

SUPPORTING INFORMATION

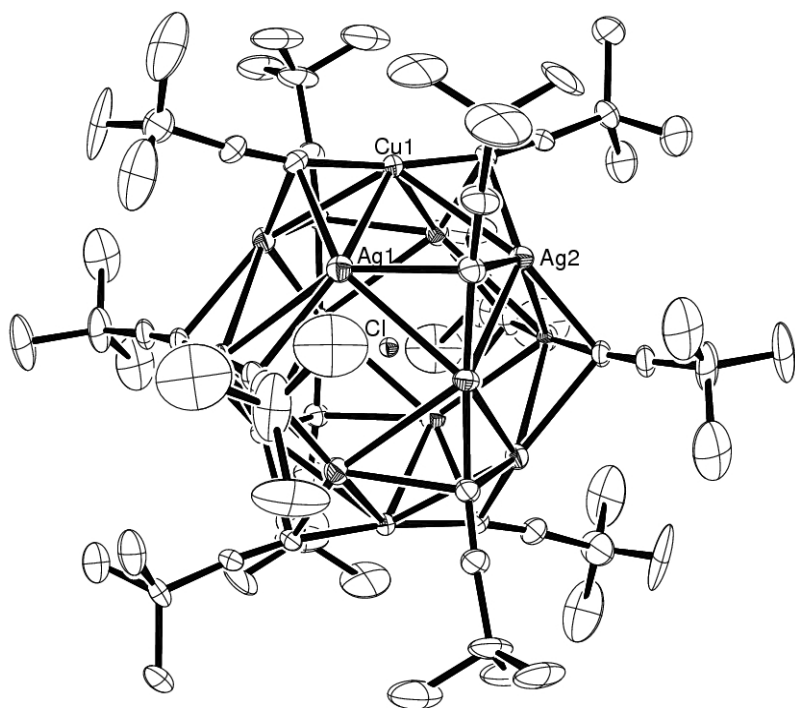
Halide-Ion-Templated Ag_8Cu_6 Rhombic Dodecahedrons: Synthesis, Structure and Reactivity of $[\text{Ag}_8\text{Cu}_6(\text{C}\equiv\text{CtBu})_{12}\text{X}]\text{BF}_4$ ($\text{X} = \text{Cl}, \text{Br}$)

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Fig S1. ORTEP plot of cation of $[\text{Ag}_8\text{Cu}_6(\text{C}\equiv\text{CtBu})_{12}\text{Cl}]\text{BF}_4$ (**2**). Thermal ellipsoids are at 20% probability.



ORTEP plot showing asymmetric unit of cation of $[\text{Ag}_8\text{Cu}_6(\text{C}\equiv\text{CtBu})_{12}\text{Cl}]\text{BF}_4$ (**2**). Thermal ellipsoids are at 20% probability.

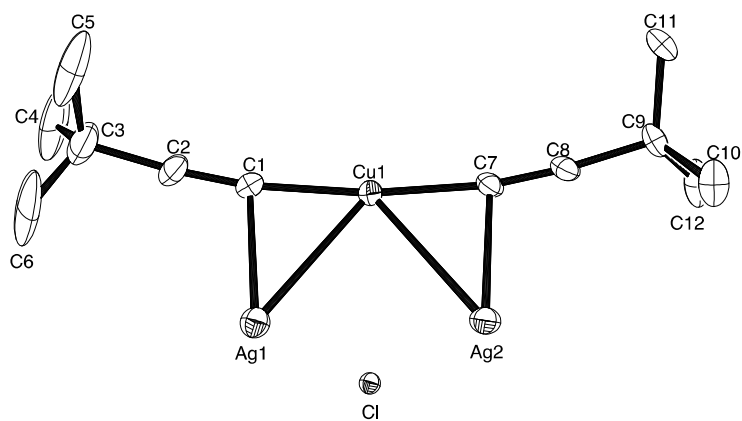
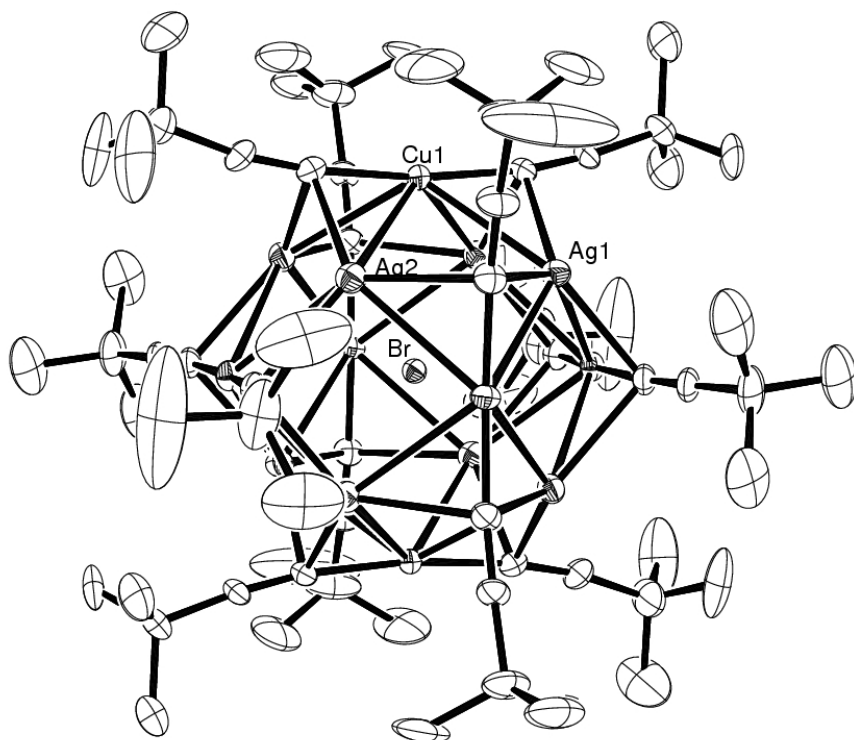


Fig S2. ORTEP plot of cation of $[\text{Ag}_8\text{Cu}_6(\text{C}\equiv\text{CtBu})_{12}\text{Br}]\text{BF}_4$ (**4**). Thermal ellipsoids are at 20% probability.



ORTEP plot showing asymmetric unit of cation of $[\text{Ag}_8\text{Cu}_6(\text{C}\equiv\text{CtBu})_{12}\text{Br}]\text{BF}_4$ (**4**). Thermal ellipsoids are at 20% probability.

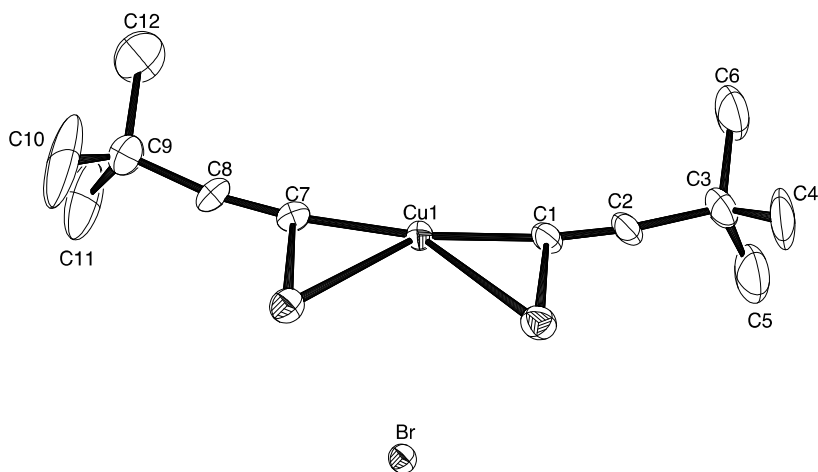


Fig S3. Normalized emission spectra of 50 μM solutions of Cl@Ag_{14} cluster **1** (blue) and $\text{Cl@Ag}_8\text{Cu}_6$ cluster **2** (red) in dichloromethane. Samples were irradiated at 283 nm. Spectra were measured on a Varian CARY Eclipse fluorescence spectrophotometer in capped quartz cuvettes.

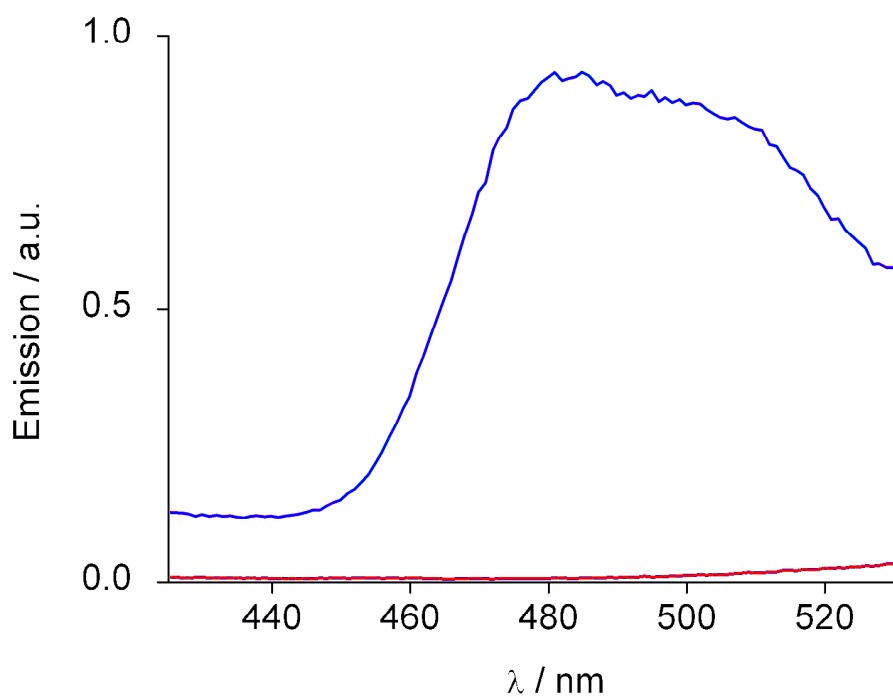


Fig S4. 500 MHz ^1H NMR spectrum of 1-benzyl-4-*tert*-butyl-1,2,3-triazole in CDCl_3 (**5**).

