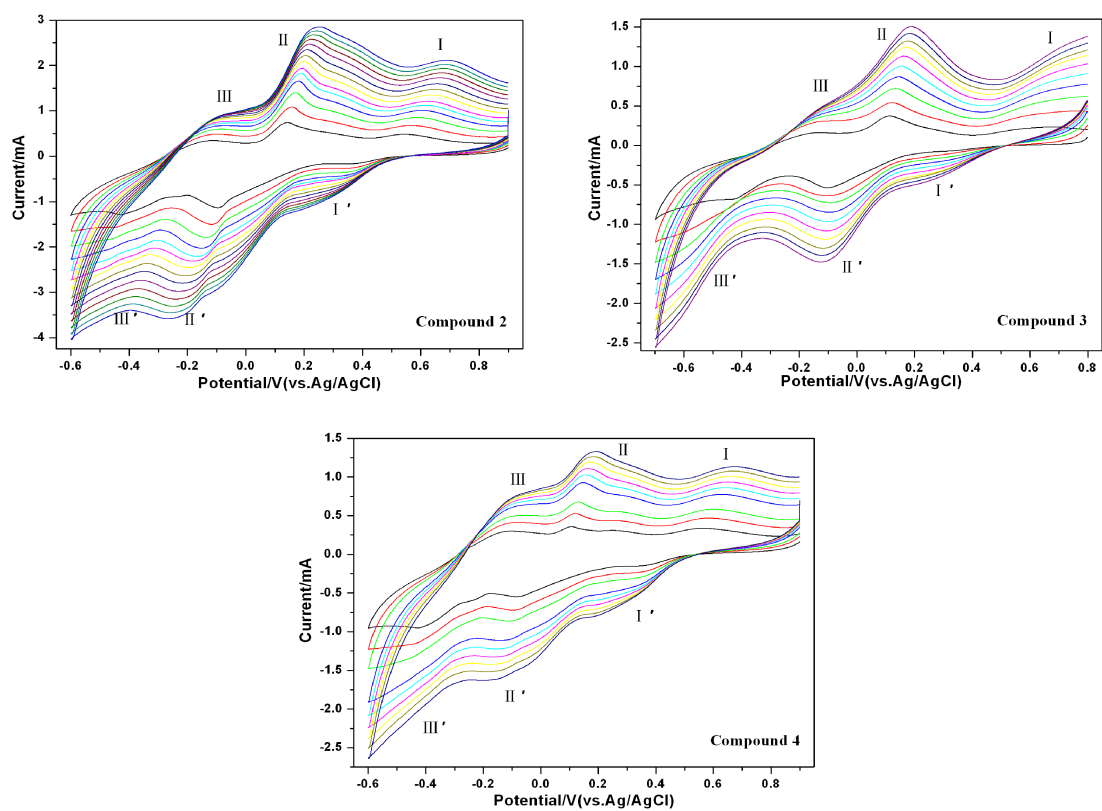


Fig. S9. The electrochemical behaviors of CPEs for compounds 2, 3, 4.

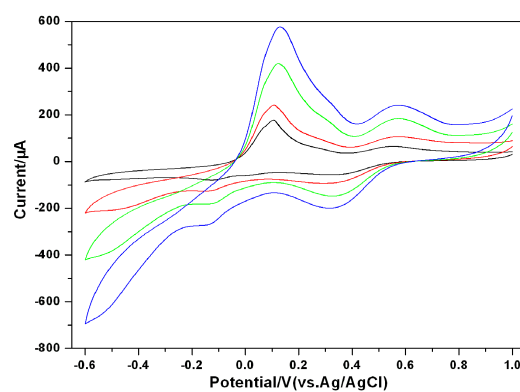


Fig. S10. Cyclic voltammograms of **1**-CPE in 1 M H₂SO₄ containing 0 (a), 3.8 (b), 7.5 (c), and 15 (d) mM NaNO₂. Scan rate: 80 mV·s⁻¹.