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Neutral mixed-metal coordination polymers based on a ditopic acetylacetonate, Mg(II) and Ag(I): syntheses, characterization and solvent-dependent topologies

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Supplementary Information

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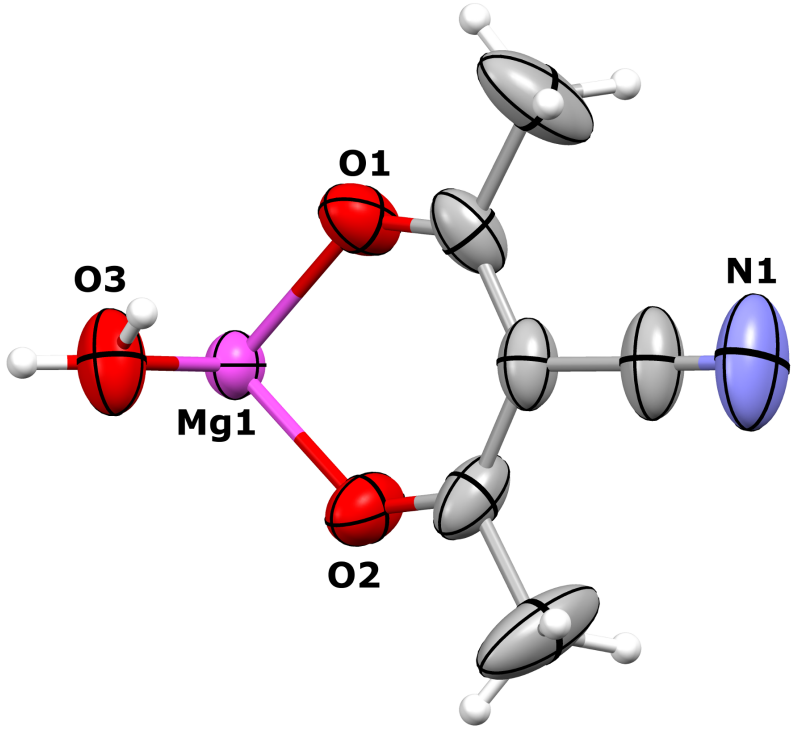

Fig. S1 Displacement ellipsoid plot of the asymmetric unit in **1**. Ellipsoids are drawn at 50 % probability.

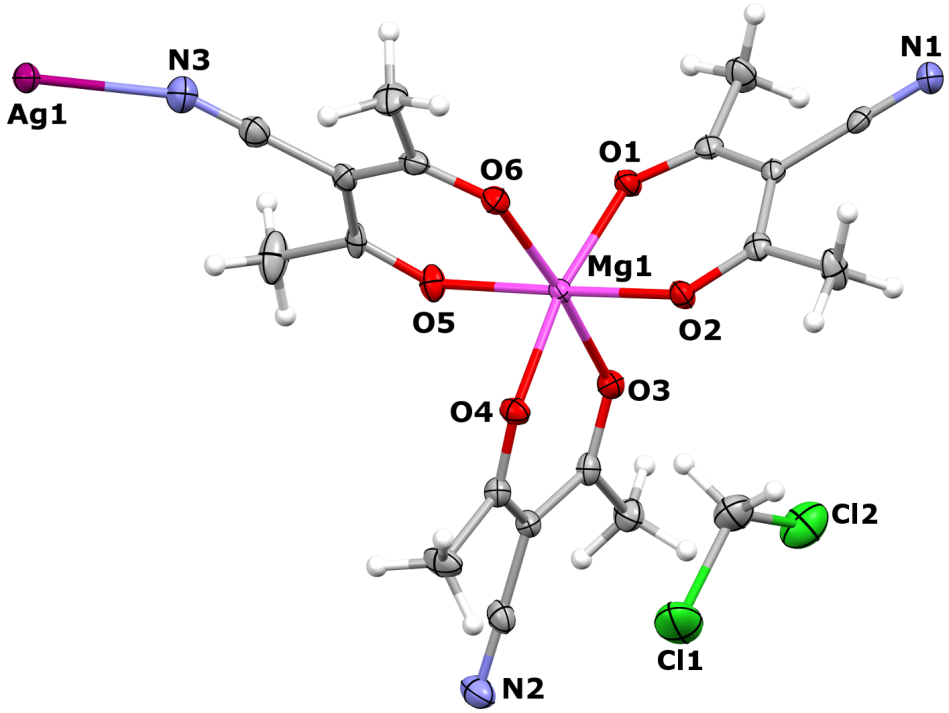

Fig. S2 Displacement ellipsoid plot of the asymmetric unit in **2a**. Ellipsoids are drawn at 50 % probability.

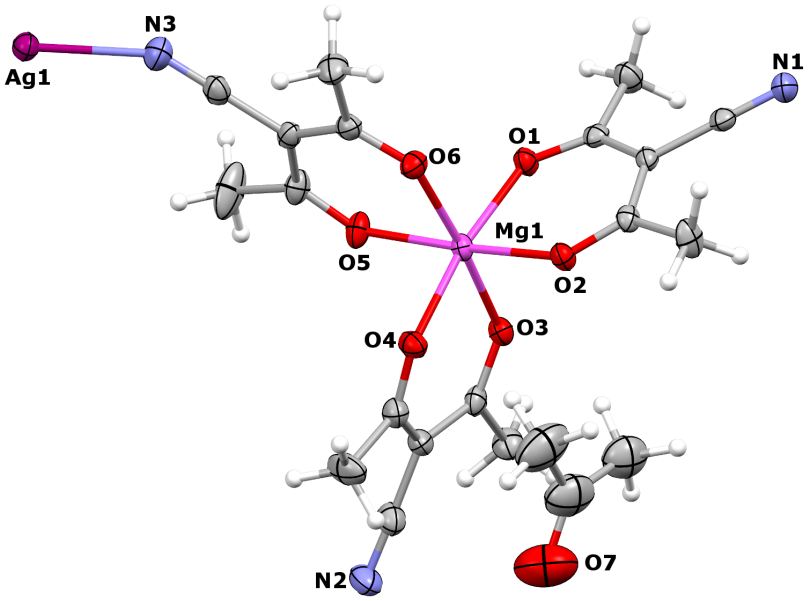

Fig. S3 Displacement ellipsoid plot of the asymmetric unit in **2b**. Ellipsoids are drawn at 50 % probability.

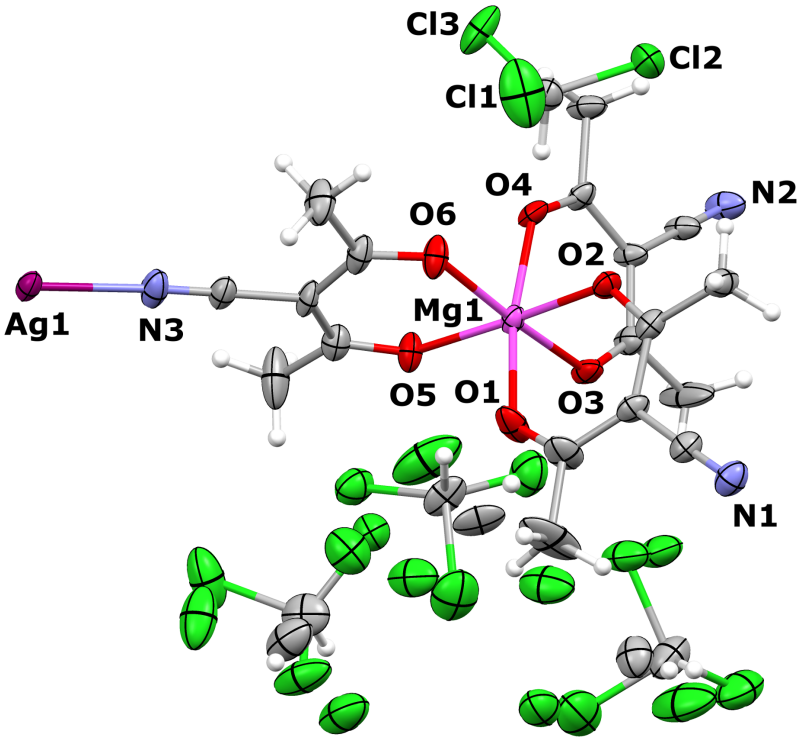

Fig. S4 Displacement ellipsoid plot of the asymmetric unit in **3a**. Ellipsoids are drawn at 50 % probability and disordered chloroform molecules are not labeled for clarity.

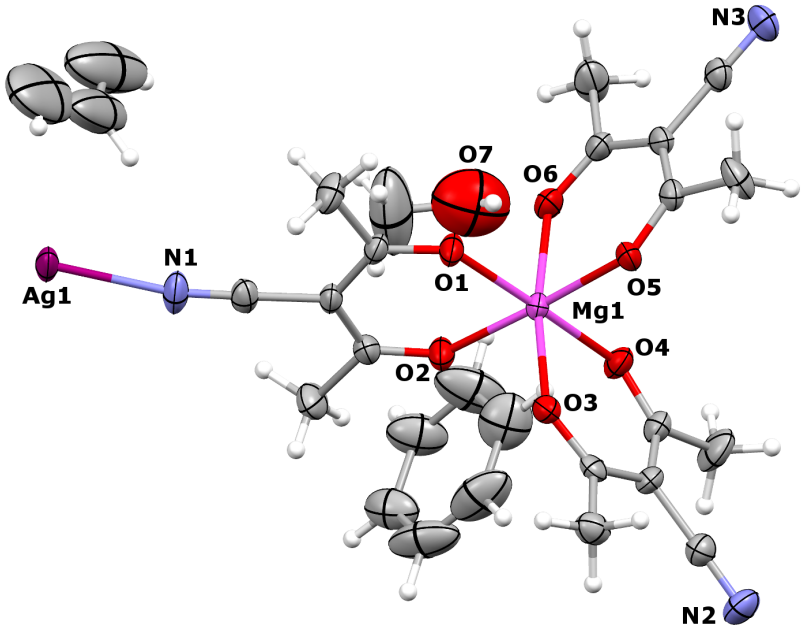

Fig. S5 Displacement ellipsoid plot of the asymmetric unit in **3b**. Ellipsoids are drawn at 50 % probability.

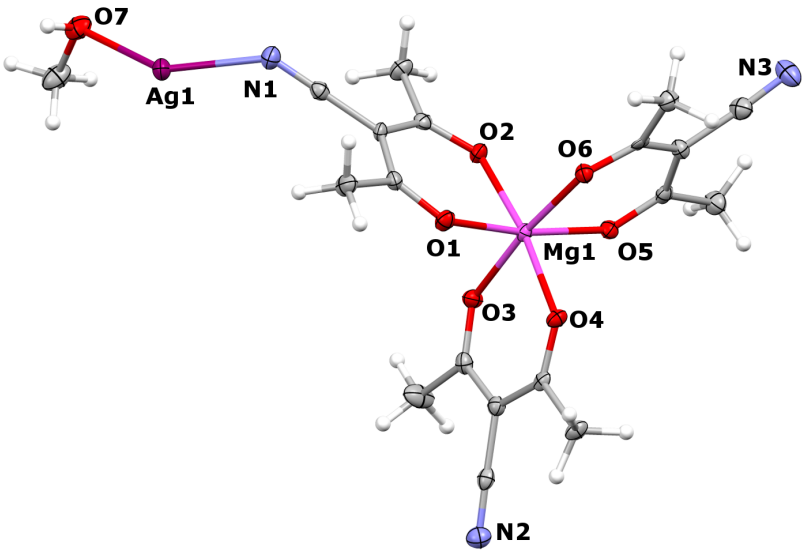

Fig. S6 Displacement ellipsoid plot of the asymmetric unit in **4**. Ellipsoids are drawn at 50 % probability.

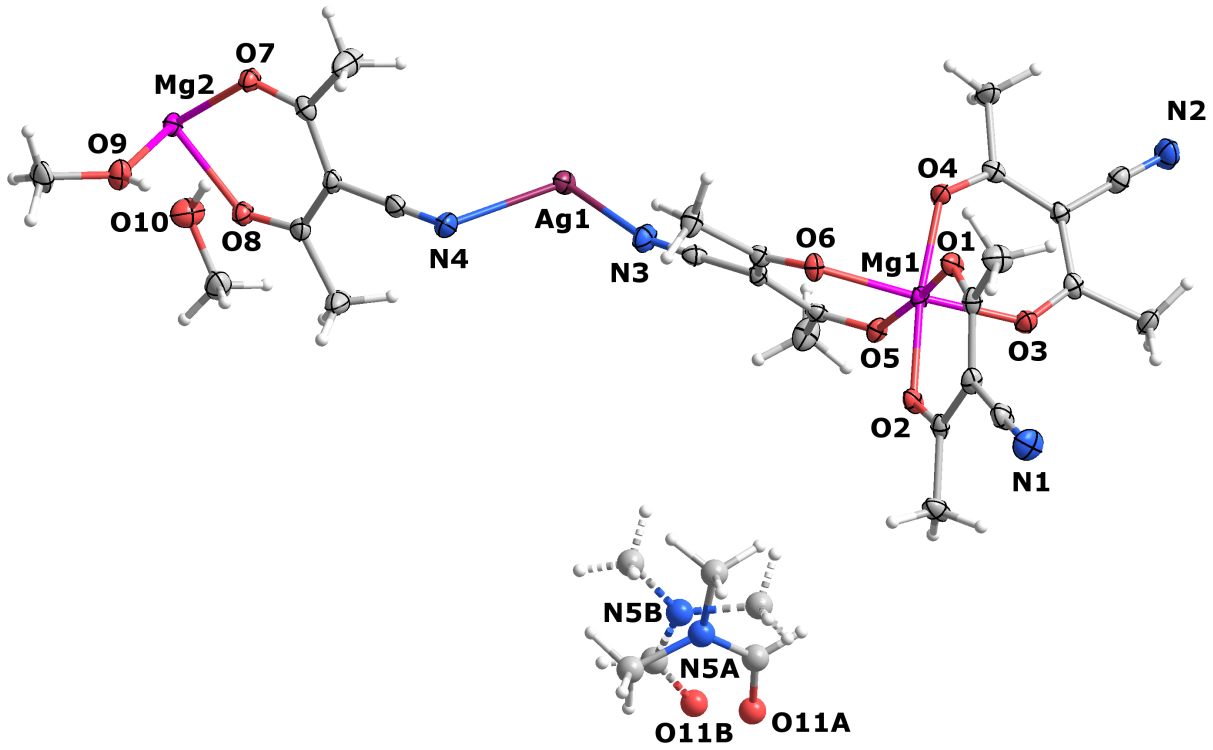

Fig. S7 Displacement ellipsoid plot of the asymmetric unit in **5**. N,N-dimethylformamide is disordered over two orientations and treated as isotropic. Ellipsoids are drawn at 50 % probability.

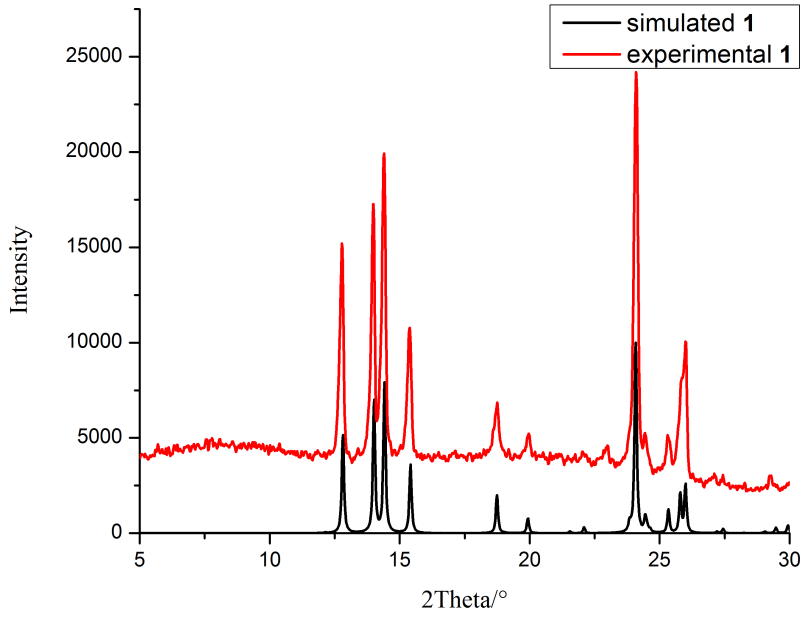

Fig. S8 Simulated and experimental powder patterns for **1**.

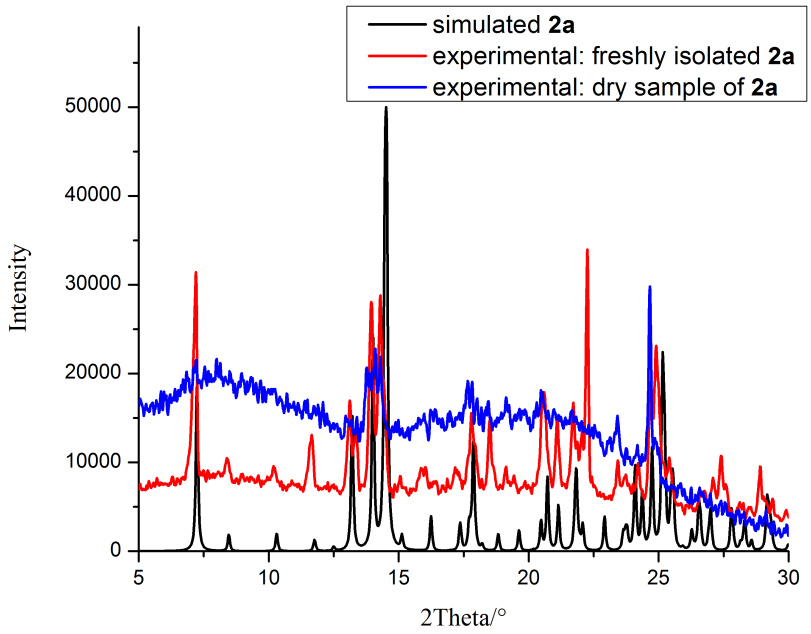

Fig. S9 Simulated and experimental powder patterns for freshly isolated and dry samples of **2a**.

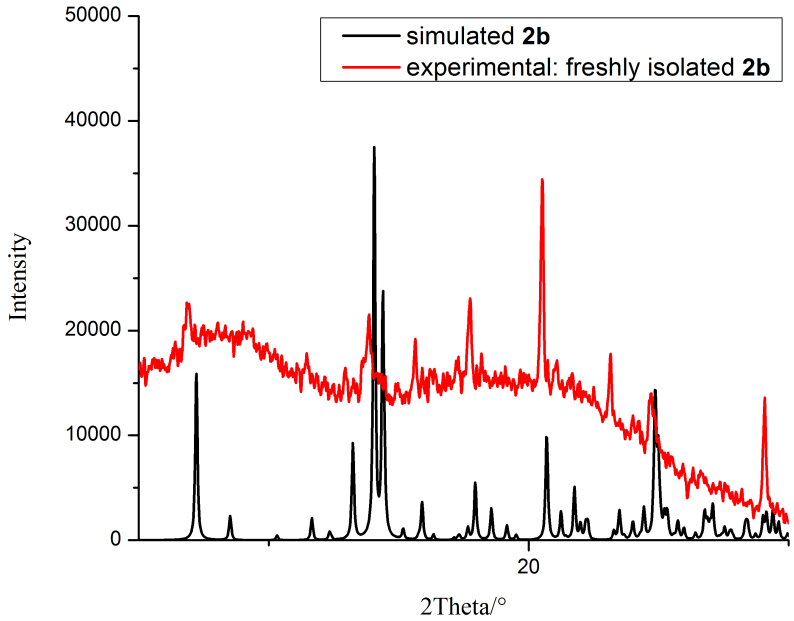

Fig. S10 Simulated and experimental powder patterns for freshly isolated **2b**.

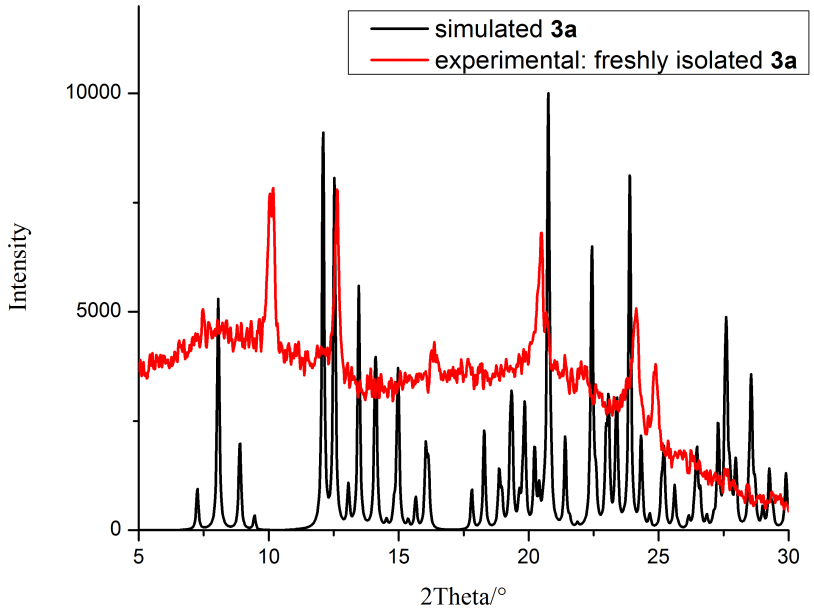

Fig. S11 Simulated and experimental powder patterns for freshly isolated **3a**; low crystallinity and poor match indicate fast desolvation, in agreement with the microanalytical results.

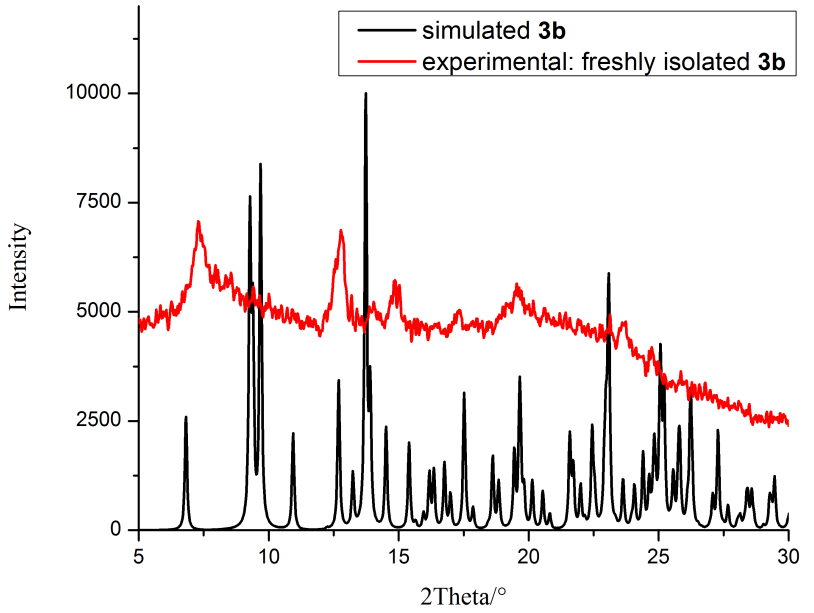

Fig. S12 Simulated and experimental powder patterns for freshly isolated **3b**; low crystallinity and poor match indicate fast desolvation, in agreement with the microanalytical results.

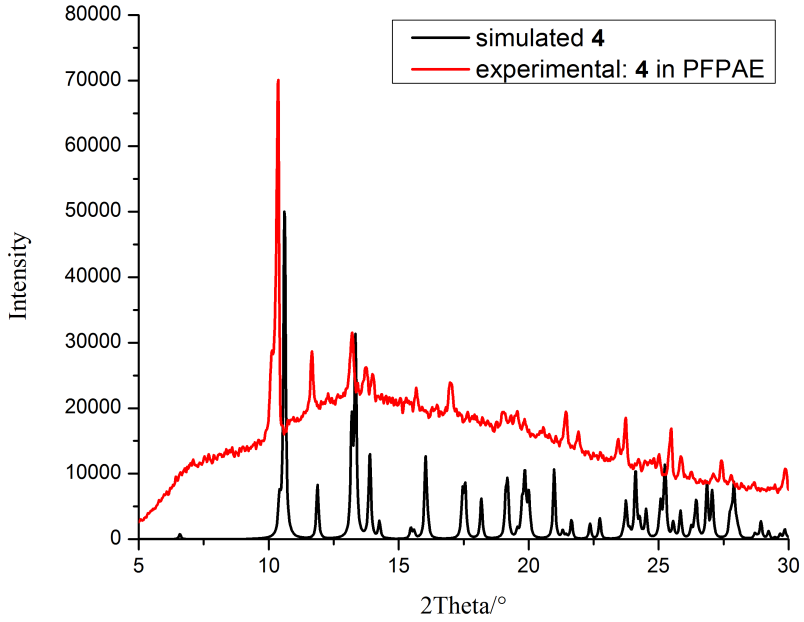

Fig. S13 Experimental powder patterns for a PFPAE protected sample of **4** and the simulated pattern based on the single crystal diffraction analysis of **4**. Perfluoropolyallylether (PFPAE) was used to protect the crystallites from solvent loss; this protectant causes the high amorphous background in the experimental diagram.

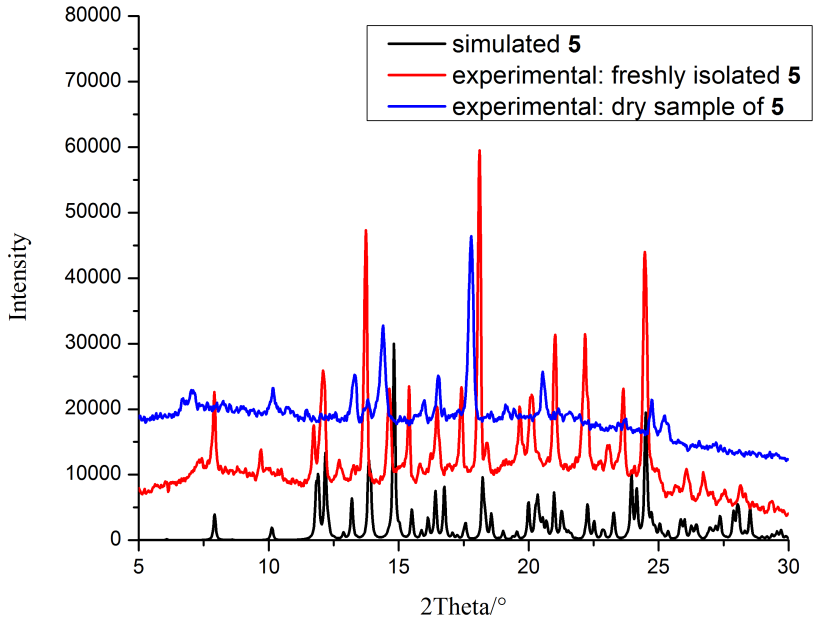

Fig. S14 Simulated and experimental powder patterns for freshly isolated and dry samples of **5**.

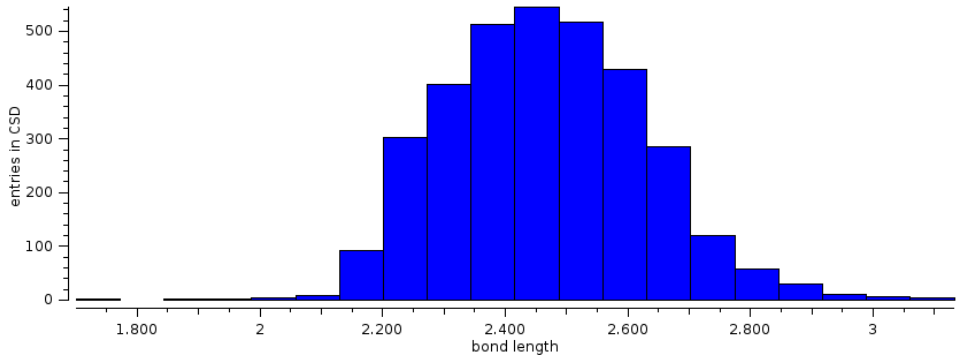

Fig. S15 Histogram of Ag-O bond distances for five-coordinated Ag including at least one Ag-O bond.