

Electronic supplementary information

Seven phenoxido-bridged complexes encapsulated by 8-hydroxy-quinoline Schiff base derivatives and β -diketone ligands: single-molecule magnet, magnetic refrigeration and luminescence properties

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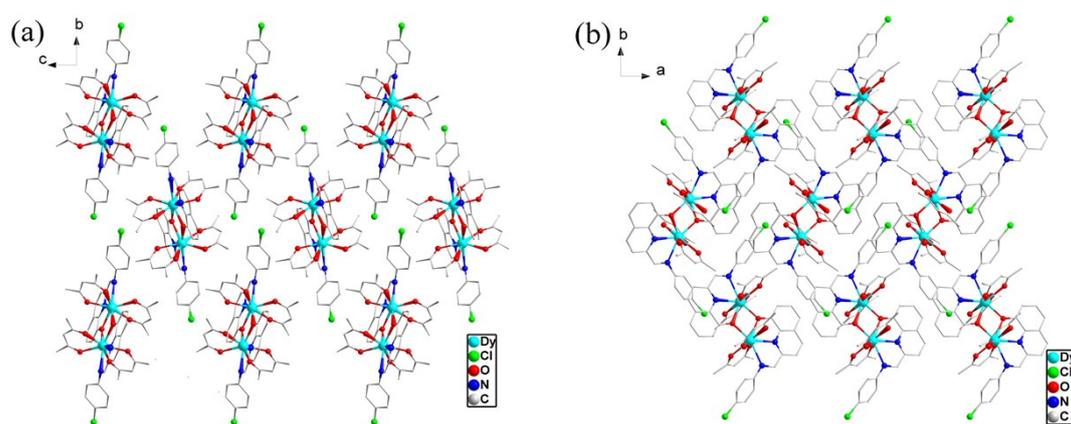


Figure S1. Packing arrangement of complex 4 viewed along the crystallographic *a* axis (a) and *c* axis (b).

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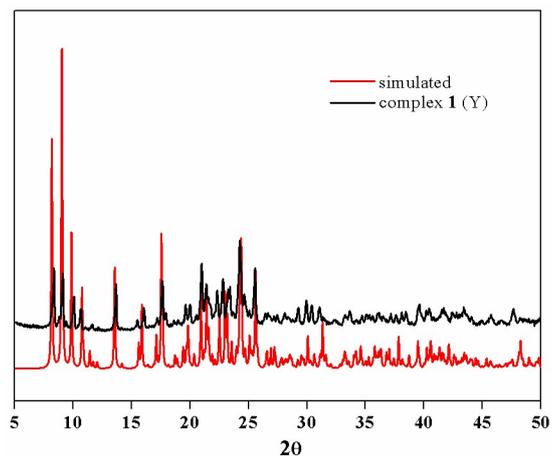


Figure S2. Simulated and experimental PXRD patterns of complex 1.

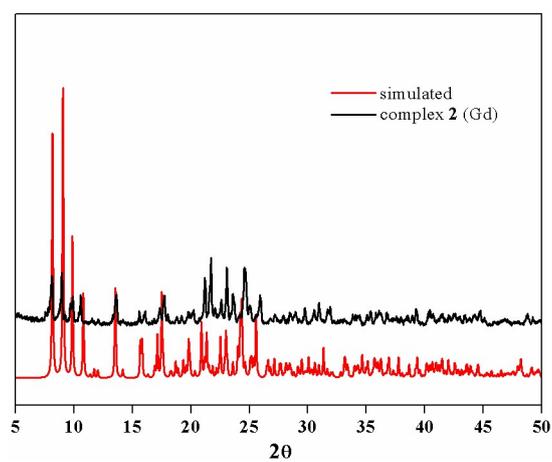


Figure S3. Simulated and experimental PXRD patterns of complex 2.

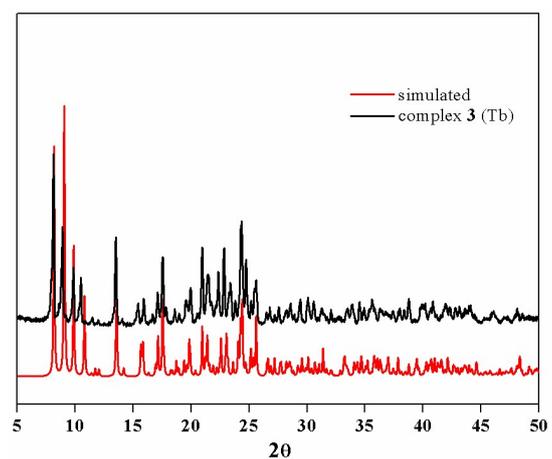


Figure S4. Simulated and experimental PXRD patterns of complex 3.

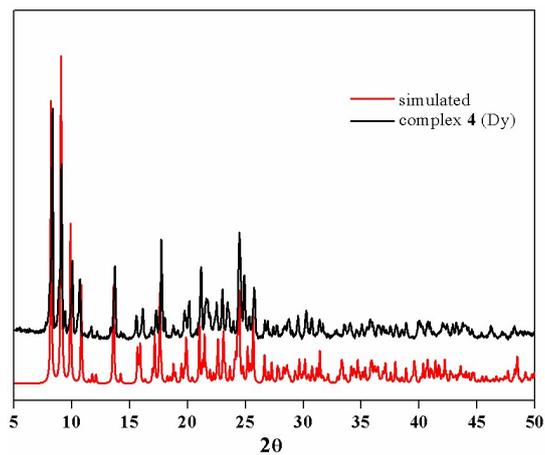


Figure S5. Simulated and experimental PXRD patterns of complex 4.

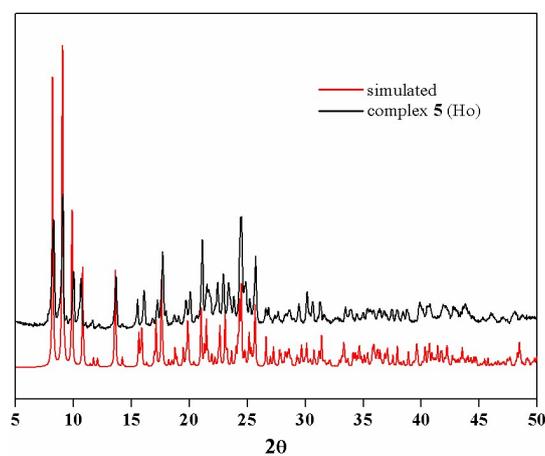


Figure S6. Simulated and experimental PXRD patterns of complex 5.

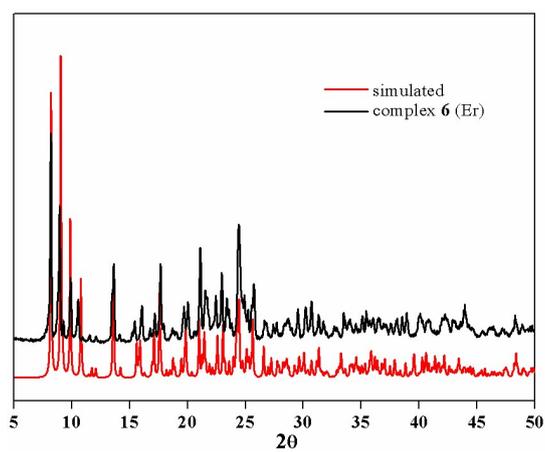


Figure S7. Simulated and experimental PXRD patterns of complex 6.

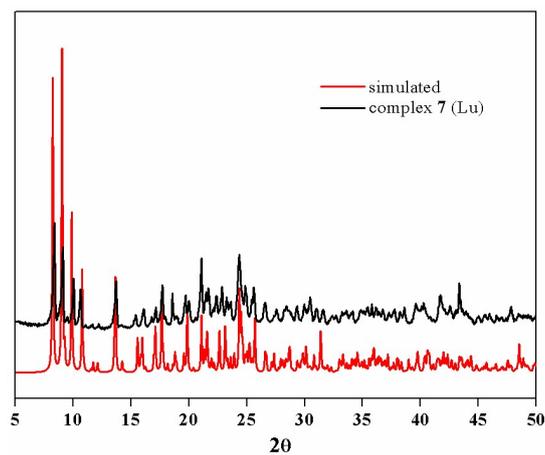


Figure S8. Simulated and experimental PXRD patterns of complex 7.

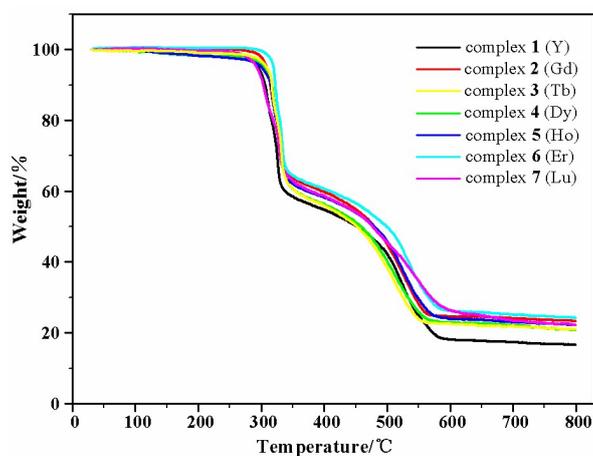


Figure S9. TGA curves for 1–7.

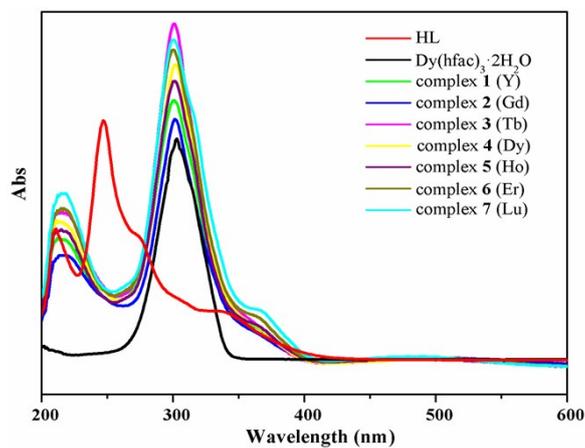


Figure S10. The UV-vis spectra of HL, $\text{Dy}(\text{hfac})_3 \cdot 2\text{H}_2\text{O}$ and complexes 1–7

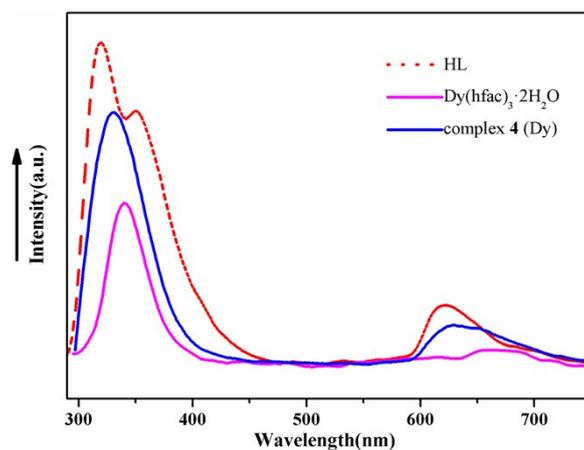


Figure S11. The emission spectra of HL, Dy(hfac)₃·2H₂O and complex 4.

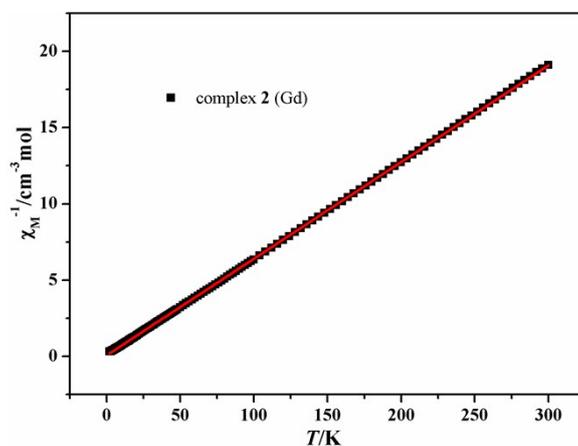


Figure S12. Temperature dependence of the magnetic susceptibility in the form of χ_M^{-1} vs T for **2**

[(■) experimental data; (—) best-fit curve].

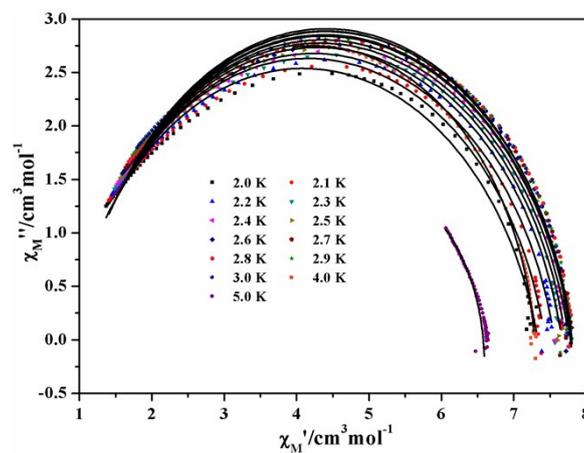


Figure S13. Cole–Cole plots for **4** measured in zero-dc field. The solid lines are the best fit to the experimental data, obtained with the generalized Debye model with $\alpha = 0.068$ – 0.156 for **4**