

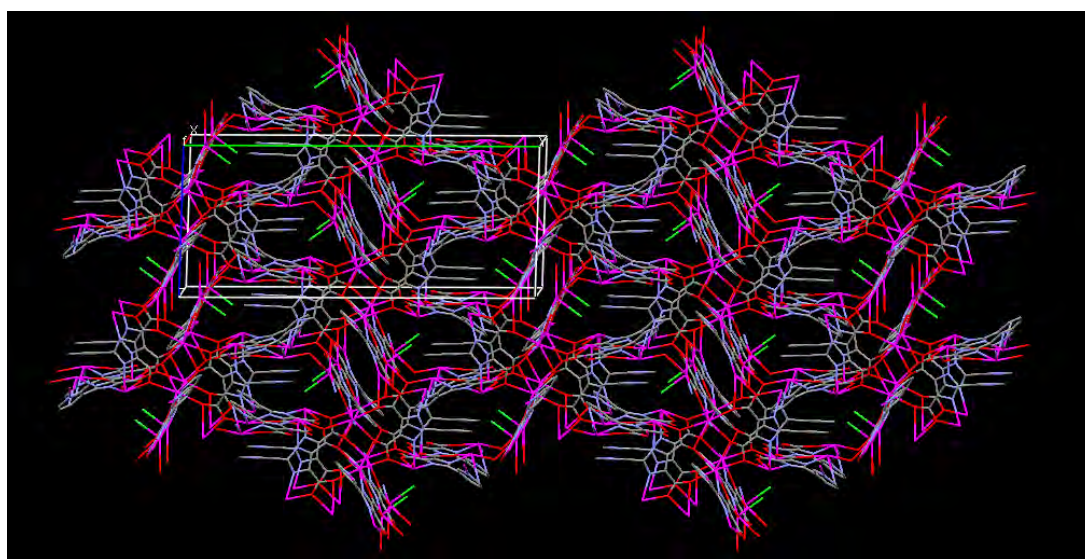
# An unprecedented (3,4,14)-connected 3D metal–organic framework based on planar octanuclear lead(II) cluster as a secondary building unit

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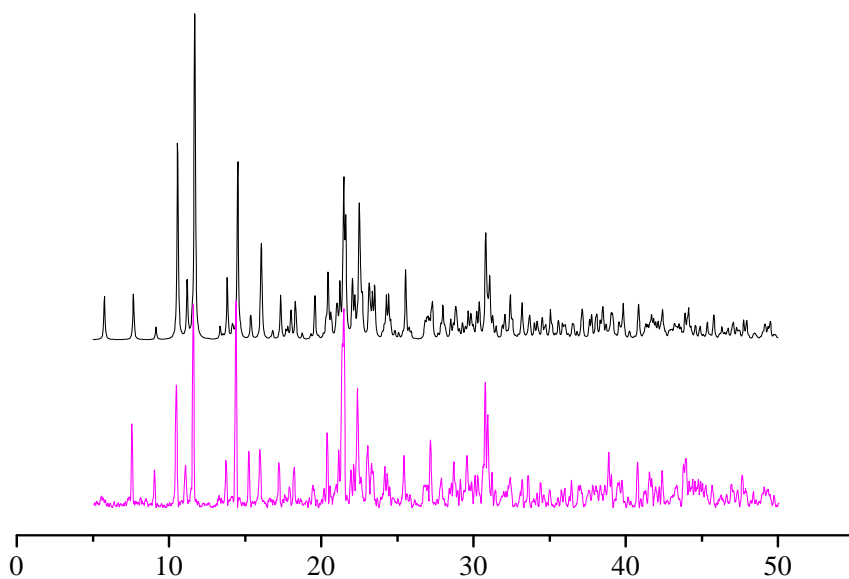
## Supporting information

### Materials and physical measurements

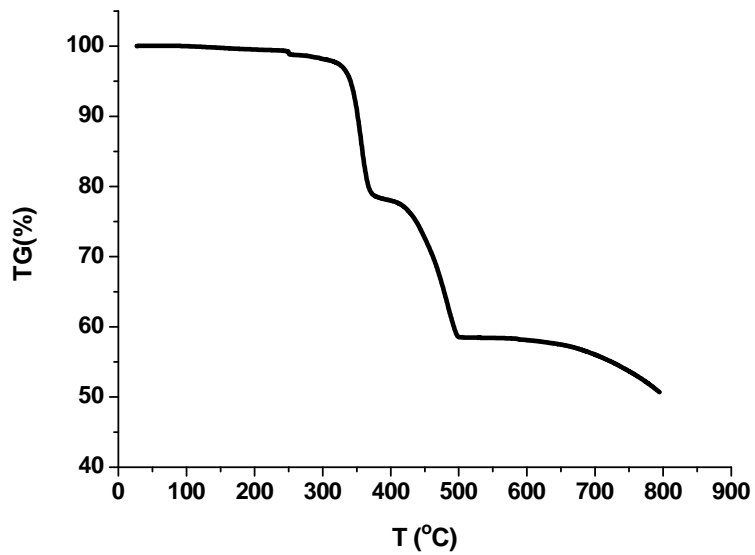
Elemental analyses of C, H and N were measured with a Thermo FlashEA112 elemental analyzer. IR spectra were recorded by using Shimadzu IR Prestige-21 spectromete with KBr pellets in the range from 4000 to 400  $\text{cm}^{-1}$ . X-ray powder diffraction measurements were preformed on a Bruker D8 Advance diffractometer at 40 kV, 40 mA with a Cu-target tube and a graphite monochromator. Solid-state fluorescence spectra were measured by using a Hitachi-2500 spectropho-tometer with a 150 W xenon lamp as light source at room temperature. Thermogravimetric analyses (TG) were determined with a Netzsch STA409PC Thermal Analyzer from room temperature to 800 °C under air atmosphere.



**Fig. S1** The 3D framework of **1**.



**Fig. S2** The simulated X-ray powder diffraction patterns (lower) and the measured one (upper) of complex **1**.



**Fig. S3** The TGA curves of **1**.