

Supporting Information

Assembly between Various Molecular-building-blocks for Network Diversity of Zinc-1,3,5-benzenetricarboxylate Frameworks

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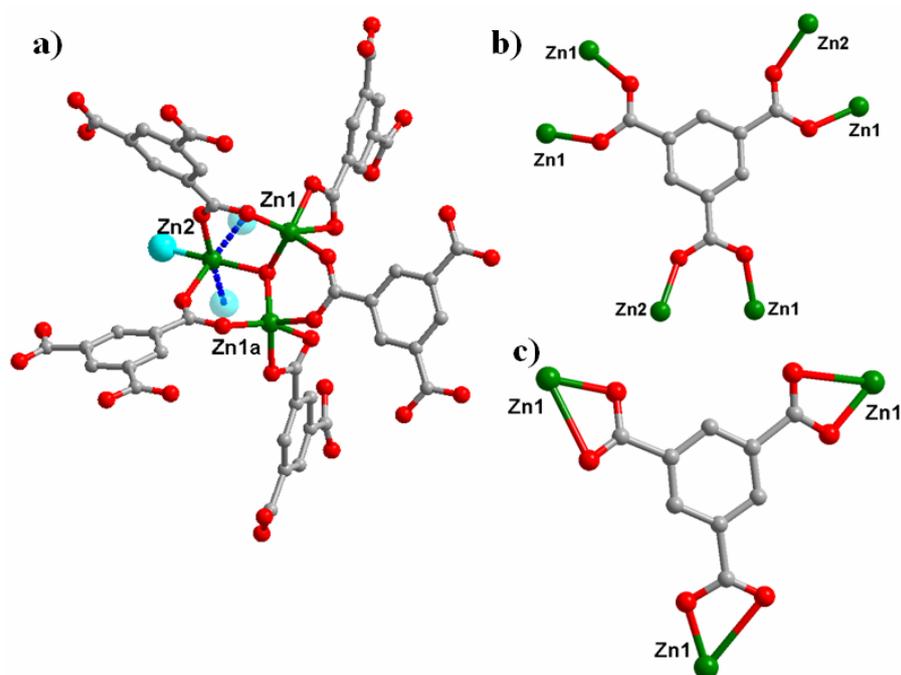


Figure S1. The coordination environment of the Zn atoms and btc ligands in **1** (solvent molecules are shown as large blue spheres for clarity).

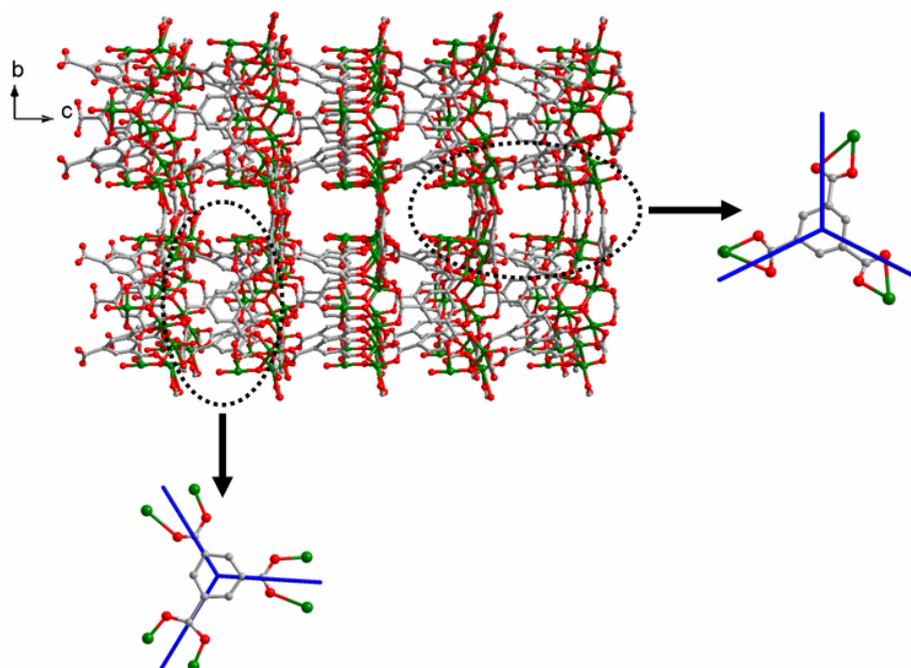


Figure S2. View 3D structure of **1** along *b* axis.

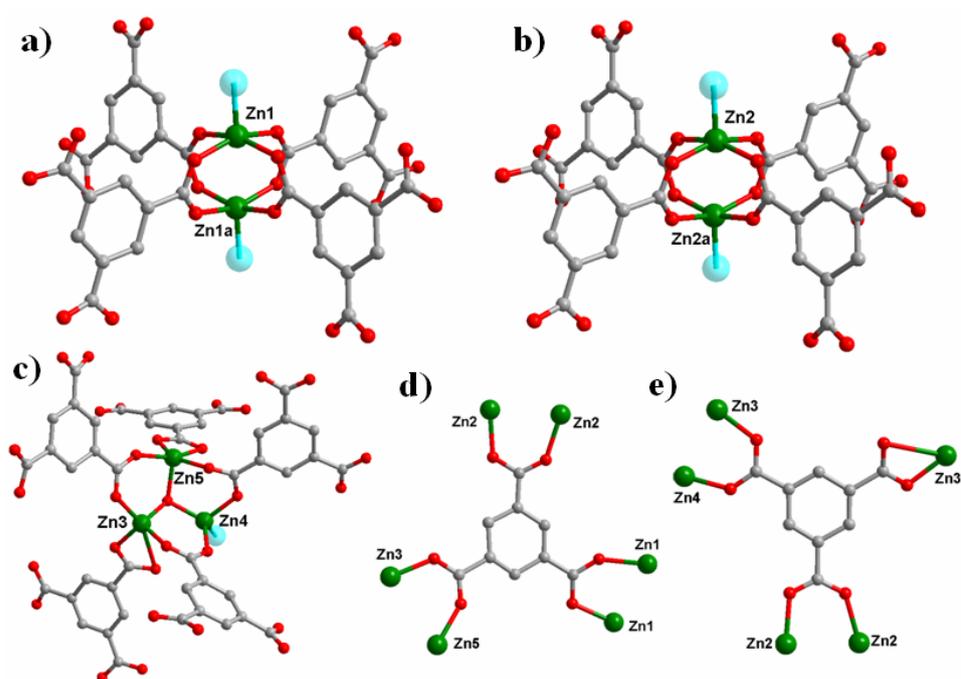


Figure S3. The coordination environment of the Zn atoms and btc ligands in **2** (solvent molecules are shown as large blue spheres for clarity).

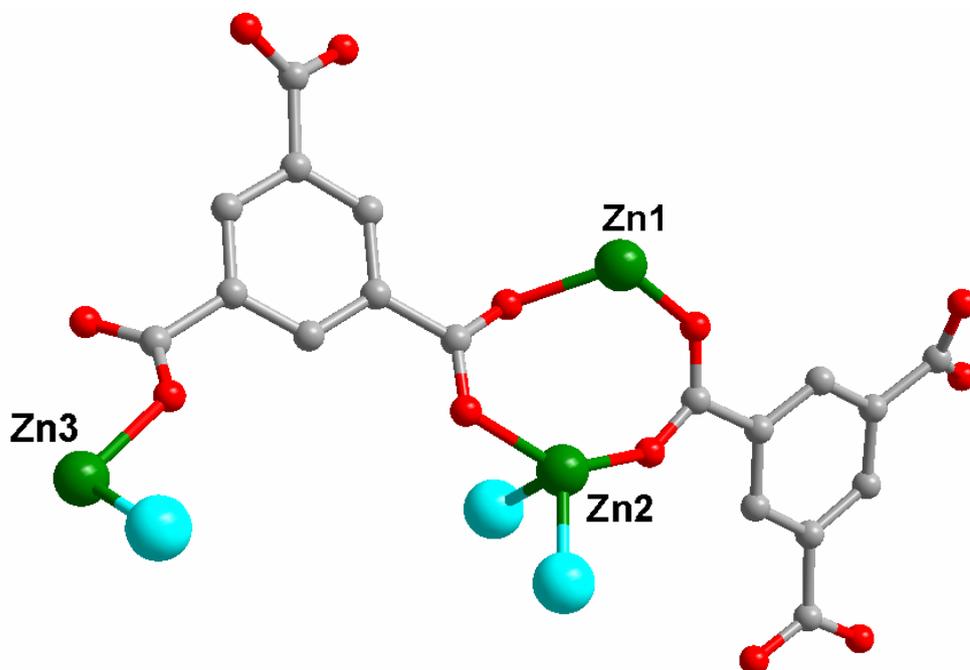


Figure S4. The independent unit of **3** (solvent molecules are shown as large blue spheres for clarity).

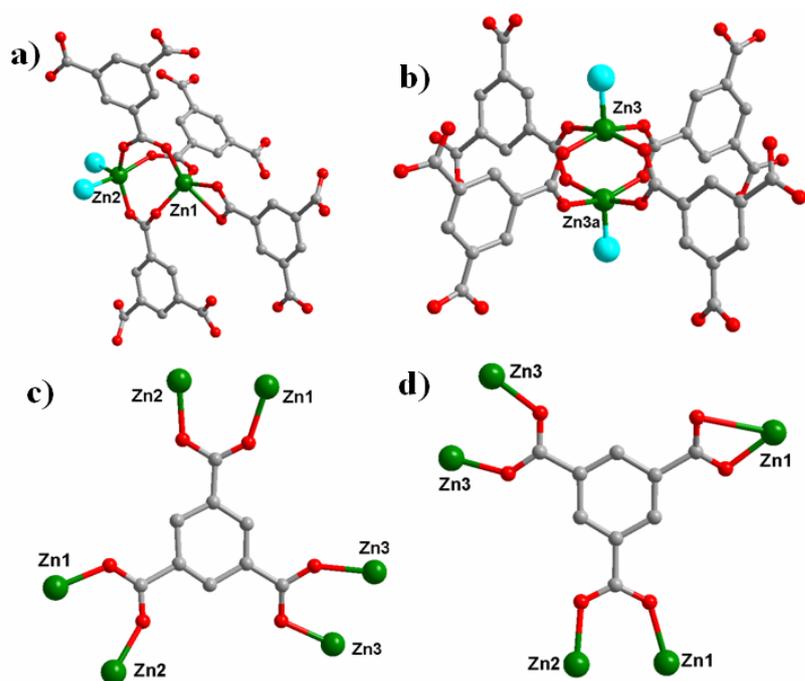


Figure S5. The coordination environment of the Zn atoms and btc ligands in **3** (solvent molecules are shown as large blue spheres for clarity).

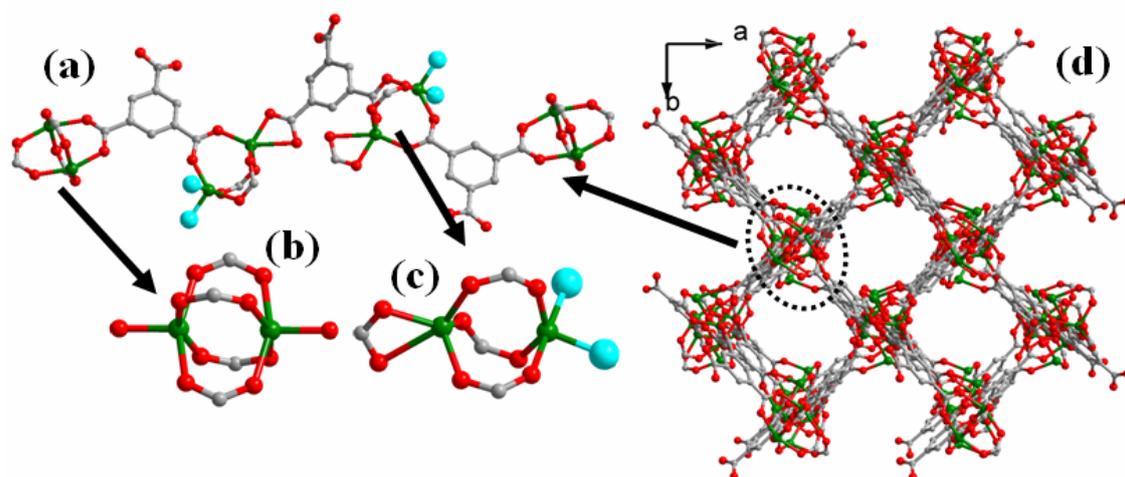


Figure S6. The crystal structures of **3**: (a) The dinuclear paddlewheel and two mpyrol solvent molecules coordinated dinuclear MBBs alternately arranged in **3**; (b) The dinuclear paddlewheel MBBs; (c) Two mpyrol solvent molecules coordinated dinuclear MBBs; (d) the 3D framework of **3** (solvent molecules are shown as large blue spheres for clarity).

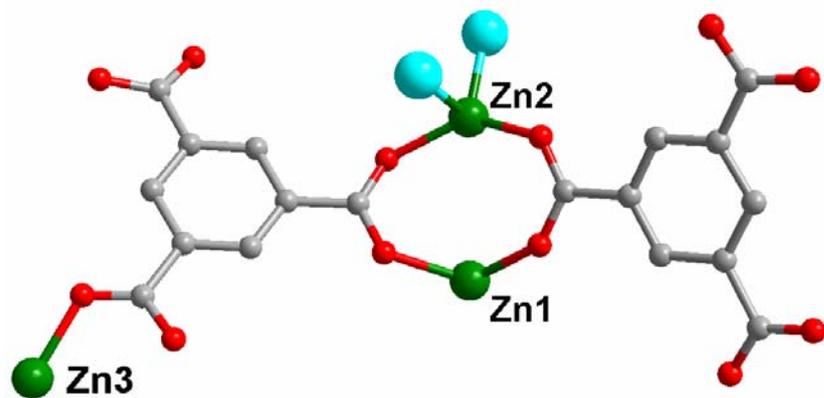


Figure S7. The independent unit of **4** (solvent molecules are shown as large blue spheres for clarity).

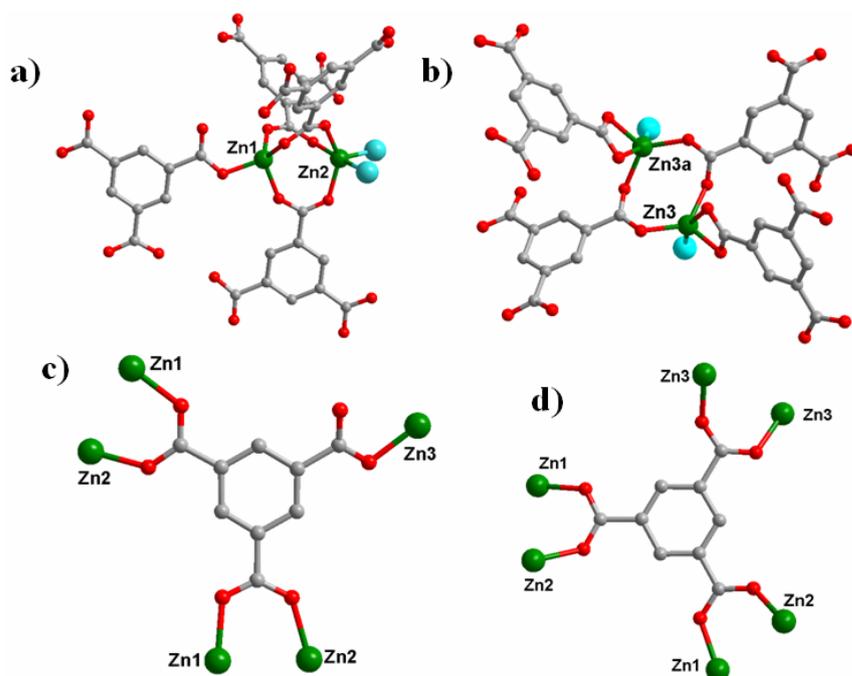


Figure S8. The coordination environment of the Zn atoms and bte ligands in **4** (solvent molecules are shown as large blue spheres for clarity).

Table S1. A Summary of the already known zinc MBBs.

MBB	compound name	author	reference
Zn ₄ O(COO) ₆	MOF-5	O.M. Yaghi	<i>Nature</i> , 1999, 402, 276
paddle-wheel Zn ₂ (COO) ₄	USF-3	M. J. Zaworotko	<i>Angew. Chem. Int. Ed.</i> , 2005, 44, 2877
irregular Zn ₂ (COO) ₄		S. L. Qiu	<i>Inorg. Chem.</i> , 2006, 45, 3582
Zn ₂ (COO) ₆	MOF-37	O.M. Yaghi	<i>J. Am. Chem. Soc.</i> , 2001, 123, 8239
Zn ₃ (μ ₃ -O)(COO) ₆	MOF-38&39	O.M. Yaghi	<i>J. Am. Chem. Soc.</i> , 2001, 123, 8239
Zn ₃ (μ ₃ -OH)(COO) ₆		Z. M. Su	<i>CrystEngComm</i> , 2012, 14, 5596
Zn ₂ (COO) ₃		Z. M. Su	<i>CrystEngComm</i> , 2012, 14, 5596