Supporting Information

For NJ-ART-01-2015-000222.R1

Photoluminescent and Cytotoxic Properties of Multinuclear Complexes and Multinuclear-based Polymers with Group 12 Metals and Tripodal Ligand

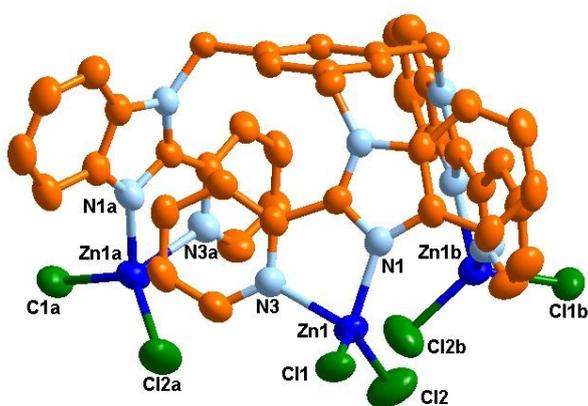Jin'an Zhao,*[a] Kun Peng,[b] Yan Guo,[b] Jin Zhang,[b] Shufang Chen,[a] and Jiyong Hu*[a]

Fig. S1 The structure of **1** presented as thermal ellipsoid model.

Fig. S2 View of 3D supramolecular structure of **1** stabilized by hydrogen-bonding and π···π interactions (Symmetry codes: ^4/3-y, 2/3+x-y, -1/3+z; 1-x,1-y,1-z).

Fig. S3 The coordination environment of **2** presented as thermal ellipsoid model.
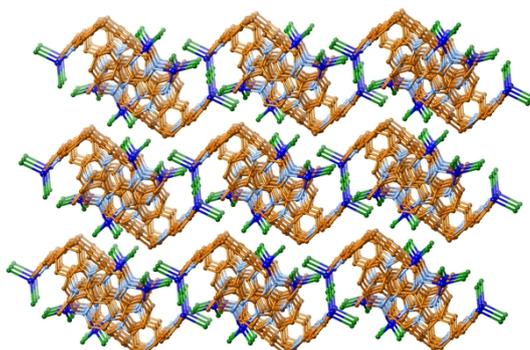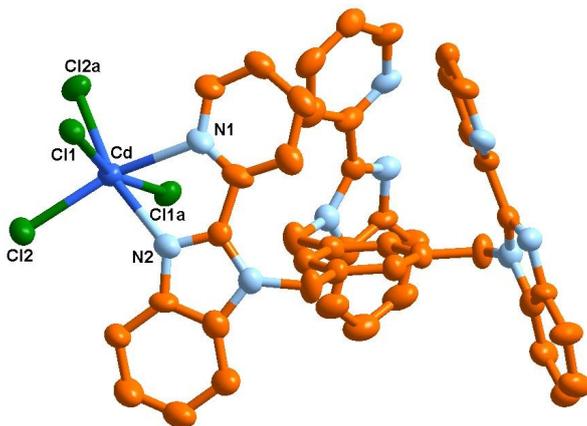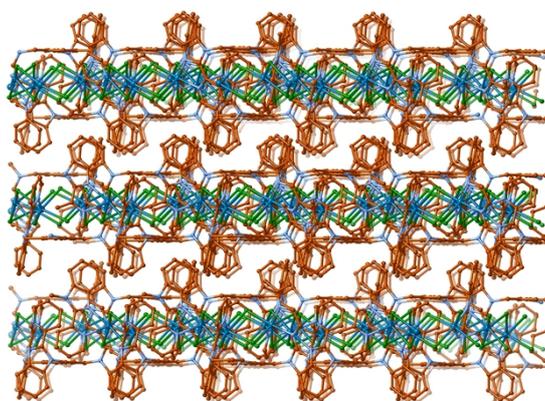

Fig. S4 View of 3D supramolecular structure of **2** stabilized by hydrogen-bonding and $\pi\cdots\pi$ interactions (Symmetry codes: [A]4/3-y, 2/3+x-y, -1/3+z; [B]5/3-x, 4/3-y, 4/3-z; [C]2-y, 1+x-y, z; 5/3-x,4/3-y,4/3-z).

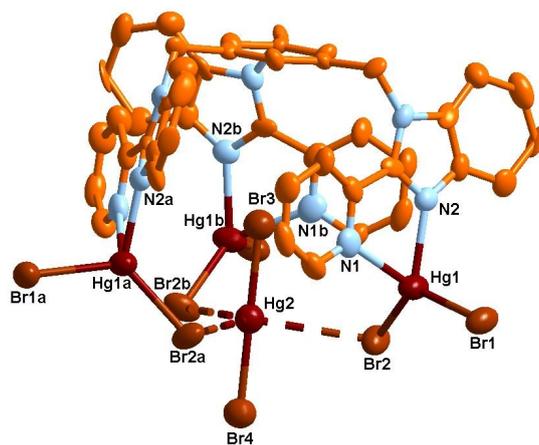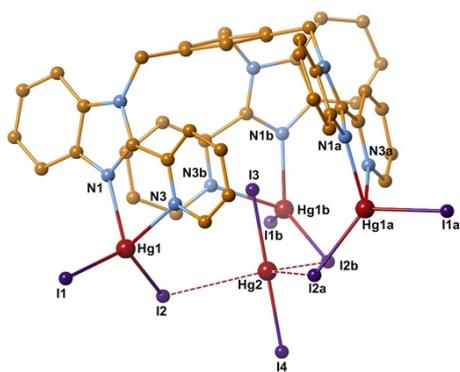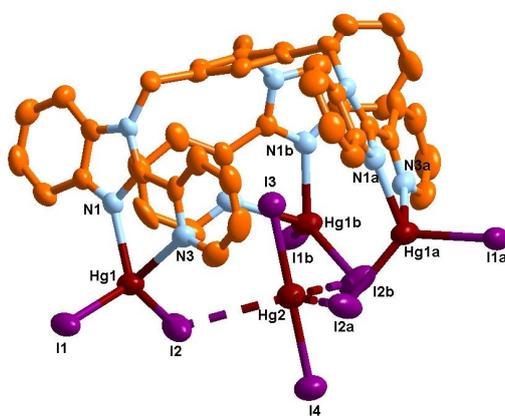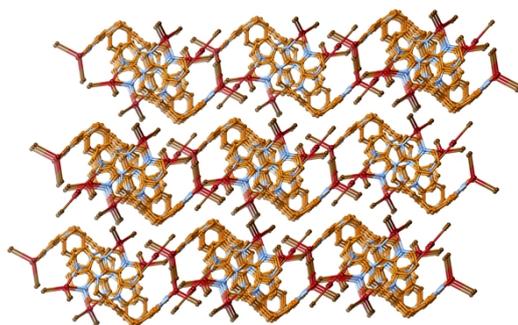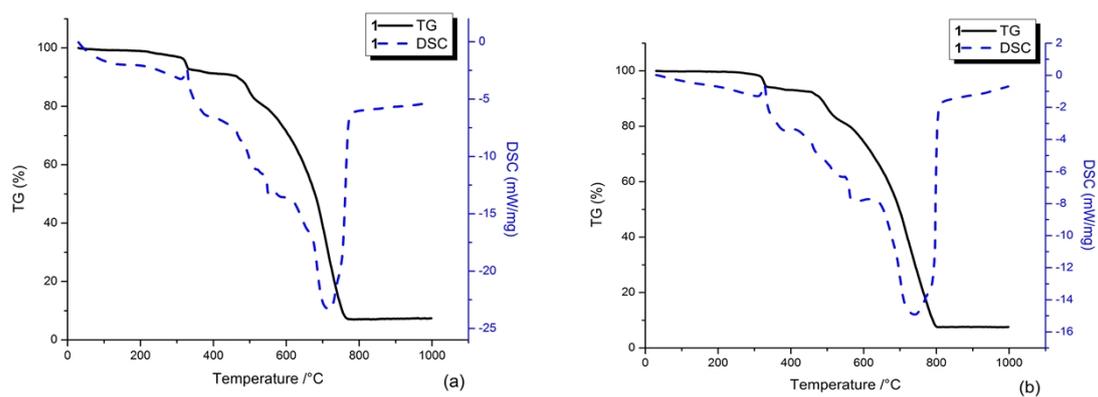**Fig. S5** The structure of **3** presented as thermal ellipsoid model.

Fig. S6 The tetranuclear framework of complex **4** (all hydrogen atoms are omitted for clarity).
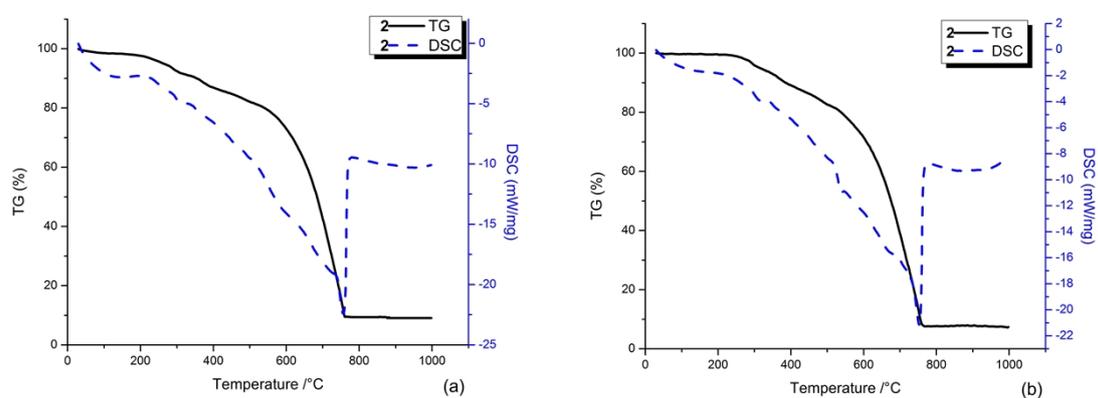

**Fig. S7** The structure of **4** presented as thermal ellipsoid model.

Fig. S8 View of 3D supramolecular structure of **3** stabilized by hydrogen-bonding and π···π interactions (Symmetry codes: [A]2/3-y, 1/3+x-y, 1/3+z; 1-x, 1-y, 1-z).

Fig. S9 (a) The TG and DSC curves of complex **1** with solvent molecular; (b) The TG and DSC curves of complex **1** without solvent molecular.

Fig. S10 (a) The TG and DSC curves of complex **2** with solvent molecular; (b) The TG and DSC curves of complex **2** without solvent molecular.
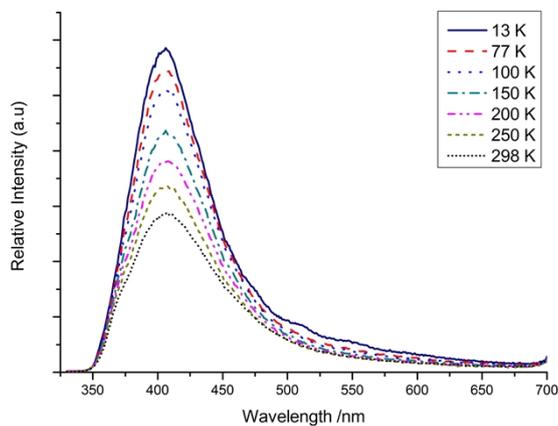
Fig. S11 The photoluminescence emission spectra of ligand tpbb (λex = 349 nm) in the solid state at 298 K and cryogenic temperatures.
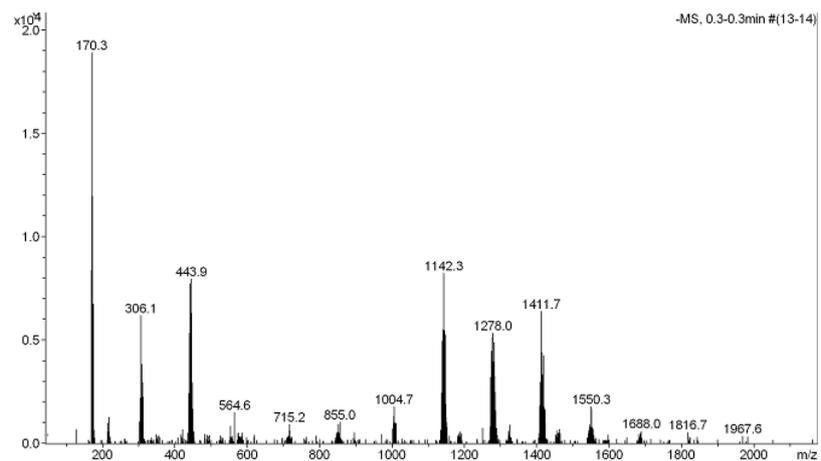
Fig. S12 ESI-MS spectrum of complex **1**.