

Electronic Supplementary Information for Dalton Transactions  
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## **A new family of octanuclear $\text{Cu}_4\text{Ln}_4$ ( $\text{Ln} = \text{Gd}, \text{Tb}$ and $\text{Dy}$ ) spin clusters**

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### **Supporting Information**

Table S1 Bond valence sum calculations for **1**

Table S2 Bond valence sum calculations for **2**

Fig. S1. Plot of intensity vs  $2\theta/\lambda$  for powder diffraction data for **1**

Fig. S2. Plot of intensity vs  $2\theta/\lambda$  for powder diffraction data for **2**

Table S1.

Bond valence sum calculations for **1**

	Cu(I)	Cu(II)	Cu(III)
Cu1	1.606	<u>1.837</u>	2.310
Cu2	1.640	<u>1.811</u>	2.360
	Gd(III)		
Gd1	<u>2.956</u>		
Gd2	<u>2.971</u>		

Table S2.

Bond valence sum calculations for **2**

	Cu(I)	Cu(II)	Cu(III)
Cu1	1.594	<u>1.817</u>	2.291
Cu2	1.619	<u>1.788</u>	2.331
	Tb(III)		
Tb1	<u>2.932</u>		
Tb2	<u>3.004</u>		

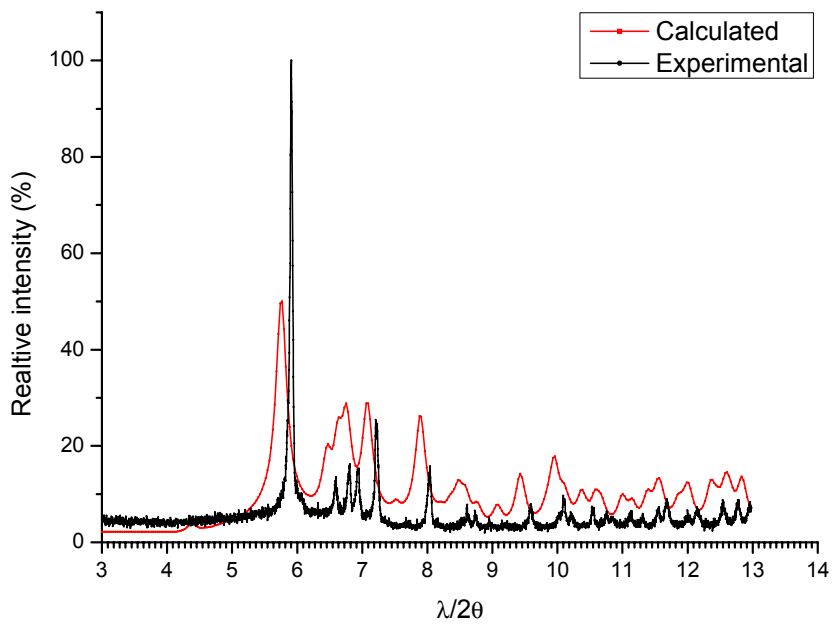


Fig. S1. Plot of intensity vs  $2\theta/\lambda$  for powder diffraction data for **1**.

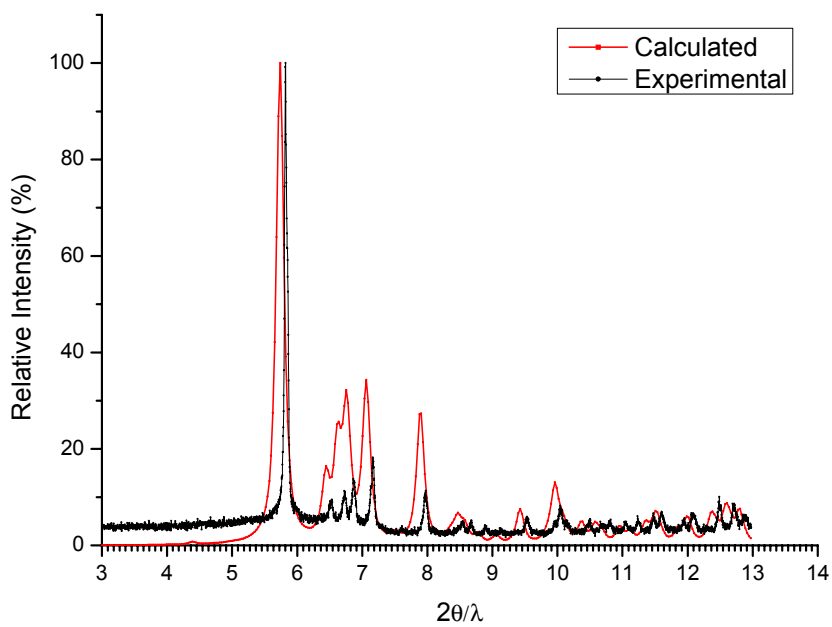


Fig. S2. Plot of intensity vs  $2\theta/\lambda$  for powder diffraction data for **2**.