

Supporting information

Four rare structurally characterized hetero-pentanuclear [Zn₄Ln] bis(salamo)-type complexes: Syntheses, crystal structures and spectroscopic properties

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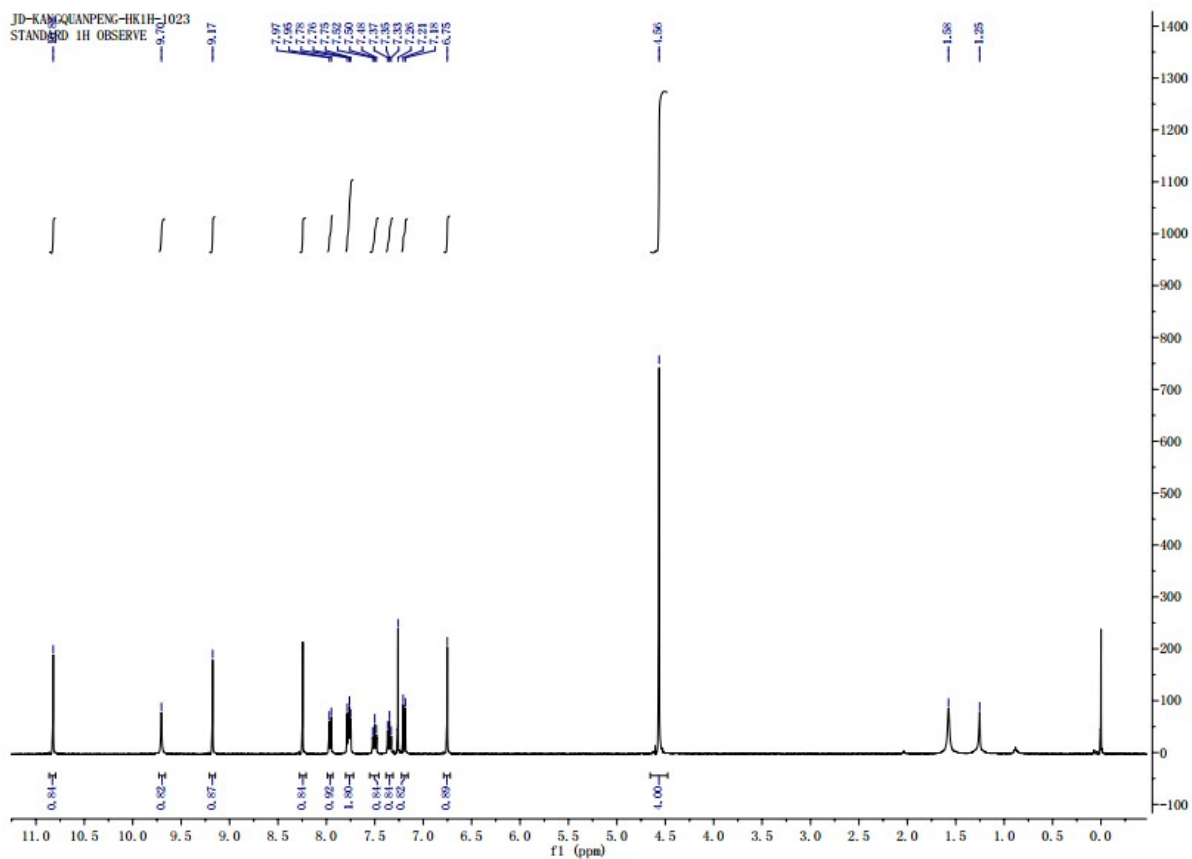


Fig. S1. ¹H NMR of the ligand H₄L.

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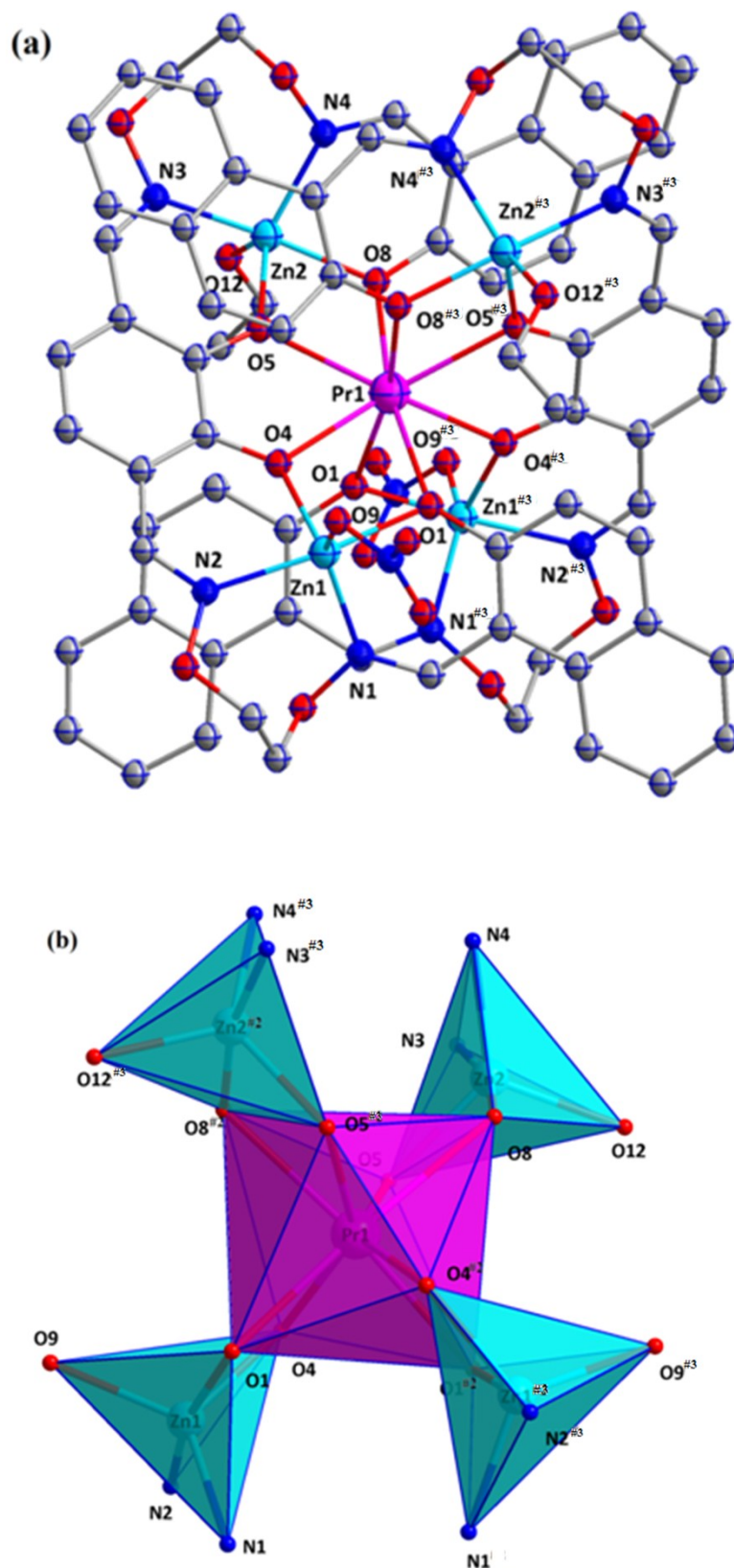


Fig. S2. (a) Molecule structure of complex **3** (hydrogen atoms and solvent molecules are omitted for clarity). (b) Coordination polyhedrons for Zn^{II} and Pr^{III} ions of complex **3** ($[\text{Zn}_4(\text{L})_2\text{Pr}(\text{NO}_3)_2(\text{OEt})(\text{EtOH})]$).

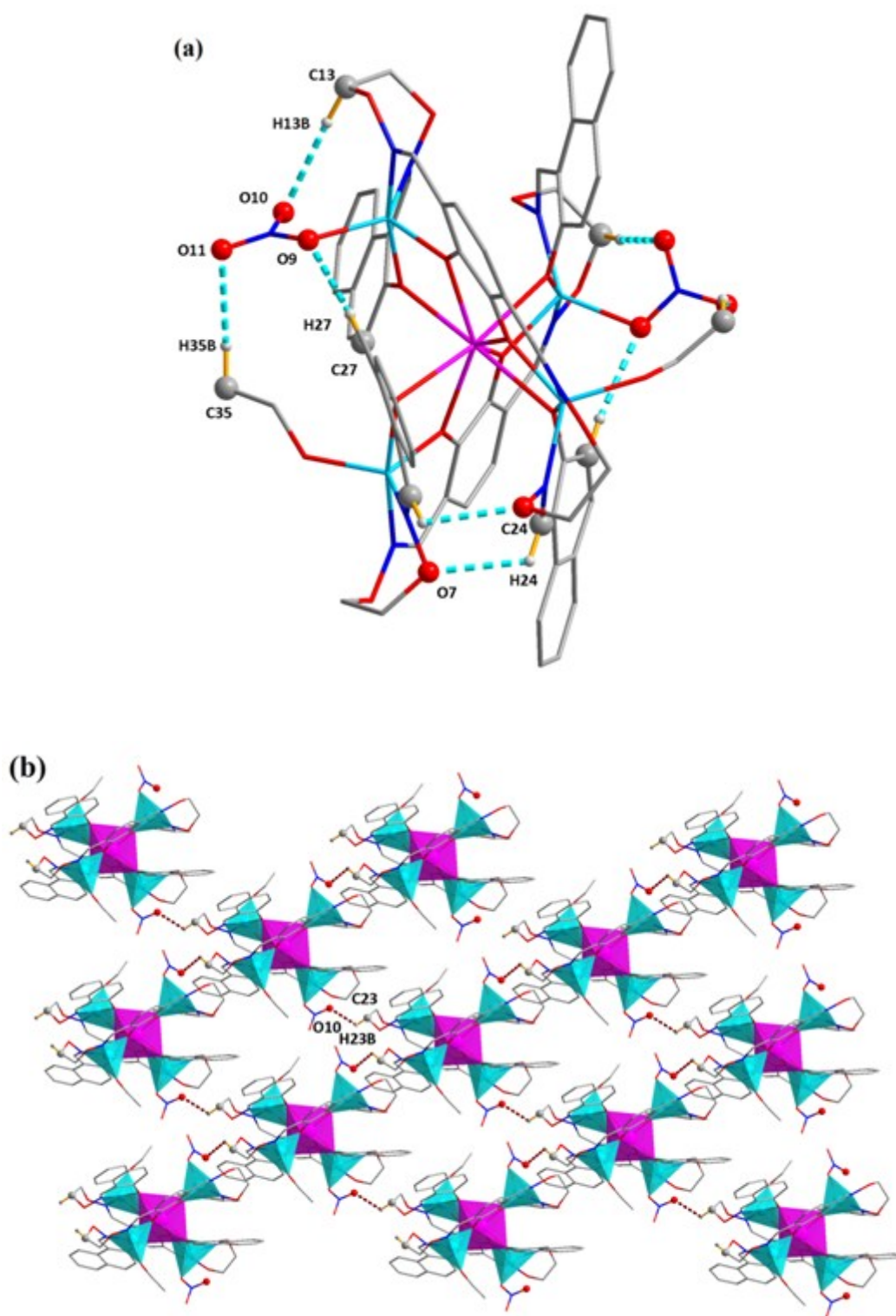


Fig. S3. (a) View of the intramolecular hydrogen bonding interactions of complex **3**. (b) View of an infinite 2D supramolecular structure of complex **3** ($[\text{Zn}_4(\text{L})_2\text{Pr}(\text{NO}_3)_2(\text{OEt})(\text{EtOH})]$).

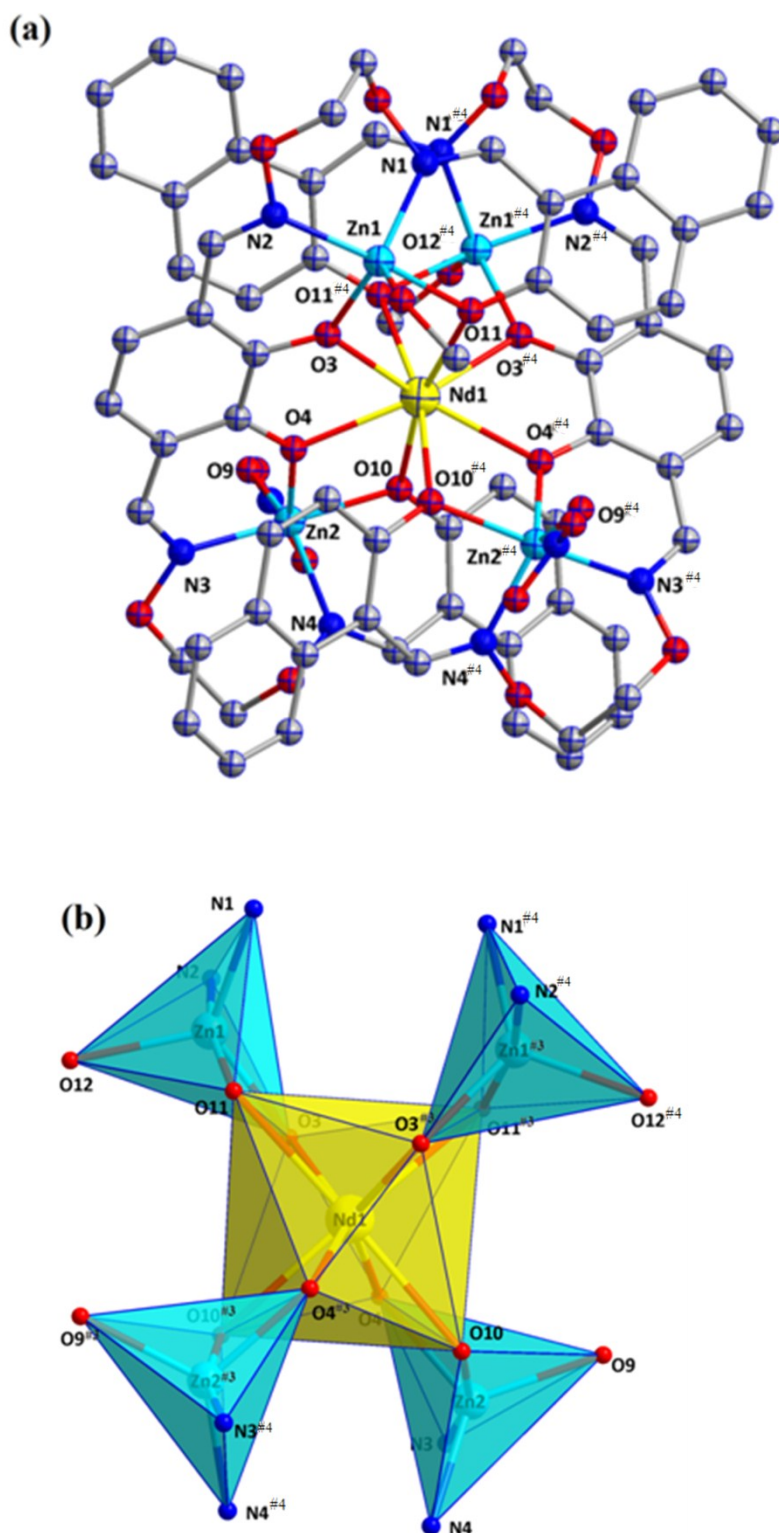


Fig. S4. (a) Molecule structure of complex **4** (hydrogen atoms and solvent molecules are omitted for clarity). (b) Coordination polyhedrons for Zn^{II} and Nd^{III} ions of complex **4** ($[\text{Zn}_4(\text{L})_2\text{Nd}(\text{NO}_3)_2(\text{OMe})(\text{MeOH})]$).

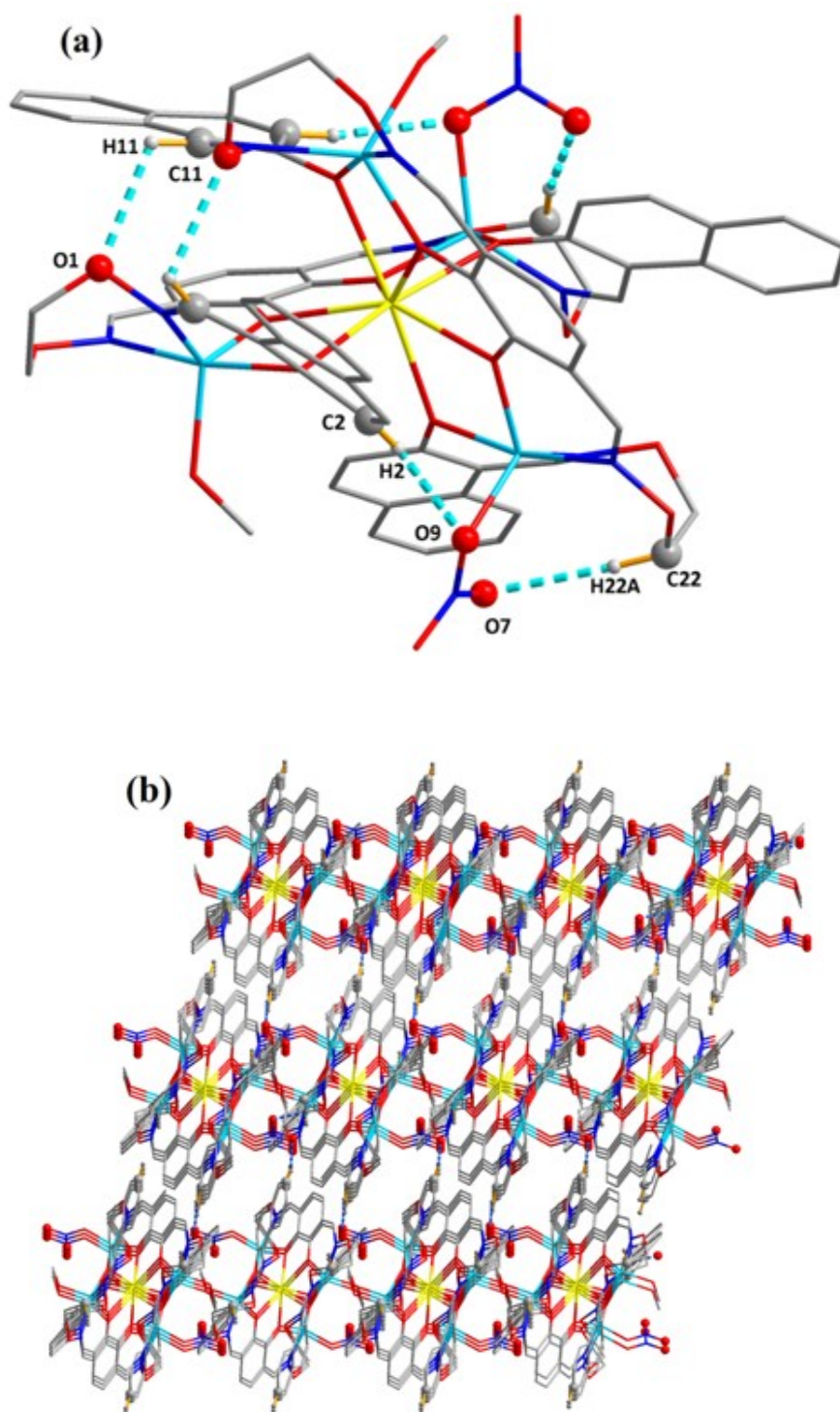


Fig. S5. (a) View of the intramolecular hydrogen bonding interactions of complex 4 ($[\text{Zn}_4(\text{L})_2\text{Nd}(\text{NO}_3)_2(\text{OMe})(\text{MeOH})]$). (b) View of an infinite 2D supramolecular structure of complex 4.