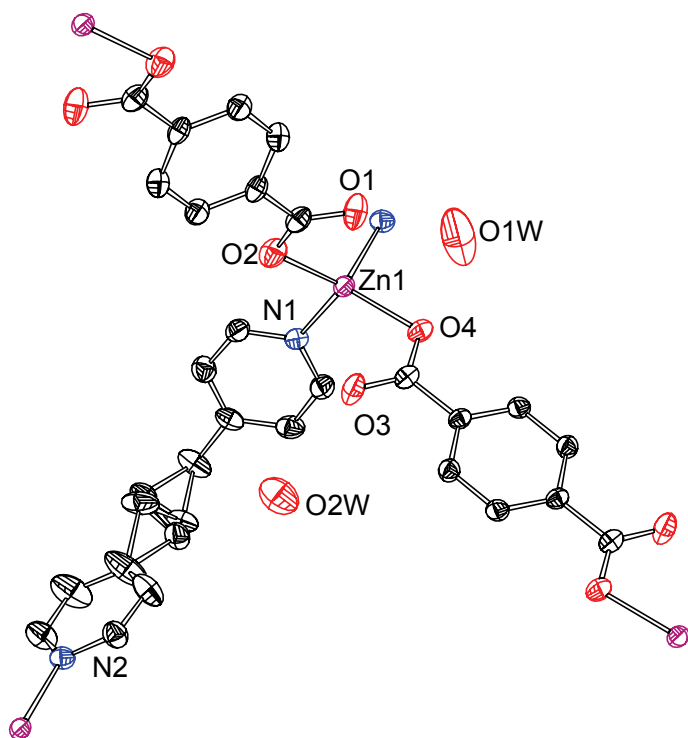


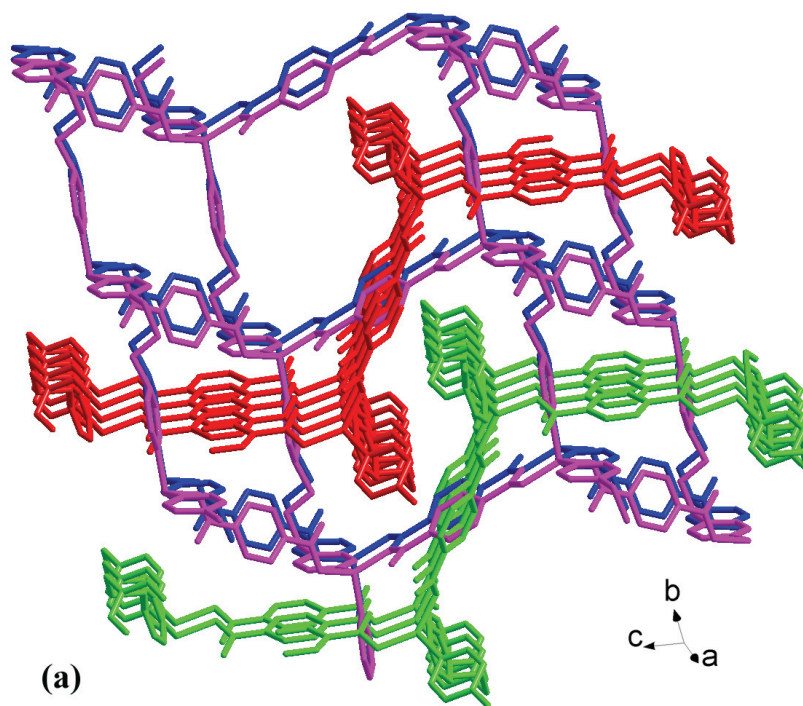
# One-pot synthesis of two isomeric zinc complexes with unusual polycatenation motifs

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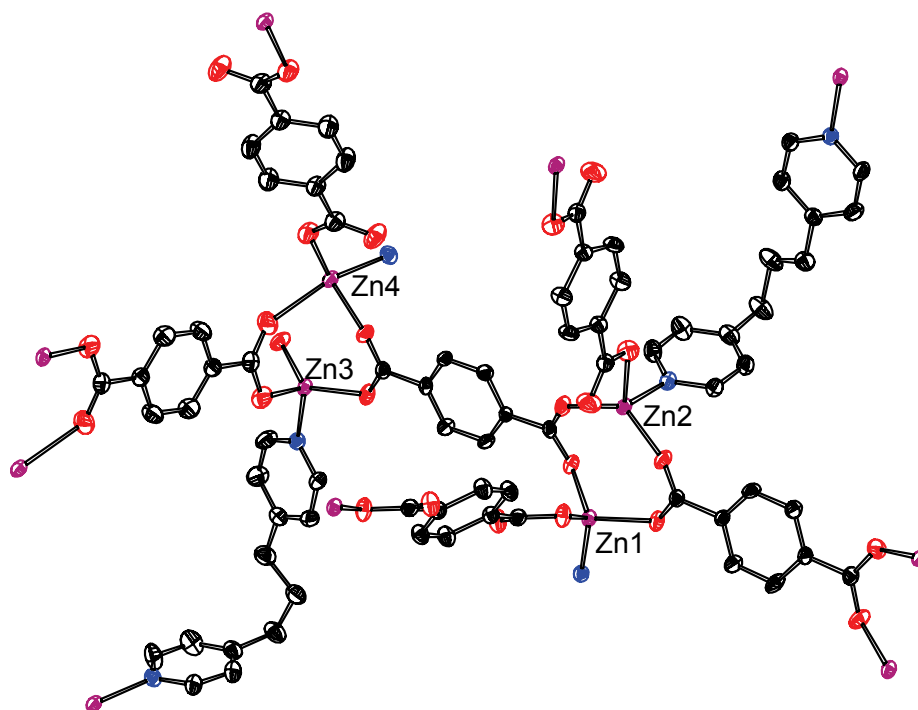
<sup>a</sup>The State Key Laboratory of Structural Chemistry, Fujian Institute of Research on the Structure of Matter, National Center for Nanoscience and Nanotechnology, the Chinese Academy of Sciences, Fuzhou, Fujian, 350002, CHINA and <sup>b</sup>Graduate School, Chinese Academy of Sciences, Beijing 100039, CHINA.



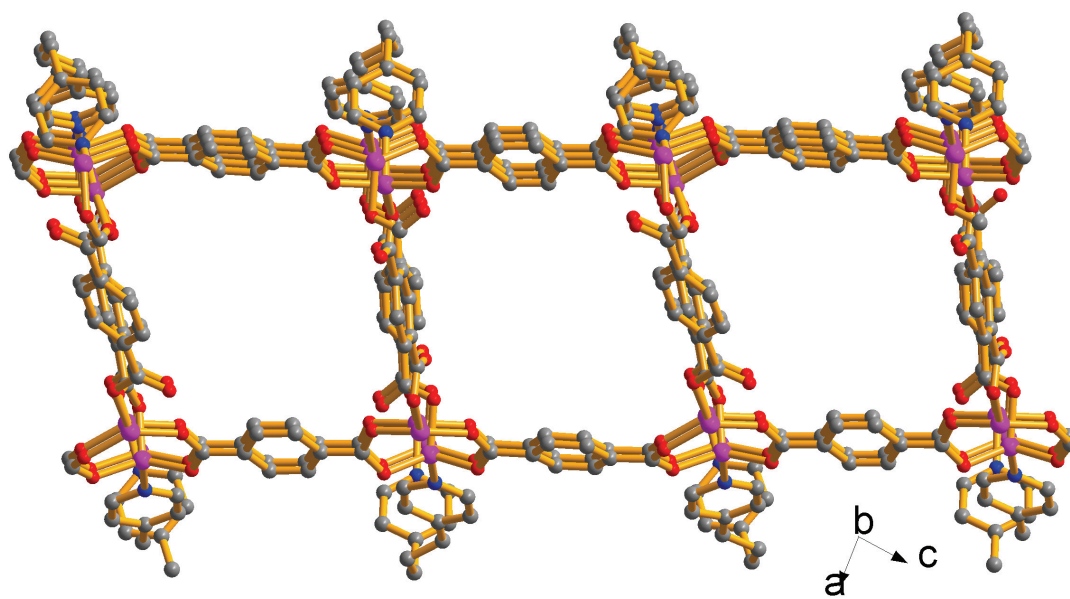
**Figure S1** The molecular structure of **1**. Two C atoms of the bpp ligand were disorder, and both of them locate at two sites. A “part” command was used to refine them.



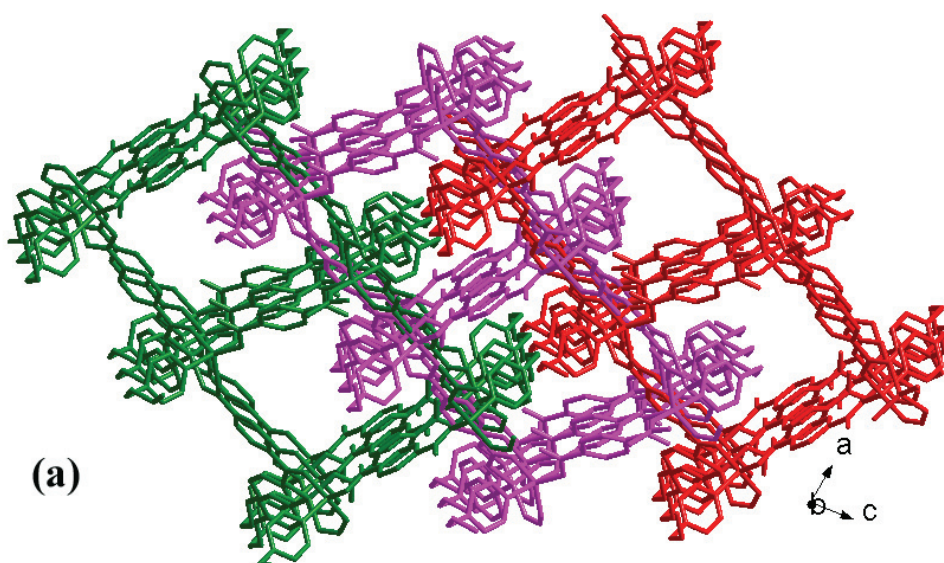
**Figure S2** The packing structure of **1**, showing the interpenetration between the layers.



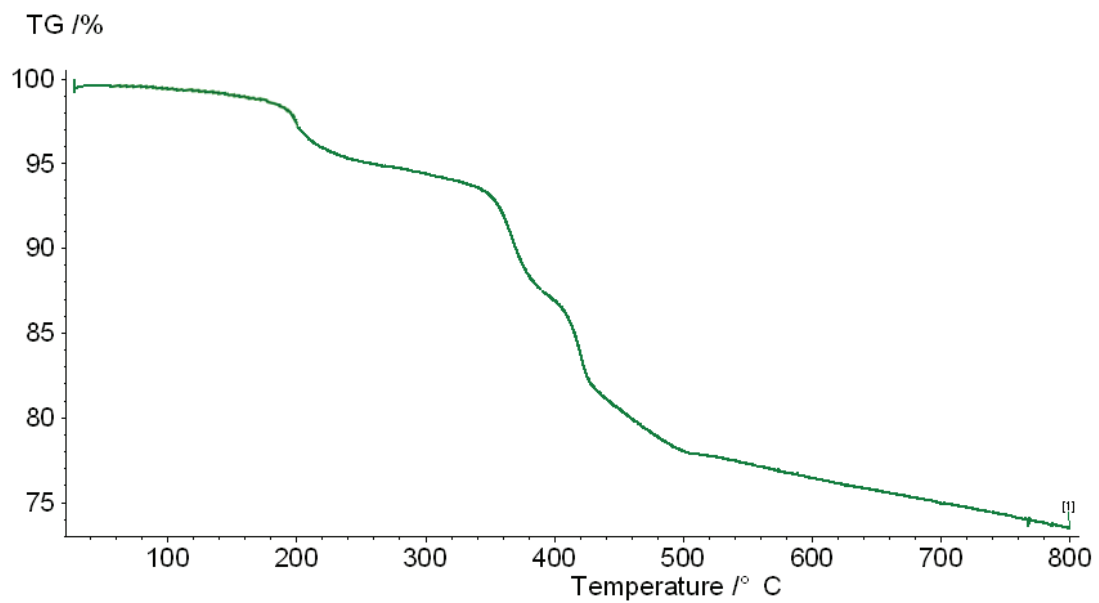
**Figure S3** The molecular structure of **2**.



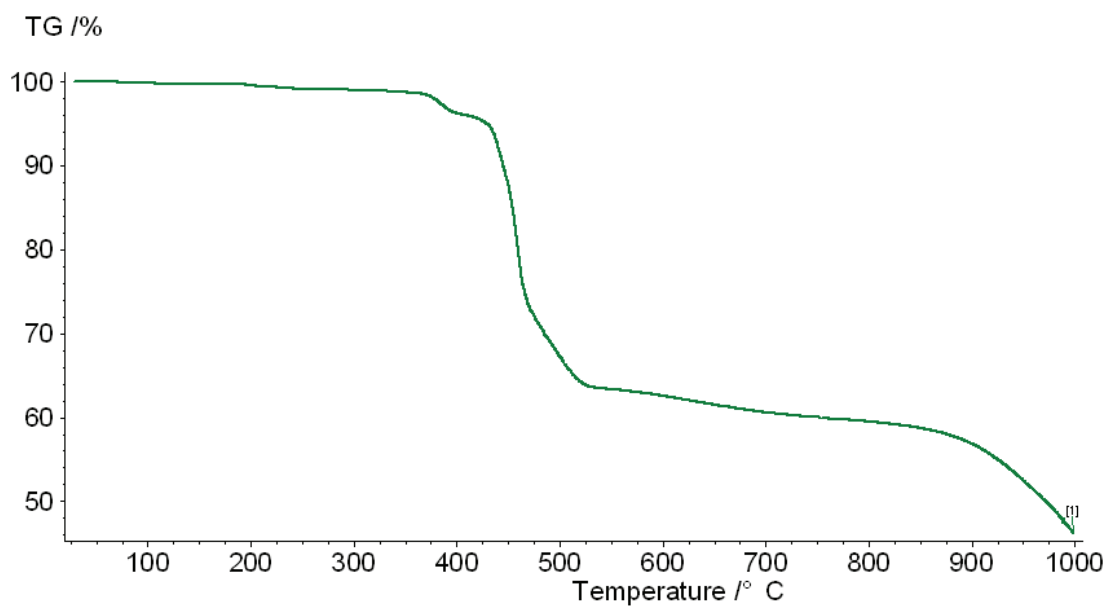
**Figure S4** View of the bilayer in **2**.



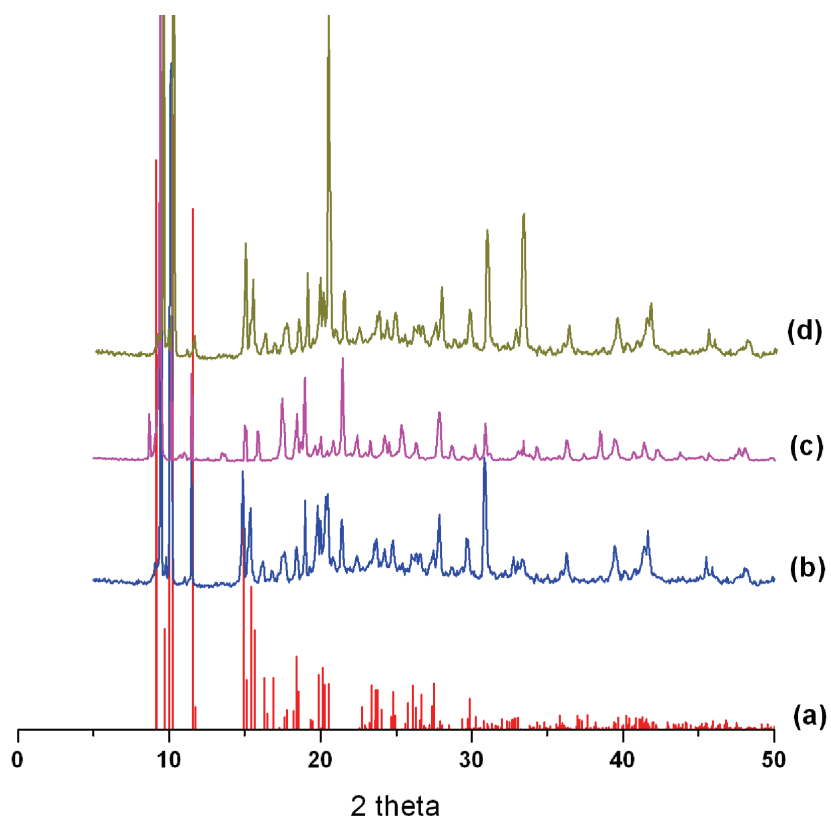
**Figure S5** The packing structure of **4**, showing the interpenetration between the bilayers.



**Figure S6** The TGA curve of complex 1.



**Figure S7** The TGA curve of complex 2.



**Figure S8** XPRD patterns for **1**: (a) calculated on the basis of the structure determined by single-crystal X-ray diffraction; (b) taken at room temperature; (c) after heating **1** at 250 °C for 30 min; (f) after rehydration of sample c for 24 h.