

Supplementary Materials:

Silver Dendritic Gels with Luminescence and AIE effect

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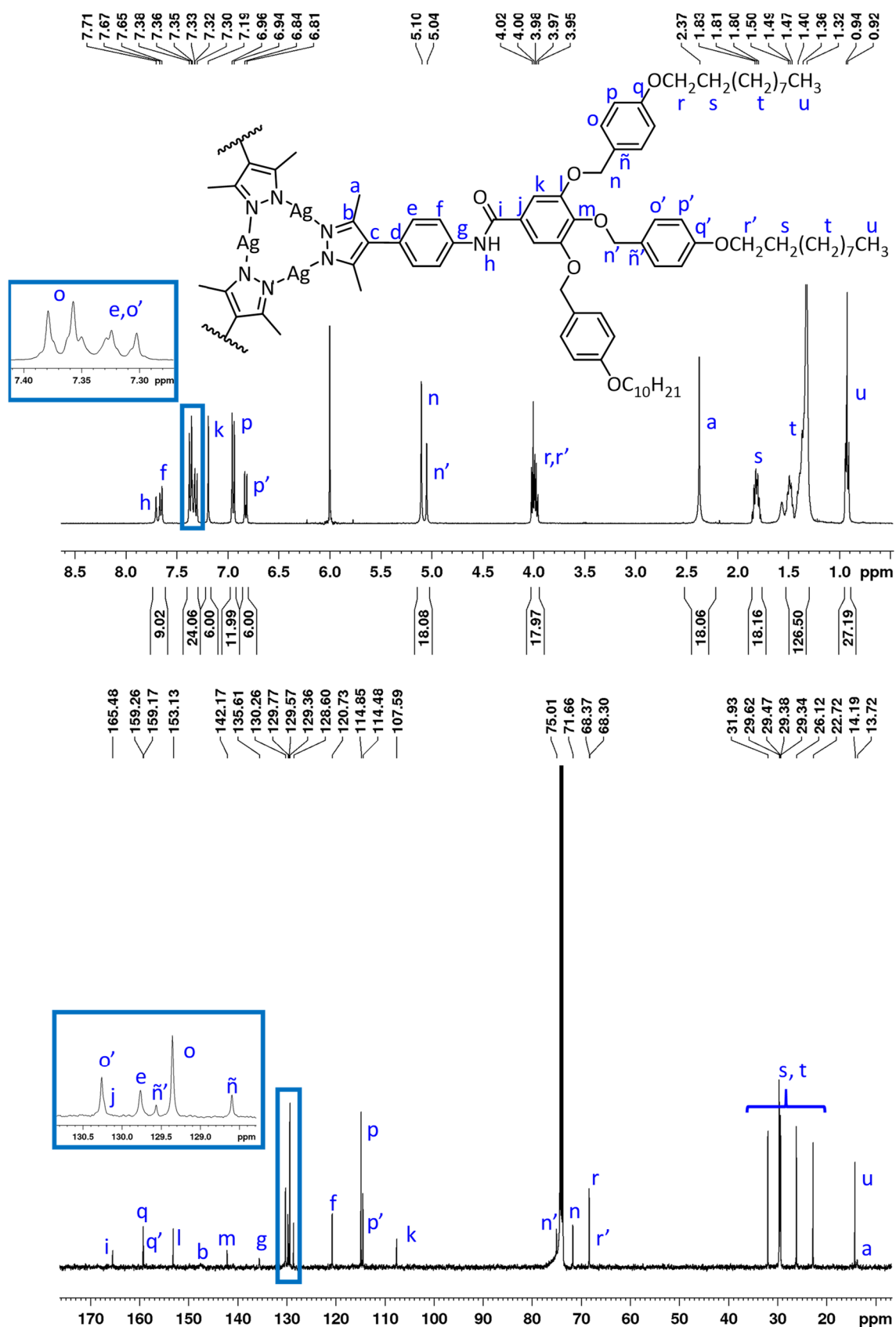


Figure S1. ¹H-NMR (400 MHz, C₂D₂Cl₄, 60 °C) and ¹³C-NMR (100 MHz, C₂D₂Cl₄, 60 °C) spectra of [Ag(μ-(4-3,4,5)-10G2-APz)]₃.

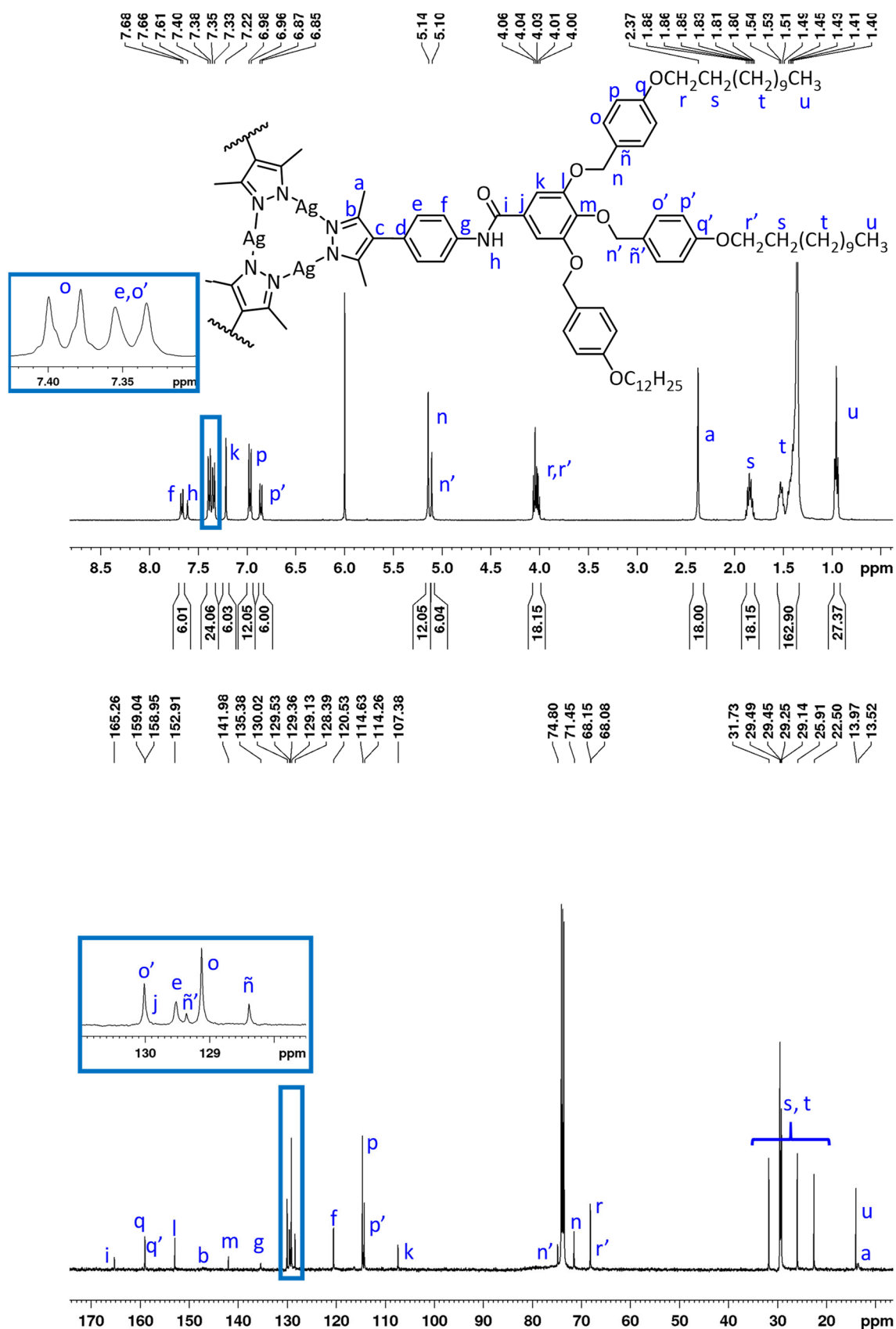


Figure S2. ¹H-NMR (400 MHz, C₂D₂Cl₄, 60 °C) and ¹³C-NMR (100 MHz, C₂D₂Cl₄, 60 °C) spectra of [Ag(μ-(4-3,4,5)-12G2-APz)]₃.

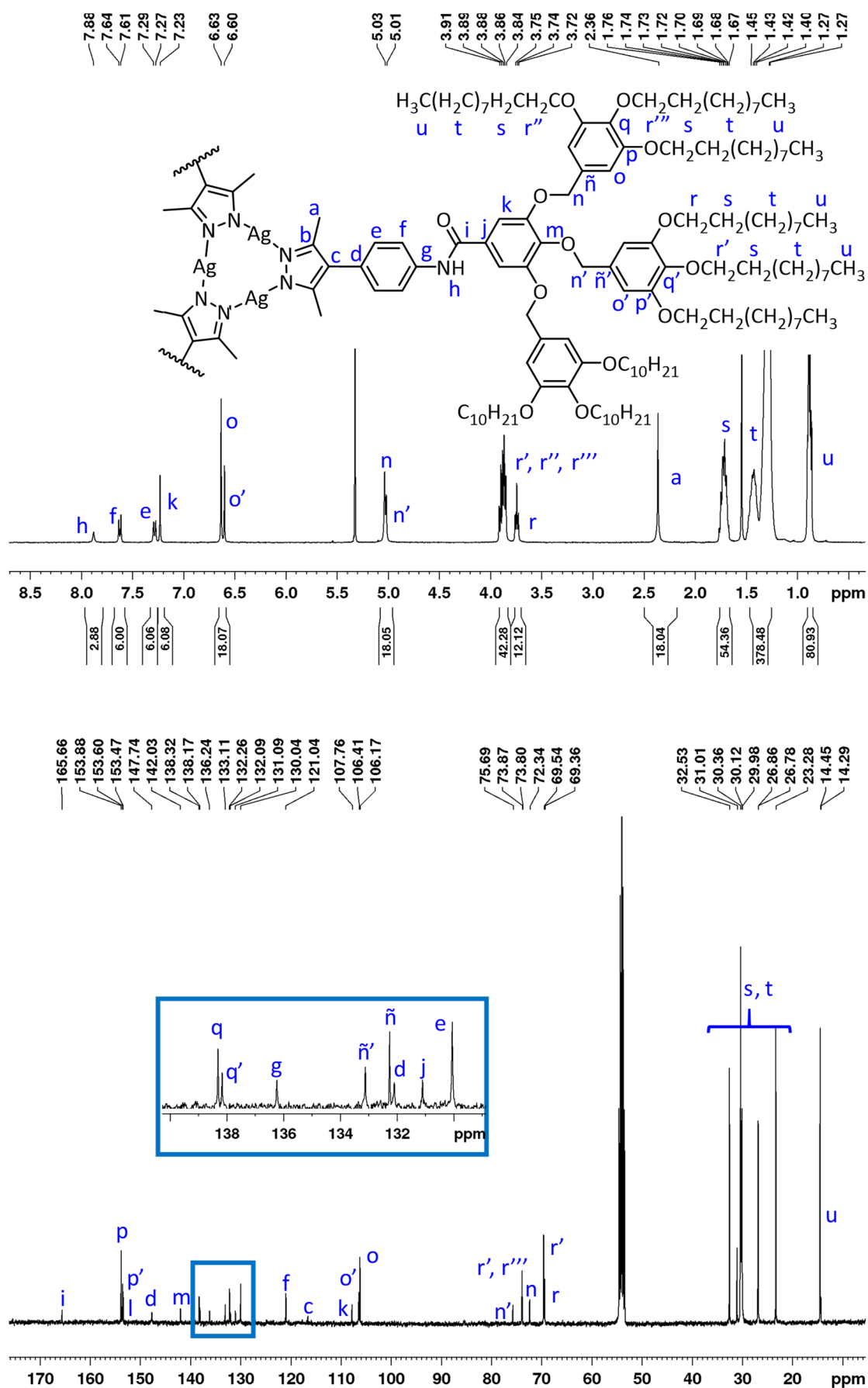


Figure S3. ¹H-NMR (400 MHz, CD₂Cl₂, 25 °C) and ¹³C-NMR (100 MHz, CD₂Cl₂, 25 °C) spectra of [Ag(μ-(3,4,5-3,4,5)-10G2-APz)]₃.

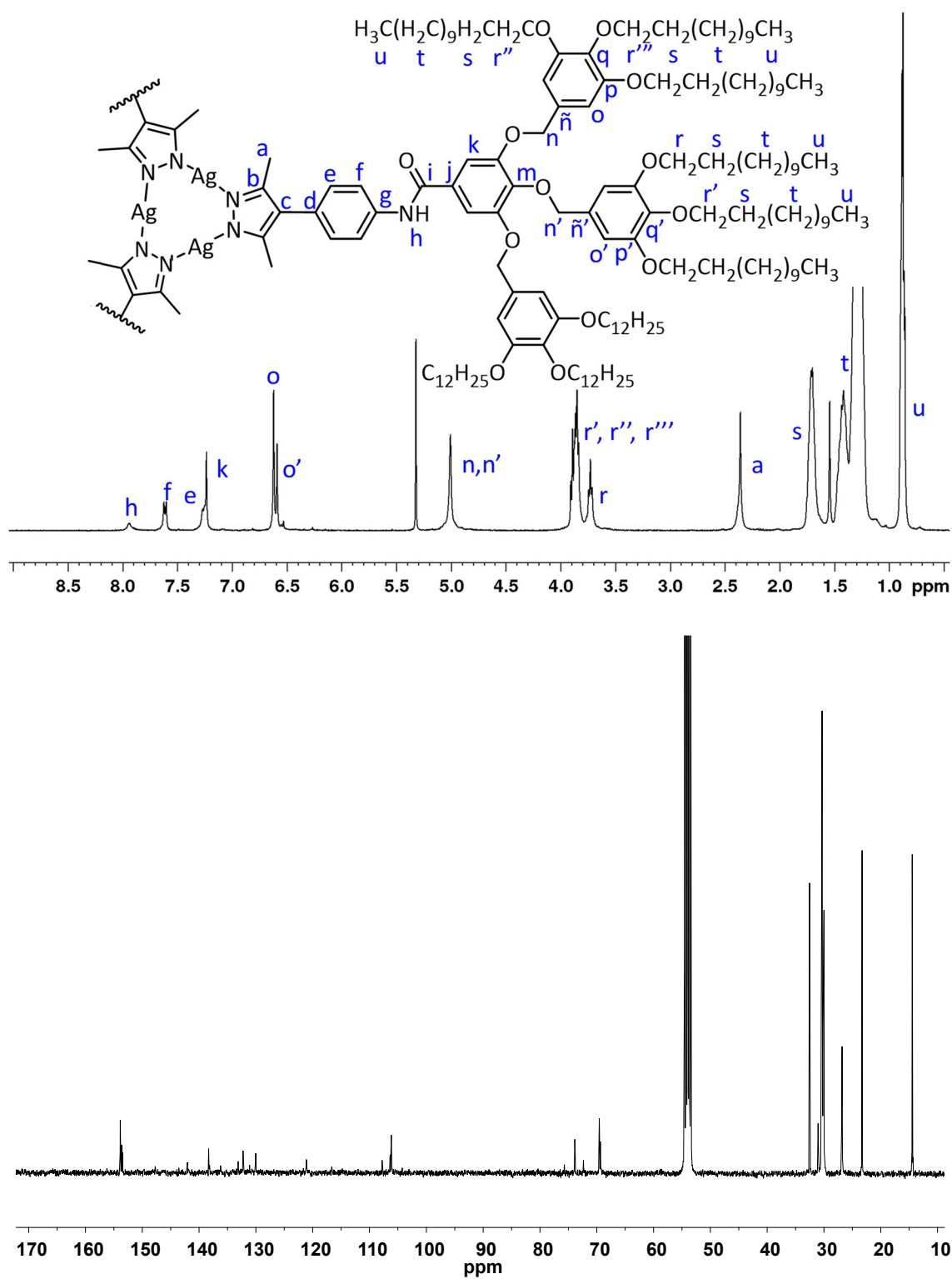


Figure S4. ^1H -NMR (400 MHz, CD₂Cl₂, 25 °C) and ^{13}C -NMR (100 MHz, CD₂Cl₂, 25 °C) spectra of $[\text{Ag}(\mu\text{-(3,4,5-3,4,5)-12G2-APz})]_3$.

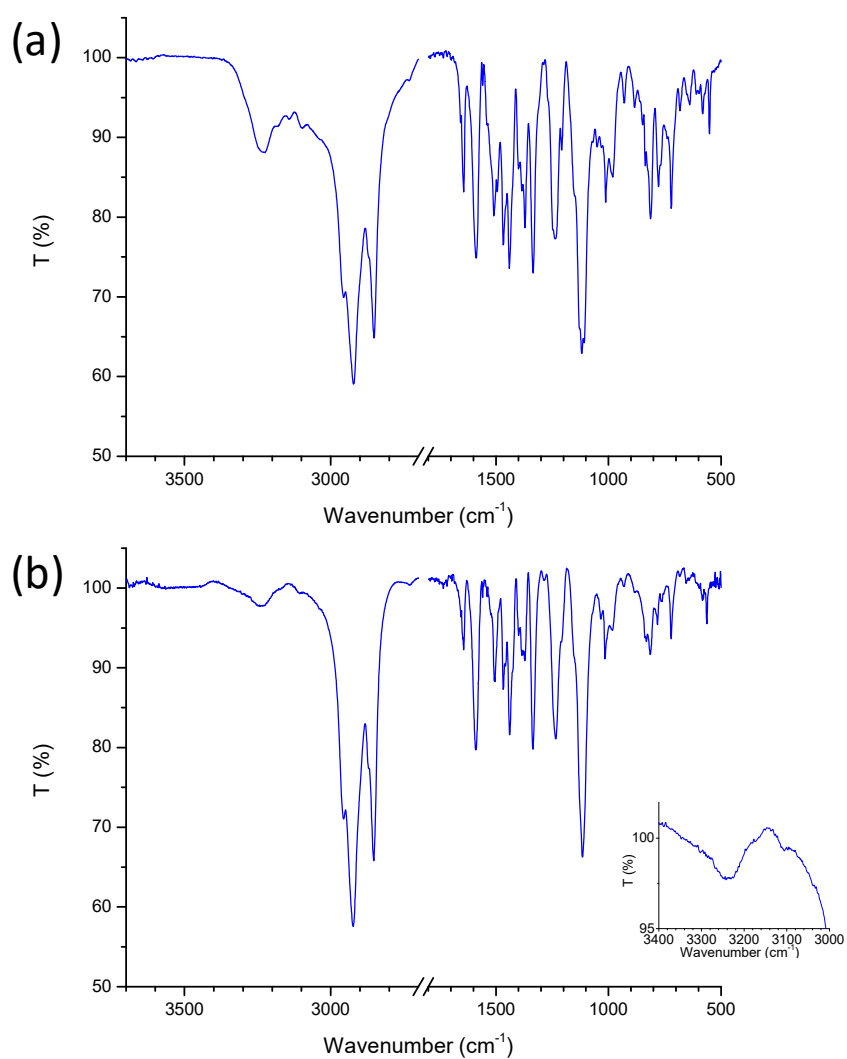


Figure S5. FTIR spectra in KBr pellets for (a) ligand precursor **3,4,5-3,4,5-10G2-APzH** and (b) their corresponding metallodendrimer **[Ag(μ-(3,4,5-3,4,5)-10G2-APz)]₃**.

Calculation of the association constant

Curve fitting was performed using nonlinear regression analysis (OriginPro 2020b, version 9.7 (Academic) by OriginLab Corporation) assuming the isodesmic model according to the equation:

$$\delta_{obs} = \delta_m + (\delta_{ag} - \delta_m) \left(1 + \frac{(1 - \sqrt{4KC_T + 1})}{2KC_T} \right)$$

in which K is the association constant, C_T is the total concentration, δ_{obs} is the measured chemical shift at concentration C_T , δ_m and δ_{ag} are limiting chemical shifts of monomer and the aggregate, respectively. Values and curve fitting obtained for three signals were as follows:

Signal	NH (H _h)	H _k	H _a
K (M ⁻¹)	142.69861±19.6257	142.69861±19.6257	142.69861±19.6257
R-square	0.99368	0.99186	0.9963

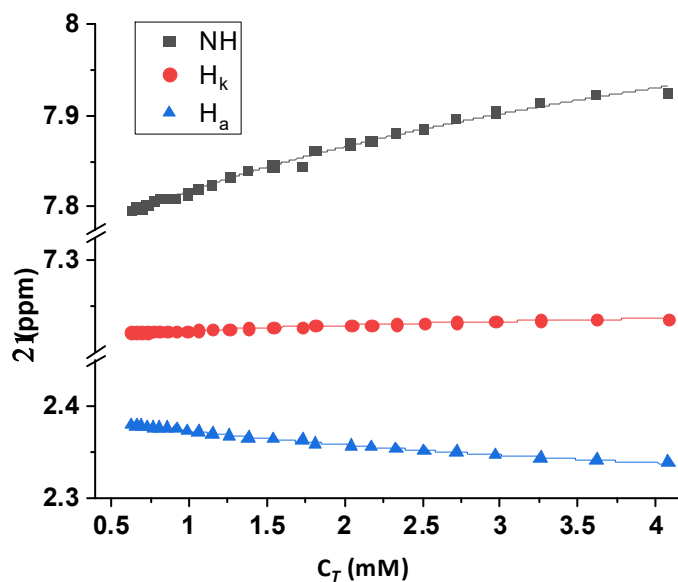


Figure S6. Concentration dependence of NMR chemical shifts of the H_h, H_k and H_a signals for [Ag(μ-(3,4,5-3,4,5)-10G2-APz)]₃ in CD₂Cl₂. Refer to Figure 5 or Figure S3 for proton assignment.