Electronic Supplementary Information

A New Family of 3d-4f Heterometallic Coordination Polymers Assembled with 1*H*-1,2,3-Triazole-4,5-Dicarboxylic Acid: Syntheses, Structures and Magnetic Properties

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1. Power X-Ray Diffraction

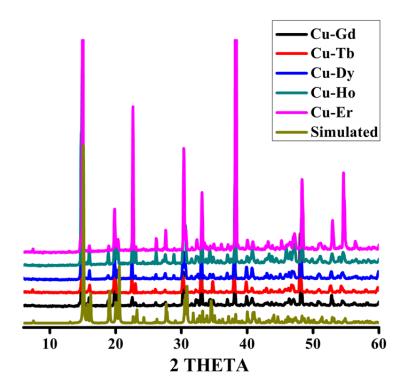


Fig. S1. Comparisons of the experimental PXRD patterns of as-synthesized Cu-Ln with that simulated from their

single crystal data.

2. Infrared Spectra

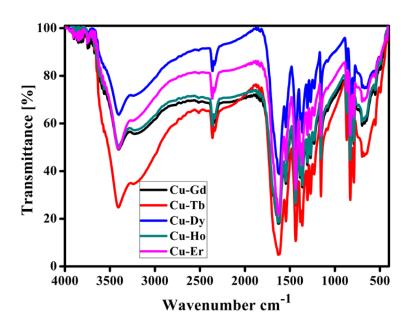


Fig. S2. Infrared spectra of Cu-Ln.

3. Scanning Electron Microscopy

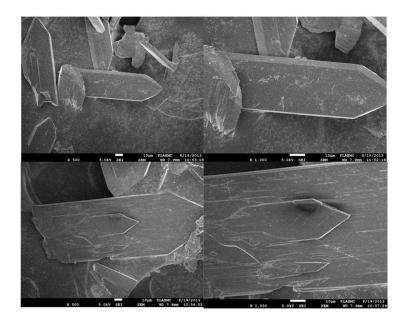


Fig. S3. Optional SEM images of the as-synthesized Cu-Dy (up) and Cu-Tb (bottom).

4. Thermogravimetric Analysis

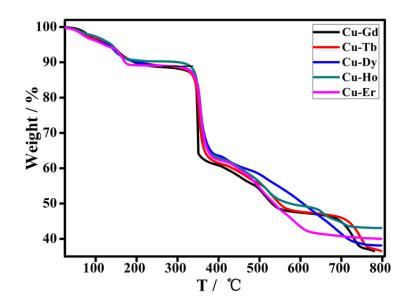


Fig. S4. The thermal gravimetric analysis (TGA) data of Cu-Ln.

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5. Magnetism Measurements

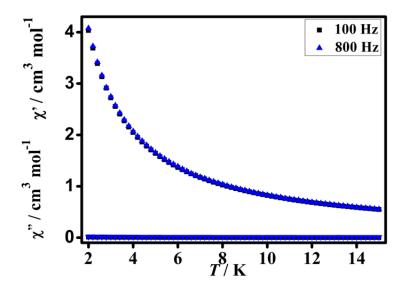


Fig. S5. Temperature dependence of the in-phase (χ') and out-of- phase (χ'') components of ac susceptibilities for

Cu-Gd under the indicated frequencies.

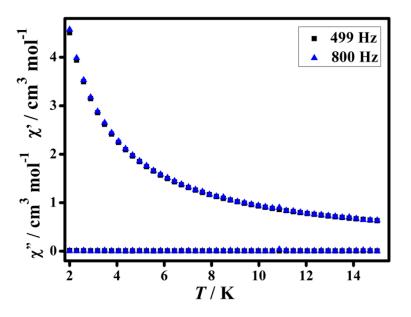


Fig. S6. Temperature dependence of the in-phase (χ ') and out-of- phase (χ '') components of ac susceptibilities for

Cu-Tb under the indicated frequencies.

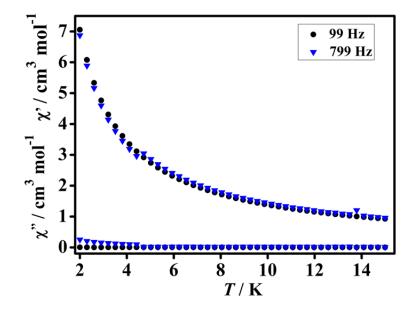
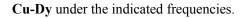


Fig. S7. Temperature dependence of the in-phase (χ ') and out-of- phase (χ ') components of ac susceptibilities for



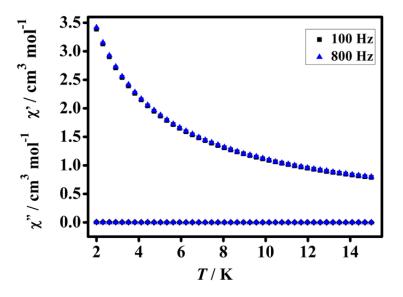


Fig. S8. Temperature dependence of the in-phase (χ ') and out-of- phase (χ '') components of ac susceptibilities for **Cu-Ho** under the indicated frequencies.

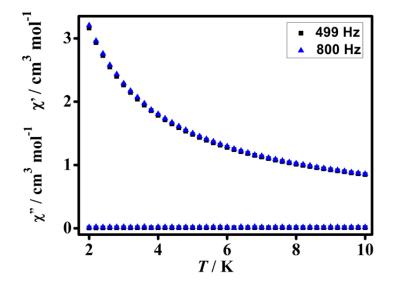


Fig. S9. Temperature dependence of the in-phase (χ ') and out-of- phase (χ ') components of ac susceptibilities for **Cu-Er** under the indicated frequencies.