

## Supporting Information

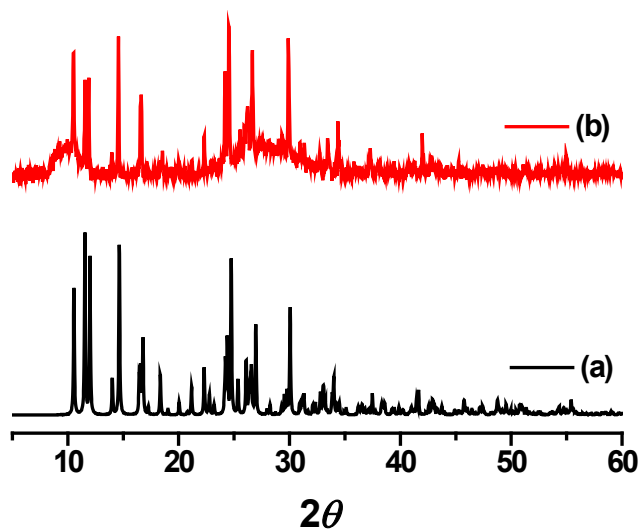
# Metal-directed assembly of coordination polymers with the versatile ligand 2-(1*H*-benzotriazol-1-yl)acetic acid: from discrete structures to two-dimensional networks

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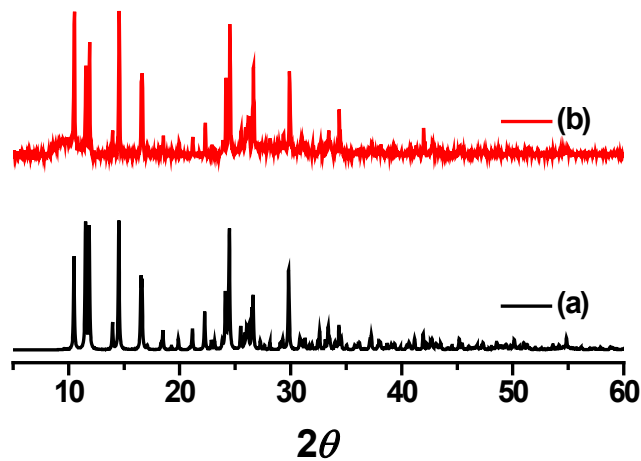
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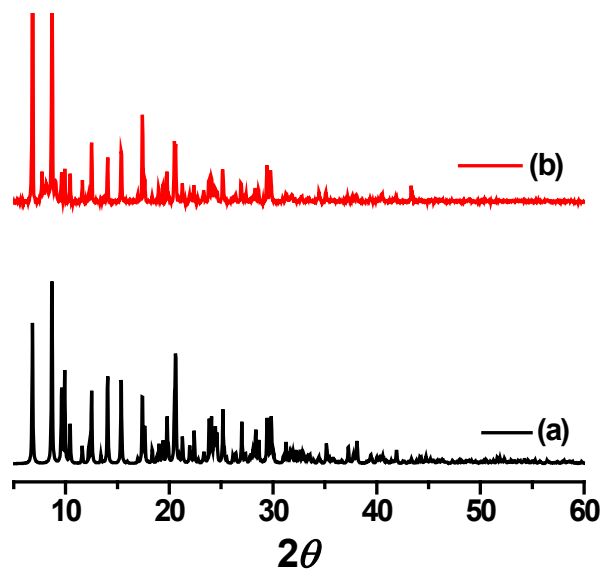
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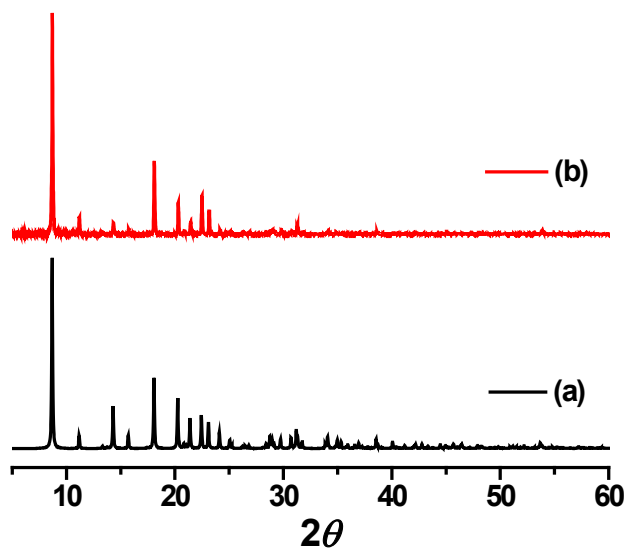
**Figure S1.** Powder X-ray diffraction (PXRD) plots. (a) **1** (simulated); (b) powder of **1** (experimental).



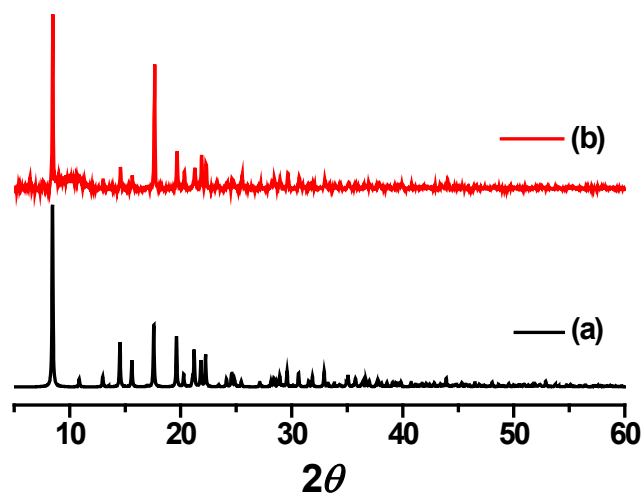
**Figure S2.** PXRD plots. (a) **2** (simulated); (b) powder of **2** (experimental).



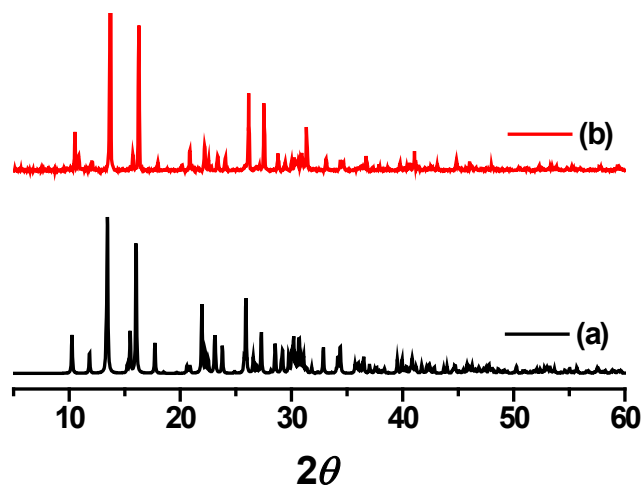
**Figure S3.** PXRD plots. (a) **3** (simulated); (b) powder of **3** (experimental).



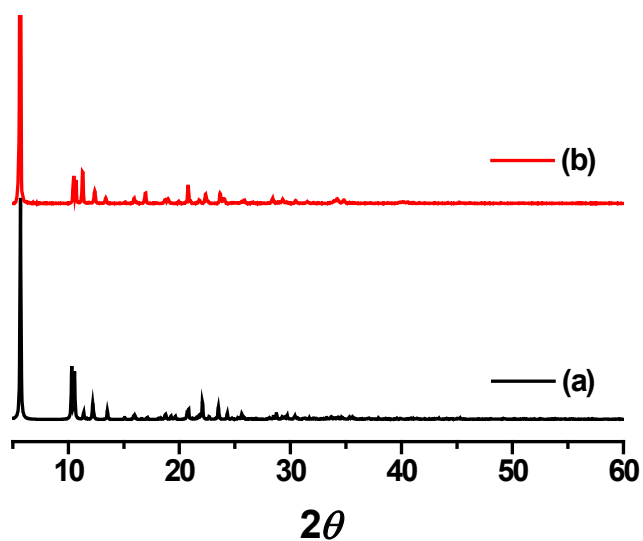
**Figure S4.** PXRD plots. (a) **4** (simulated); (b) powder of **4** (experimental).



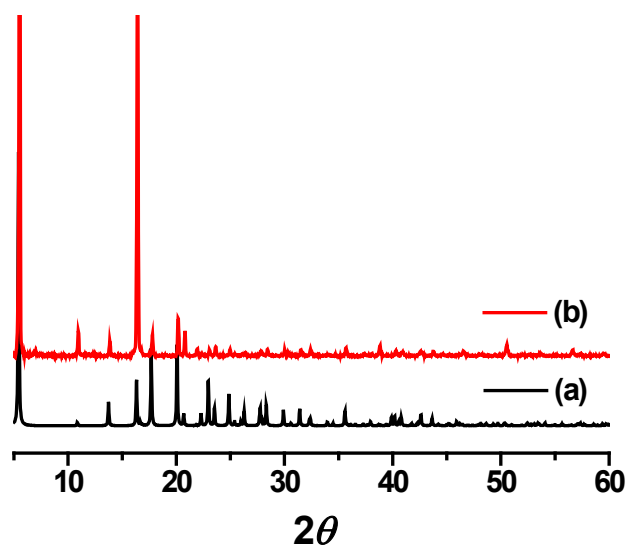
**Figure S5.** PXRD plots. (a) **5** (simulated); (b) powder of **5** (experimental).



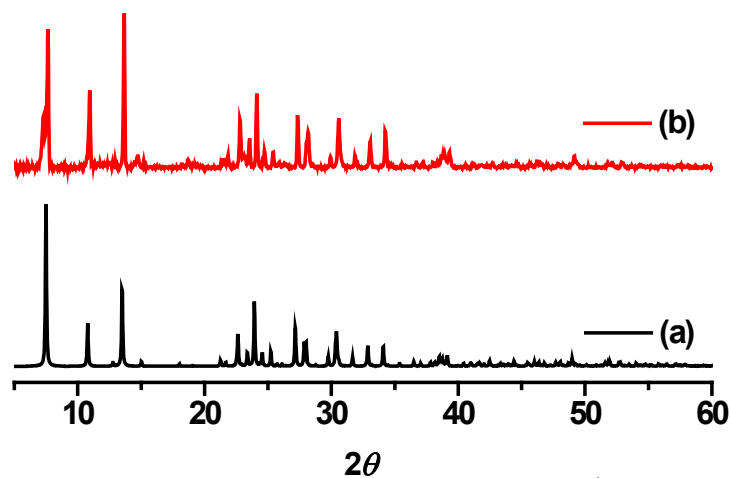
**Figure S6.** PXRD plots. (a) **6** (simulated); (b) powder of **6** (experimental).



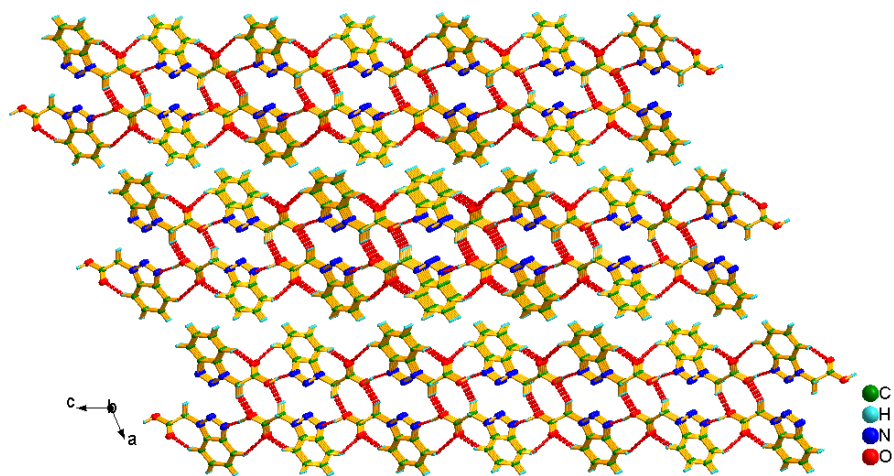
**Figure S7.** PXRD plots. (a) **7** (simulated); (b) powder of **7** (experimental).



**Figure S8.** PXRD plots. (a) **8** (simulated); (b) powder of **8** (experimental).



**Figure S9.** PXR D plots. (a) **BTA-Ag** (simulated from the literature<sup>1</sup>); (b) powder of **BTA-Ag** (our primarily experimental).



**Figure S10.** Packing diagram of HBTA along the *b* axis.

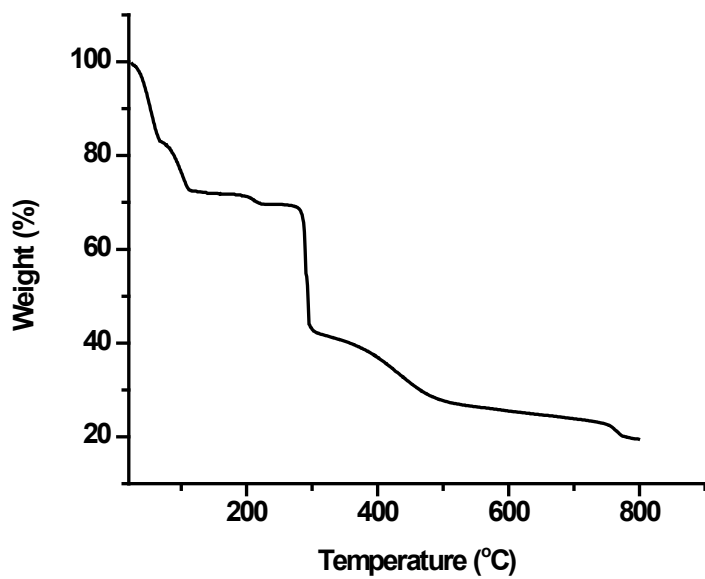


Figure S11. TGA cure of 1.

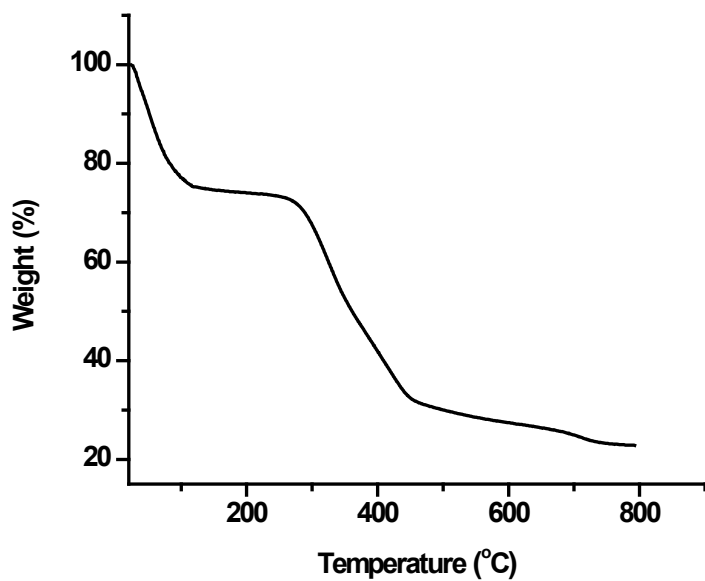


Figure S12. TGA cure of 2.

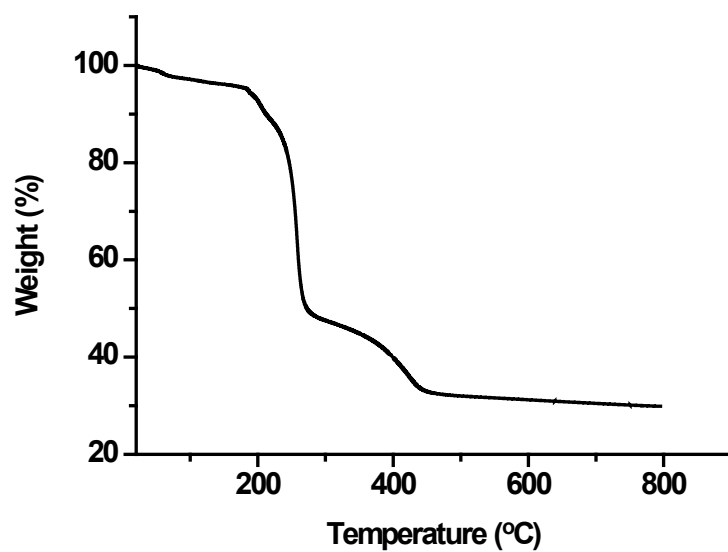


Figure S13. TGA cure of 3.

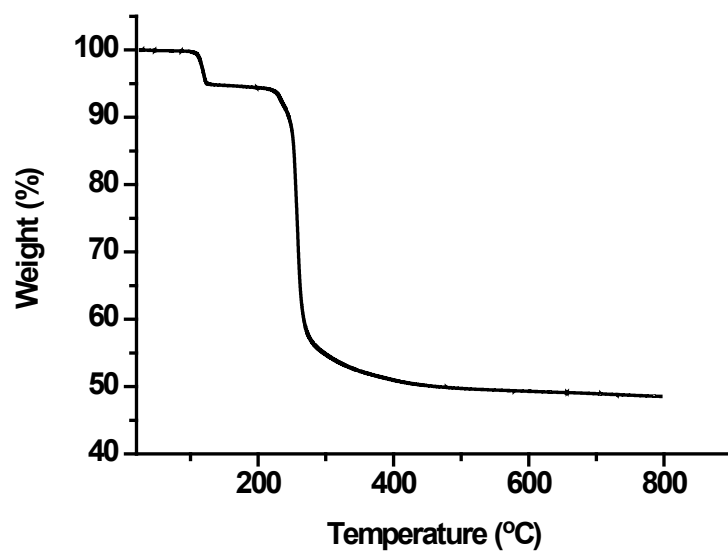


Figure S14. TGA cure of 4.



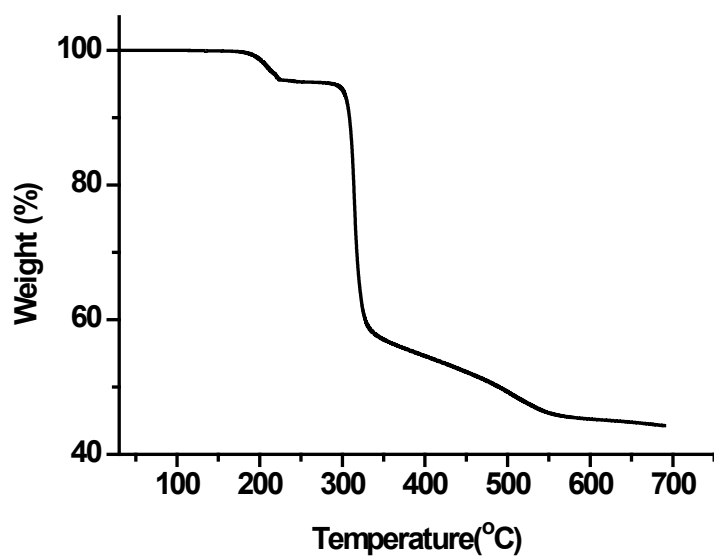


Figure S15. TGA cure of 5.

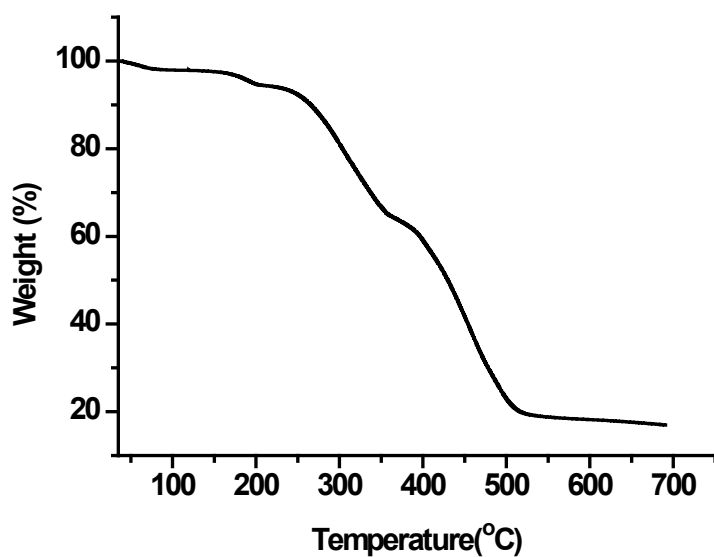


Figure S16. TGA cure of 6.

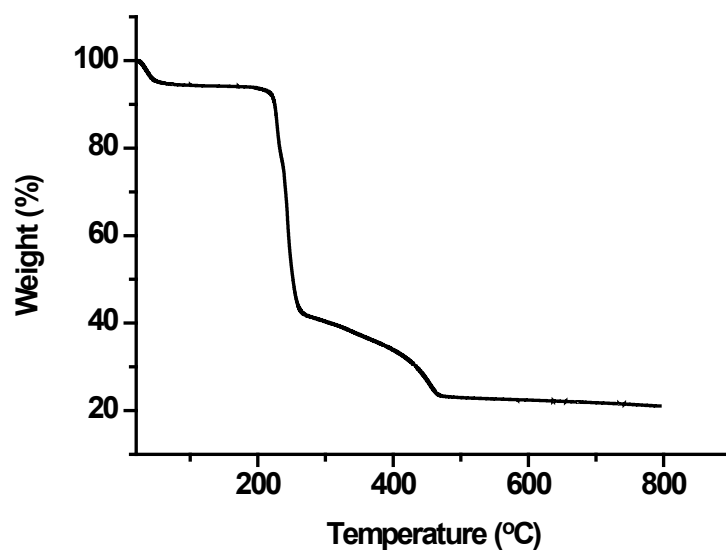


Figure S17. TGA cure of 7.

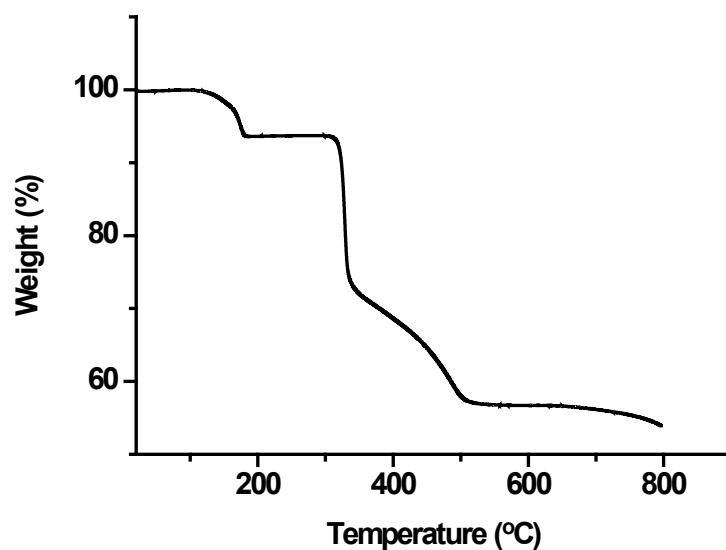


Figure S18. TGA cure of 8.

#### References

1. Hu, T. L.; Du, W. P.; Hu, B. W.; Li, J. R.; Bu, X. H.; Cao, R., Novel Ag(I) complexes withazole heterocycle ligands bearing acetic acid group: synthesis, characterization and crystal structures. *CrystEngComm* **2008**, *10* (8), 1037-1043.