

Supporting Information

Thiophenyl anilato-based NIR-emitting lanthanide ($\text{Ln}^{\text{III}} = \text{Er}$, Yb) dinuclear complexes

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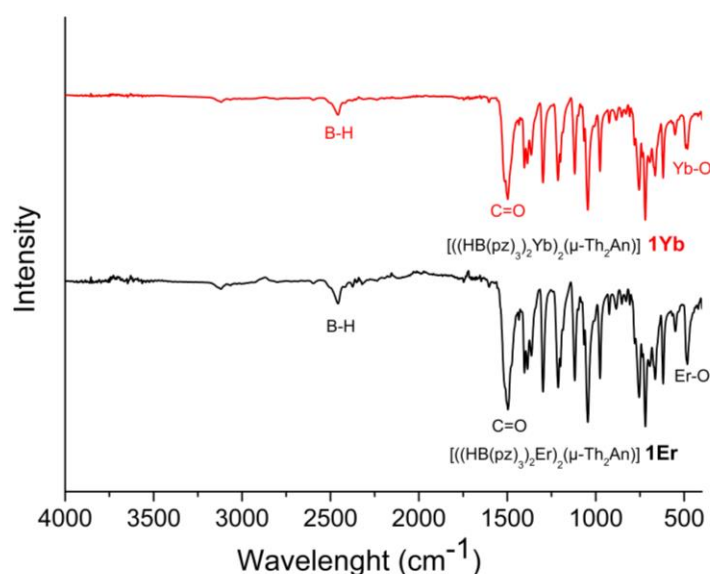


Figure S1. The ATR spectra of **1Yb** and **1Er** with the main bands highlighted.

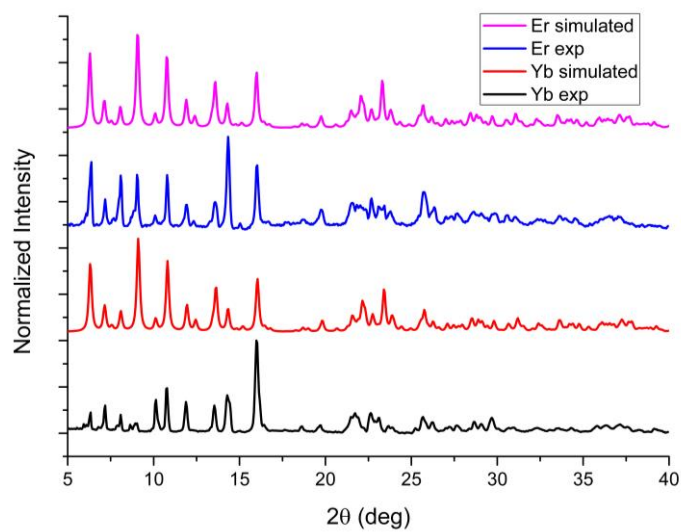


Figure S2. PXRD pattern for **1Yb** and **1Er**, experimental (exp) and simulated from crystal structure (simulated).

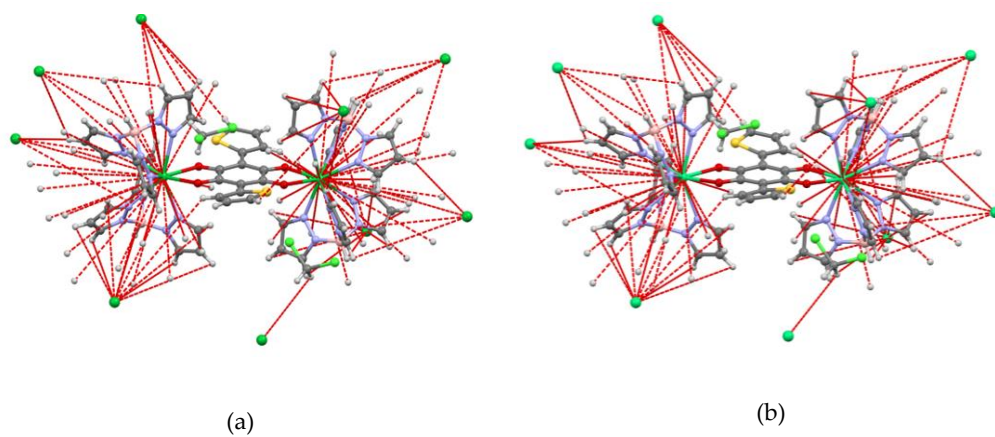


Figure S3. Representation of the intermolecular Ln^{III}...H contact interactions in the 5-7.5 Å range for (a) **1Yb** and (b) **1Er**.

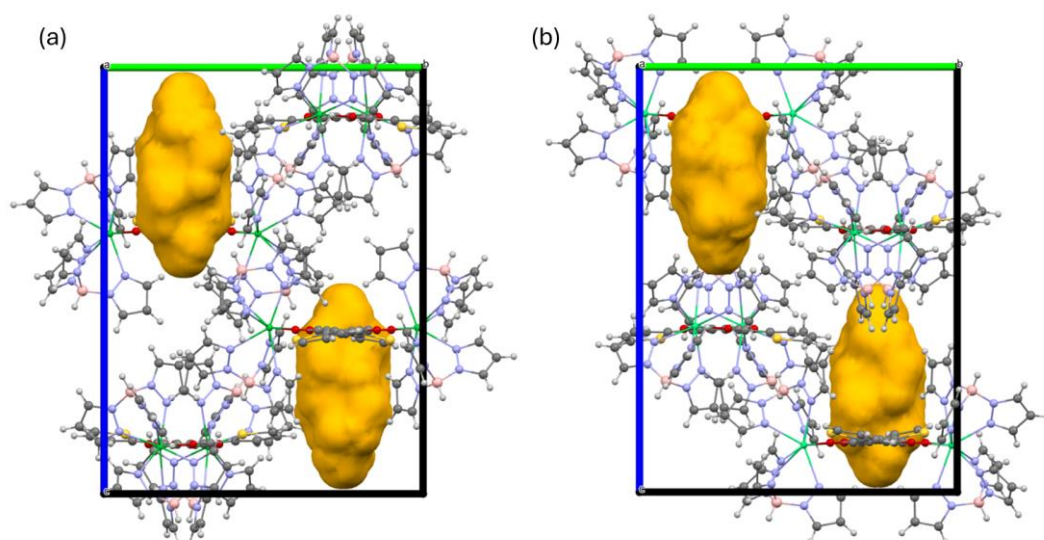


Figure S4. Contact surface area representation of the voids obtained through Mercury software for **1Yb** (a) and **1Er** (b).

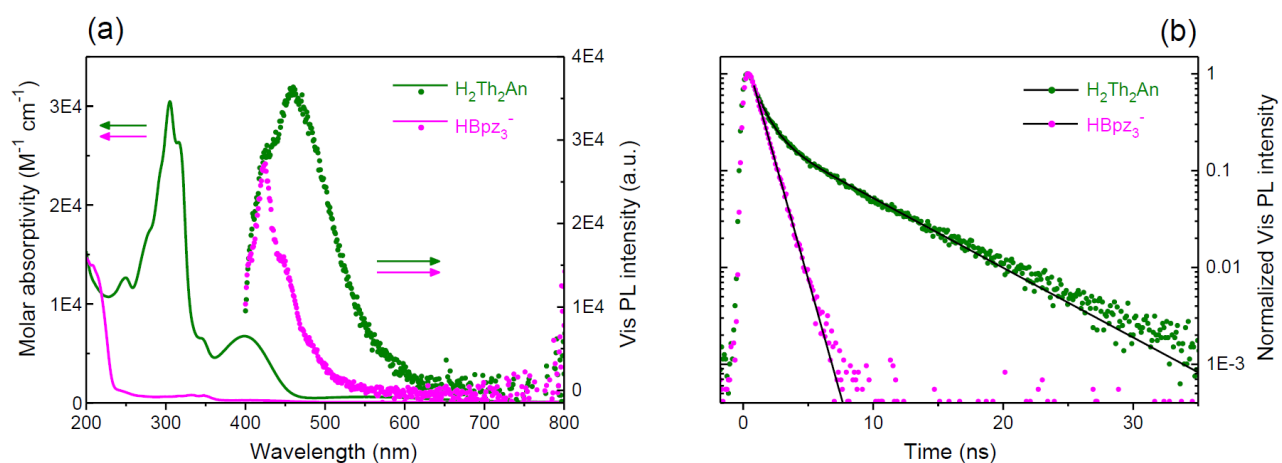


Figure S5. Optical spectroscopy of ligand species in diluted ACN solutions (excitation at 350 nm). (a) Molar absorptivity (left scale) and Cw Vis PL spectra (right scale); (b) Time-resolved Vis PL decay traces. Dots: Experimental data; Solid lines: Mono- and biexponential decay fits.