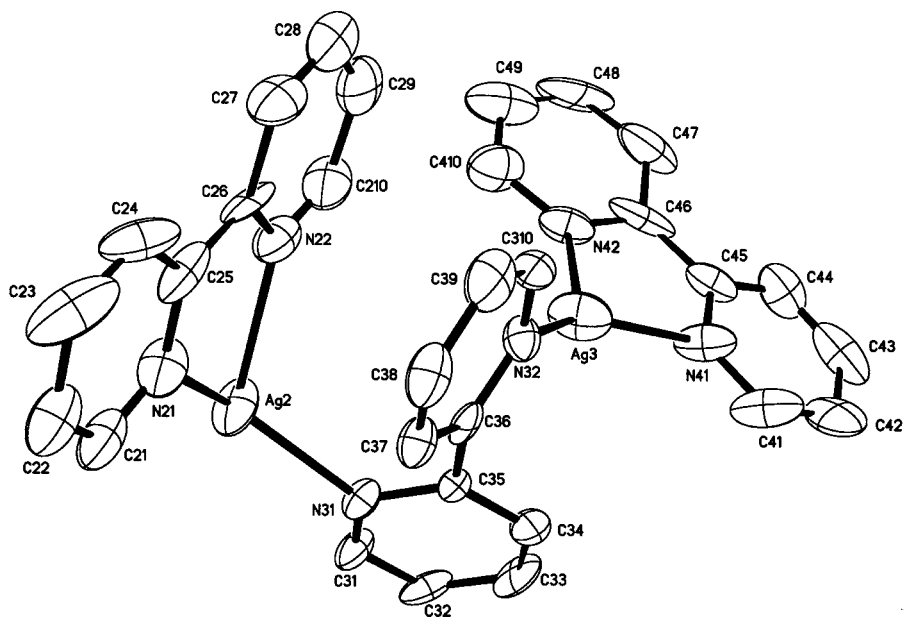
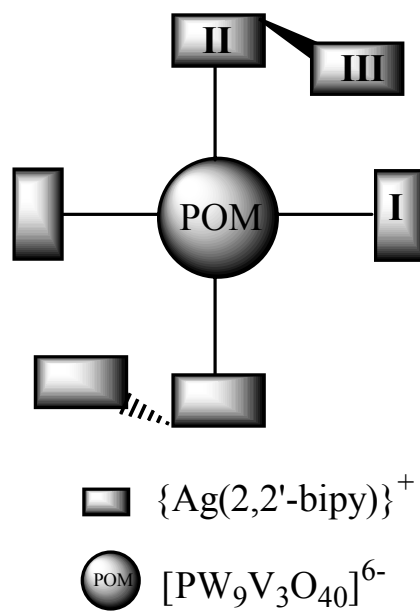


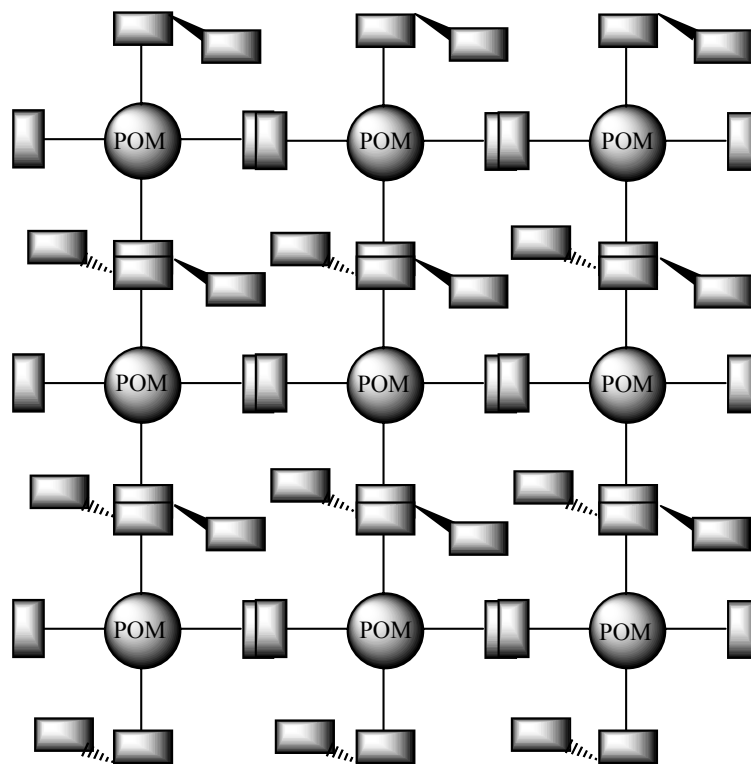
## Supplementary Materials



**Fig. S1** Thermal ellipsoid plot of  $[\text{Ag}_2(2, 2'\text{-bipy})_3]^{2+}$  groups showing the coordination environment around Ag(2) and Ag(3) and their connectivity.



**Scheme S1** The schematic representation of molecular building block of **1**. Group I, II and III are representative of the  $\{\text{Ag}(1)(2,2'\text{-bipy})\}^+$   $\{\text{Ag}(2)(2,2'\text{-bipy})\}^+$  and  $\{\text{Ag}(3)(2,2'\text{-bipy})\}^+$  units, respectively.



**Scheme S2** Simplified schematic representation of the 2D supramolecular network of

**1.**

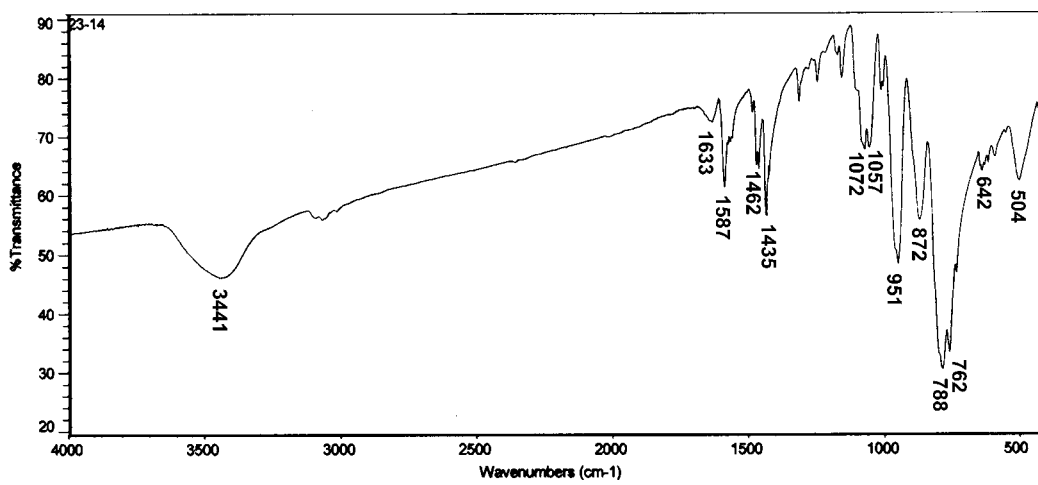
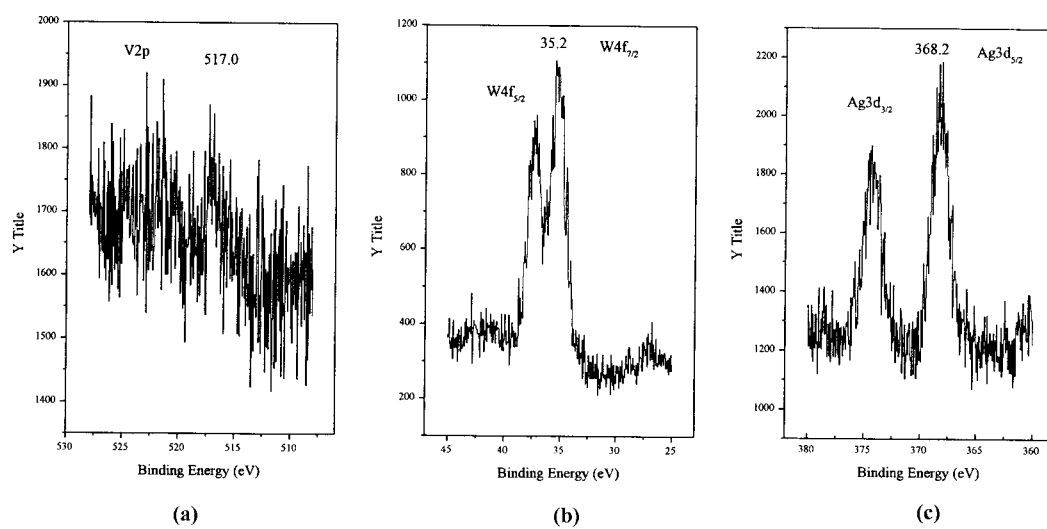
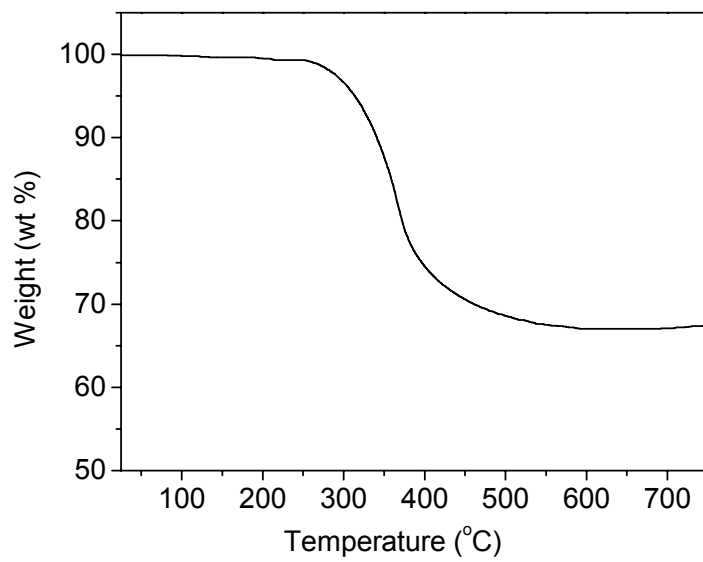


Fig. S2 The IR spectrum of compound 1



**Fig. S3** The XPS spectra of compound **1**



**Fig. S4** The TG curve of compound **1**