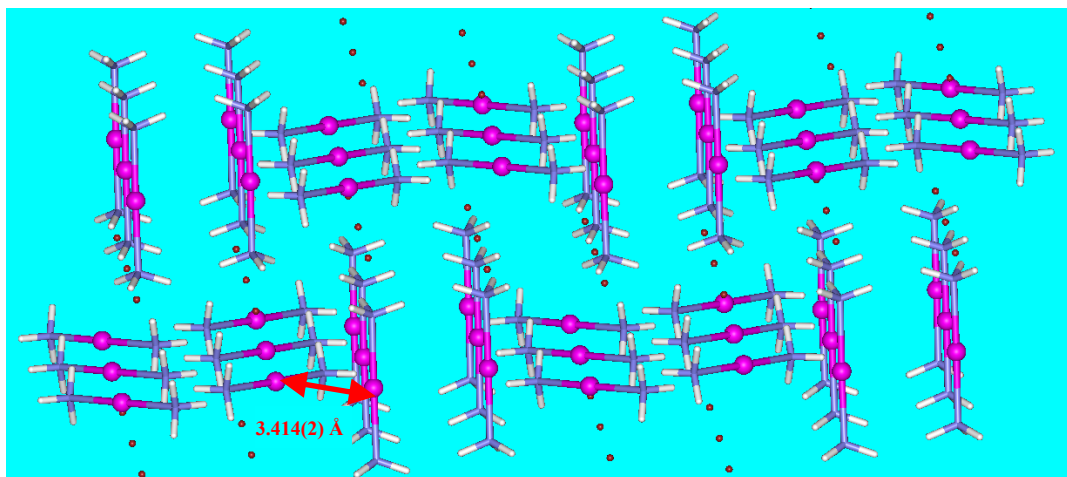
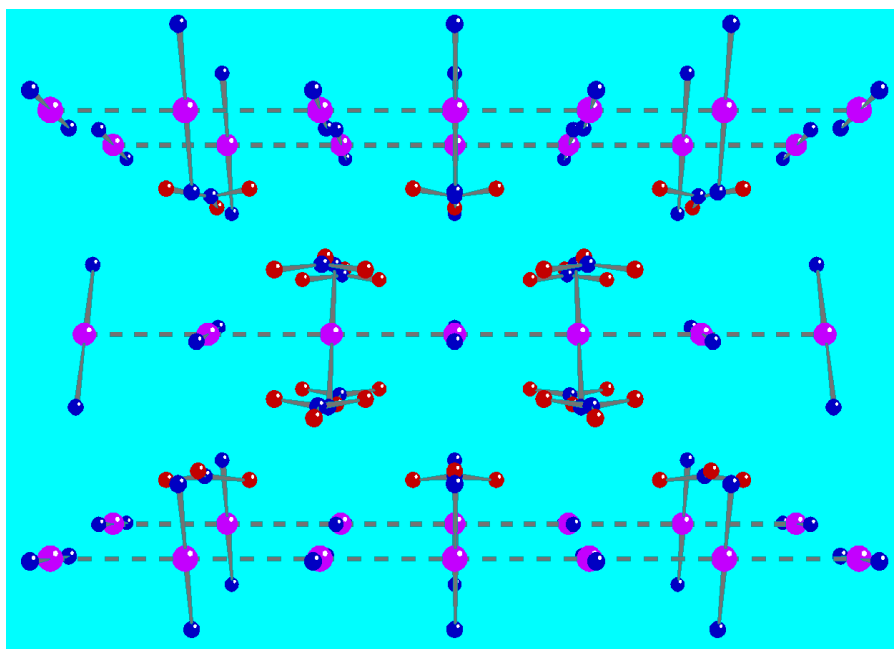


Supporting Information



(a)



(b)

Figure S1: Perspective views showing the three-dimensional structure of a) $[\text{Au}(\text{NH}_3)_2]\text{Br}$ [$\text{Au}\cdots\text{Au}$ 3.414(2) Å, with $\text{Au}\cdots\text{Au}$ distances in the “chains” up to 4.787 and 5.594Å] and b) $[\text{Ag}(\text{NH}_3)_2]\text{NO}_3$ [$\text{Ag}\cdots\text{Ag}$ 3.131(2) Å]

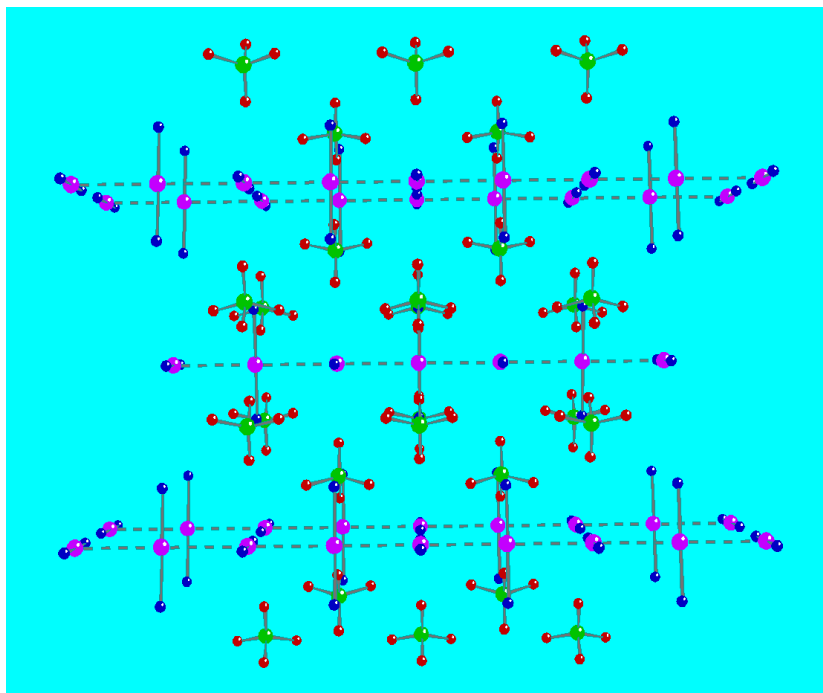
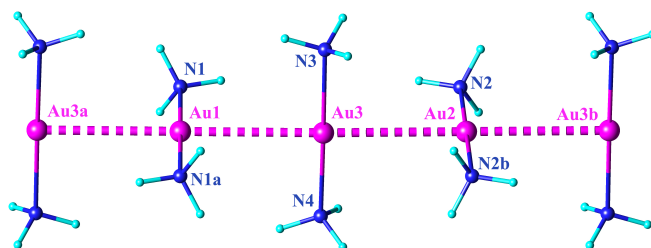
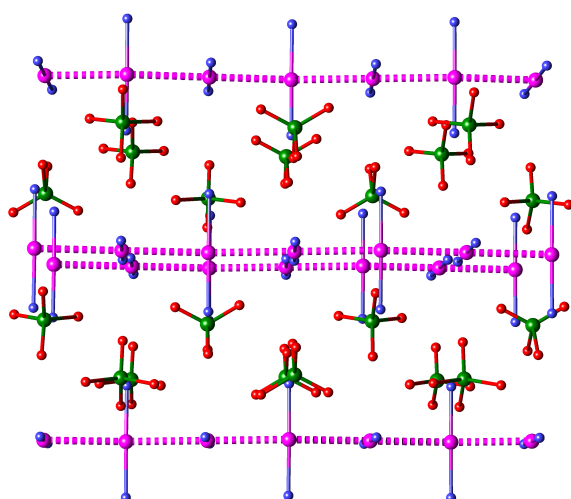


Figure S2: Perspective views showing the three-dimensional structure of $[\text{Ag}(\text{NH}_3)_2]\text{ClO}_4$ [$\text{Ag}\cdots\text{Ag}$ 3.020(2) Å].



(a)



(b)

Figure S3: Perspective views showing a) the structure of $[\text{Au}(\text{NH}_3)_2]^+$ ($\text{Au}\cdots\text{Au}$ 2.976(5)-2.9836(5) Å) and b) the three-dimensional supramolecular array in **1'**.