

# Effect of Lanthanide Contraction and Rigid Ligand on the Structure of Salen Type Lanthanide Complexes †

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Electronic supplementary information (ESI):

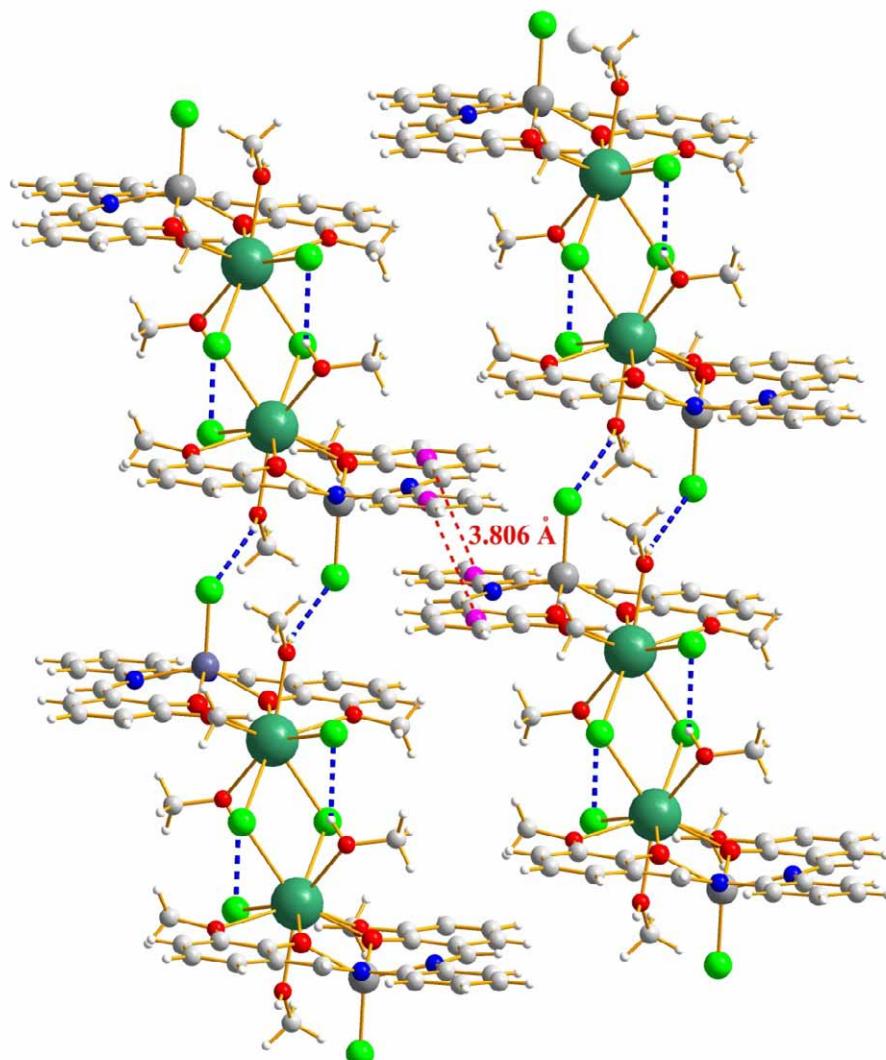


Fig. S1 The 1D chain structure formed by the intermolecular H-bonding and  $\pi-\pi$  interaction in 1.  
The blue dash line shows the H-bonding, and the purple dash line shows the  $\pi-\pi$  interactions  
between two dimers.

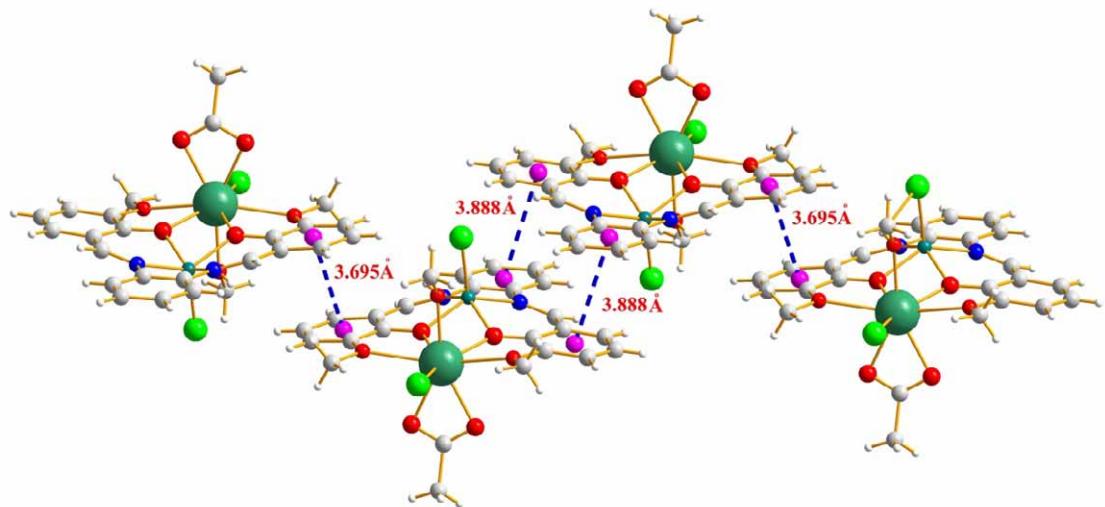


Fig. S2 The 1D chain structure formed by the intermolecular  $\pi$ - $\pi$  interaction in 3. The purple dash line shows the  $\pi$ - $\pi$  interactions between the molecular structures of 3.

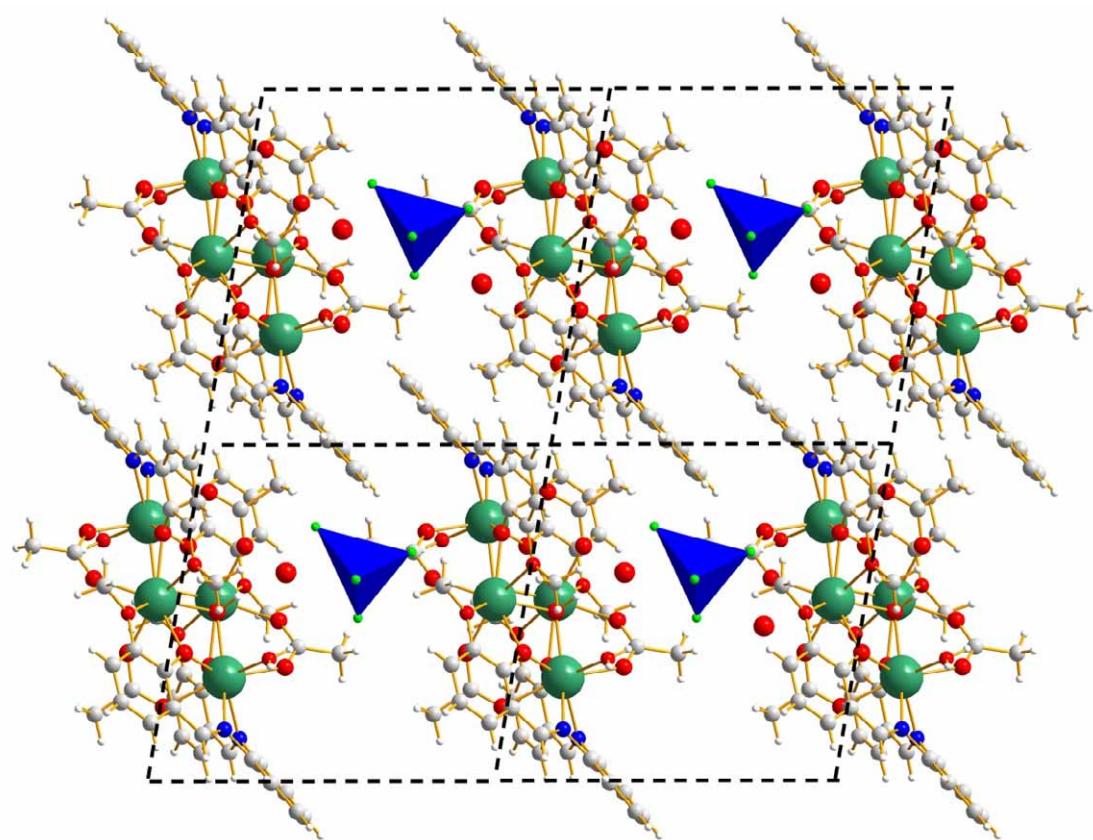


Fig. S3 Viewing along the *b* axis, showing the packing structure of 4 (The blue tetrahedra represent the  $[ZnCl_4]^{2-}$  units and disordered parts have been removed for clarity).

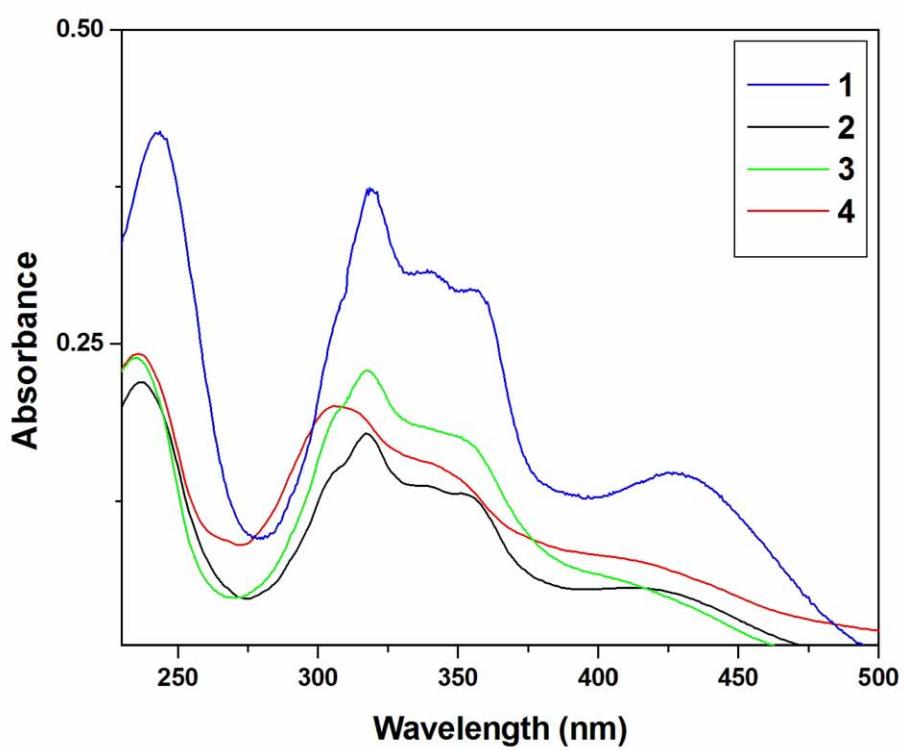


Fig. S4 The UV spectra of **1-4** in solid.

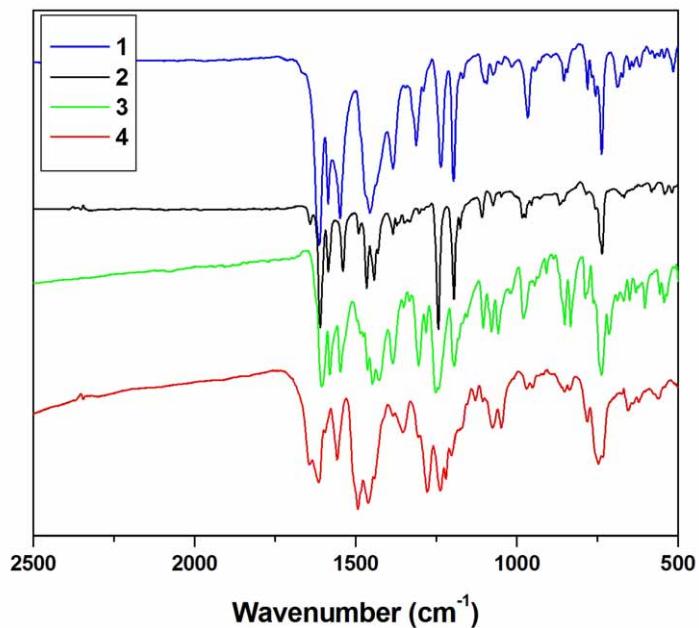


Fig. S5 The IR spectra of **1-4**.