Isolation of First Row Transition Metal–Carboxylate Zwitterions

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Table of Contents

Fig. S1 Structure of trans-Co(iso-hmnH)2(H2O)2 (3) (a), trans-Ni(iso-hmnH)2(H2O)2 (4) (b), cis-Ni(hmnH)2(H2O)2 (5) (c), trans-Co(3,2,4-hpbH)(H2O)2 (15) (d) and trans-Ni(3,2,4-hpbH)(H2O)2 (16) (e) with labeling schemes. Selected C–O bond distances: O2–C7 1.244(1) Å, O3–C7 1.246(1) Å (3); O2–C7 1.238(1) Å, O3–C7 1.244(1) Å (4); O2–C7 1.230(2) Å, O3–C7 1.271(1) Å (5); O2–C13 1.249(4) Å, O3–C13 1.262(4) Å (15) and O2–C13 1.267(5) Å, O3–C13 1.249(5) Å (16).

Fig. S2 Experimental (black) and simulated (red) powder X-ray diffraction (PXRD) pattern for [Cu(hmnH)2·DMF·H2O]n (8).

Fig. S3 TGA curves for [Cu(hmnH)2·DMF·H2O]n (8).

Fig. S4 Cell packing diagrams of trans-Zn(iso-hmnH)2(H2O)2 (1) (a), cis-Zn(hmnH)2(H2O)2·2H2O (2) (b), cis-Zn(4,2,4-hpbH)2(H2O)2 (12) (c), trans-Zn(3,2,4-hpbH)2(H2O)2 (13) (d) and cis-Zn(4,6,3-hpbH)2(H2O)2·H2O (14) (e) showing intensive hydrogen bonding interactions among these zwitterions.

Fig. S5 Crystal structure of [Mn(4,6,3-hpbH)2]n (17) looking along the b direction showing, a) two adjacent layers (orange and bamboo) associated by hydrogen bonding interactions and b) cell packing diagrams.
Fig. S1 Structure of \(\text{trans-Co(iso-hmnH)}_2(\text{H}_2\text{O})_2\) (3) (a), \(\text{trans-Ni(iso-hmnH)}_2(\text{H}_2\text{O})_2\) (4) (b), \(\text{cis-[Ni(hmnH)}_2(\text{H}_2\text{O})_2\cdot2\text{H}_2\text{O}\) (5) (c), \(\text{trans-Co(3,2,4-hpbH)}(\text{H}_2\text{O})_2\) (15) (d) and \(\text{trans-Ni(3,2,4-hpbH)}(\text{H}_2\text{O})_2\) (16) (e) with labeling schemes. Selected C–O bond distances: O2–C7 1.244(1) Å, O3–C7 1.246(1) Å (3); O2–C7 1.248(1) Å, O3–C7 1.244(1) Å (4); O2–C7 1.230(2) Å, O3–C7 1.271(1) Å (5); O2–C13 1.249(4) Å, O3–C13 1.262(4) Å (15) and O2–C13 1.267(5) Å, O3–C13 1.249(5) Å (16).
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