

General remarks. All the reagents and solvents purchased and used as received without further purification. CH₂Cl₂ dried by distillation over CaCl₂. NMR spectra recorded using a JEOL spectrometer (¹H frequency 400 MHz). ESI-MS spectra were recorded on an Orbitrap XL in positive mode using DCM. We are thankful to Prof. M. Letzel at the University of Münster for measuring our samples

SC and powder X-ray crystallography: All SC-XRD measurements were performed using graphite-monochromatized Mo K α radiation at 150 K using a Bruker D8 APEX-II equipped with a CCD camera. Data reduction was performed with SAINT.¹ Absorption corrections for the area detector were performed using SADABS.² The structure was solved by direct methods and refined by full-matrix least-squares techniques against F² using all data (SHELX).² All non-hydrogen atoms were refined with anisotropic displacement parameters if not stated otherwise. Hydrogen atoms constrained in geometric positions to their parent atoms. The structures were refined using the OLEX2 suit of programs.³ The OLEX2 solvent masking was used to treat diffuse scattering in polymers **1b** and **2a**. The cif files of CCDC 1902309-1902312 and 1953779-1953781 contain additional information.

PXRD data were recorded using CuK α radiation on a Siemens D5000 diffractometer with Bragg-Brentano setup. PXRD data were simulated with Mercury CSD (Vers. 4.1.0).

NMR measurements: Measurements of cluster **4a** and **4b** were carried out on a JNM-ECZ400S/L1 NMR spectrometer operating at a proton frequency of 399.7822 MHz. Dichloromethane-d₂ was purchased from Sigma Aldrich and used as received. DOSYs were recorded at 22 °C using a gradient arrayed from 5mT/m to 150 mT/m and a diffusion time of 100 μ s. The data were processed using the JEOL dosy_splmod parameter list (6 species, min 1 peak/species, and tolerance 0.3). The measured diffusion coefficient for mesitylene (1.85*10⁻⁹ m²/sec) giving a radius of 2.81 Å, was used as internal reference to the commonly used radius of 3.0 Å (D = 1.98*10⁻⁹ m²/sec).⁴ For the measurements of **4b** the diffusion of DCM was used as an internal standard (r = 2.03 Å).

Synthesis

1a: [$\text{Ag}_7(\text{C}\equiv\text{C}'\text{Bu})_4(\text{pic})_2(\text{EtOH})(\text{CF}_3\text{SO}_3)]_\infty$: (CCDC: 1902312) A solution of $\text{t}'\text{BuC}\equiv\text{CH}$ (50 mg, 0.61 mmol) in DCM/EtOH was treated with AgCF_3SO_3 (274 mg, 1.06 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution, 2-piconilic acid (17 mg, 0.30 mmol) was added with stirring, and a white suspension was formed. After stirring the reaction mixture for 4 hrs and filtered through a Celite pad; the solution (filtrate) was kept for crystallization. Colourless crystals were obtained after one week by slow evaporation. Yield after complete evaporation 70% (162 mg). see PXRD pattern for “1a” figure S8

1b: [$\text{Ag}_9(\text{C}\equiv\text{C}'\text{Bu})_2(\text{pic})_4(\text{CF}_3\text{SO}_3)_3$] $_\infty$: (CCDC: 1953779) A solution of $\text{t}'\text{BuC}\equiv\text{CH}$ (50 mg, 0.61 mmol) in DCM/EtOH was treated with AgCF_3SO_3 (704 mg, 2.74 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution, 2-piconilic acid (150 mg, 1.22 mmol) was added with stirring, and a white suspension was formed. After stirring the reaction mixture over night the suspension was allowed to settle and kept for crystallisation. Colourless crystals were obtained after one week by slow evaporation. Yield of solid material after decanting remaining solvents 75% (472 mg). see PXRD pattern for “1b” figure S8

2a and 2b: $[\{\text{Ag}_{15}(\text{C}\equiv\text{C } i\text{-Pr})_{10}(\text{pic})_4\}(\text{ClO}_4)]_{\infty}$: (CCDC: **1902311** and **1953780**) A solution of $i\text{-PrC}\equiv\text{CH}$ (50 mg, 0.73 mmol) in DCM/EtOH was treated with AgClO_4 (304 mg, 1.47 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution, 2-piconilic acid (45 mg, 0.36) was added with stirring, and a white suspension was formed. After stirring the mixture for four hrs and filtered through a Celite pad, the solution was kept for crystallization. Two types of colourless (blocks and needles) crystals were identified after one week of slow evaporation. Yield of solid material 70% (202 mg). see PXRD pattern for this material figure S9

3: $[\{\text{Ag}_{10}(\text{C}\equiv\text{CPh})_4(\text{pic})_3(\text{DMSO})_6\}(\text{ClO}_4)_3]_{\infty}$: (CCDC: **1902310**) A solution of $\text{PhC}\equiv\text{CH}$ (50 mg, 0.49 mmol) in DCM/EtOH was treated with AgClO_4 (254 mg, 1.22 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution, 2-piconilic acid (45 mg, 0.37) was added with stirring, and a white precipitate was formed. To get the clear solution, added few drops of DMSO in the reaction mixture. After stirring the mixture for 4 hrs and filtered through a Celite pad, the solution was kept for crystallization. Colourless crystals were obtained after one week by slow evaporation. Yield 75% (241 mg). see PXRD pattern for **3** figure S10

4a $[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{pic})_4](\text{ClO}_4)$: (CCDC: **1902309**) A solution of $(i\text{-Pr})_3\text{SiC}\equiv\text{CH}$ (50 mg, 0.27 mmol) in DCM/EtOH was treated with AgClO_4 (92 mg, 0.44 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution 2-piconilic acid (17 mg, 0.14) was added with stirring, and a white suspension was formed. After stirring the mixture for 4 hrs and filtered through a Celite pad, the solution was kept for crystallization. Colourless crystals were obtained after one week by slow evaporation. Yield 90% (106 mg). IR(KBr cm^{-1}): 3433, 2943, 2866, 2681, 2491, 2032, 1611, 1585, 1564, 1465, 1395, 1121, 1087, 996, 883, 841, 818, 742, 698, 677, 627. ^1H -NMR (DCM- d_2): δ = 8.41 (4H, br. d, J 4.6 Hz), 8.16 (4H, br. d, J 7.3 Hz), 7.81 (4H, br. t, J 7.3 Hz), 7.42 (4H, br. t, J 5.5 Hz) 1.17 (32H, br.) 0.97 (108H, br.), 0.83 (br. 36) ppm. ^{13}C -NMR (DCM- d_2): δ = 167.5, 152.9, 149.0, 138.3, 126.2, 125.6, (alkyne $\text{C}\equiv\text{C}$ atoms not detected), 19.0, 18.5, 12.2, 11.4 (two sets of $i\text{-Pr}$ groups) ppm. see PXRD pattern for **4a** figure S11 ESI-MS (DCM): m/z = 1795.88416 ($\{[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{pic})_4]+2\text{Ag}^++\text{Cl}^-\}^{2+}$), 1722.79796 ($\{[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{pic})_4]+\text{Ag}^+\}^{2+}$), 3396.78126 ($\{[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{pic})_4]^++\text{Cl}^-+\text{Na}^+\}^+$) (see figure S17 for ESI-MS spectra)

4b $[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{Mepic})_4](\text{ClO}_4)$ (CCDC: **1953781**): A solution of $(i\text{-Pr})_3\text{SiC}\equiv\text{CH}$ (50 mg, 0.27 mmol) in $\text{CH}_3\text{CN}/\text{EtOH}$ was treated with AgClO_4 (92 mg, 0.44 mmol) and added few drops of triethylamine (Et_3N). To the resulting solution 4-methylpyridine-2-carboxylic acid (19 mg, 0.14) was added and stirred for 2 h. The reaction mixture was filtered through a Celite pad and solution was kept for crystallization. Colourless crystals were obtained after one week by slow evaporation. Yield 80% (96 mg). IR(KBr cm^{-1}): 2940, 2863, 2163, 1980, 1615, 1586, 1571, 1461, 1368, 1238, 1095, 985, 798, 675. ^1H -NMR (DCM- d_2 , C_6D_6): δ = 8.08 (br. s. 4H), 7.83 (br. s. 4H), 6.84 (br. s. 4H), 1.98 (s., 12H, Me), 0.91 (br. m., 168H) Hz. We were unable to obtain any satisfactory carbon NMR data. for see PXRD pattern for **4b** figure S12 . ESI-MS (DCM): m/z = 3397.02698 ($[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{Mepic})_4]^+$), 3541.9297 ($\{[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{Mepic})_4]+\text{Ag}^++\text{Cl}^-\}^+$), 1823.4173 ($\{[\text{Ag}_{13}\{\text{C}\equiv\text{CSi}(i\text{-Pr})_3\}_8(\text{Mepic})_4]+2\text{Ag}^++\text{Cl}^-\}^{2+}$) see figure S18 for ESI-MS spectra.

Table S1. Crystallographic data for **1a**, **1b**, **2a**, **2b**, **3**, **4a**, and **4b**

Compound ID (manuscript number)	AG_216 (1a)	AG_498 (1b)	AG_221 (2a)	AG_504 (2b)	AG_200 (3)	AG_85 (4a)	AG_501 (4b)
CCDC	1902312	1953779	1902311	1953780	1902310	1902309	1953781
Chemical formula	C ₃₉ H ₅₀ F ₃ N ₂ O ₈ SAg ₇	C ₃₈ H ₃₄ Ag ₉ F ₆ N ₄ O ₁₄ S ₂	C ₇₄ H ₈₆ Ag ₁₅ ClN ₄ O ₁₂	C ₁₆ H ₁₈ Ag ₄ ClNO ₆	C ₆₂ H ₆₈ Ag ₁₀ Cl ₃ N ₃ O ₂₄ S ₆	C ₁₁₂ H ₁₈₄ N ₄ O ₁₂ Si ₈ ClAg ₁₃	C ₁₁₆ H ₁₉₂ Ag ₁₃ ClN ₄ O ₁₂ Si ₈
Formula weight	1518.96	1919.64	2876.96	787.24	2616.60	3441.10	3497.20
Temperature (K)	150(2)	150(2)	150(2)	150(2)	123(2)	150(2)	150(2)
Wavelength (Å)	0.71073	0.71073	0.71073	0.71073	0.71073	0.71073	0.71073
Crystal system	Orthorhombic	Monoclinic	Triclinic	Monoclinic	Orthorhombic	Monoclinic	Triclinic
Space group	<i>Fdd2</i>	<i>C2/c</i>	<i>P-1</i>	<i>C2/c</i>	<i>P2₁2₁2₁</i>	<i>C 2/c</i>	<i>P-1</i>
a (Å); a (°)	38.814(6); 90	22.973(8); 90	13.969(3); 74.668(2)	16.465(6); 90	16.489(3); 90	29.1488(6); 90	16.217(4); 91.328(7)
b (Å); b(°)	53.264(8); 90	19.990(9); 129.995(10)	15.629(3); 76.661(2)	24.276(9); 126.986(6)	18.767(4); 90	16.3089(4); 91.799(10)	16.611(4); 94.827(7)
c (Å); g (°)	9.9806(15); 90	15.639(5); 90	20.922(4); 84.863(2)	13.433(5); 90	25.470(5); 90	28.5179(6); 90	29.328(6); 117.772(7)
V (Å ³); Z	20634(5); 16	5502(4); 4	4300.9(15); 2	4289(3); 8	7882(3); 4	13550.3(5); 4	6948(3); 2
ρ (calc.) mg m ⁻³	1.956	2.317	2.222	2.438	2.205	1.687	1.672
μ(Mo K _α) mm ⁻¹	2.697	3.286	3.416	3.755	2.762	1.975	1.927
2θ _{max} (°)	50	50	50	50	50	50	50
R(int)	0.0880	0.1059	0.0610	0.1244	0.2043	0.0502	0.0691
Completeness to θ	100%	100%	100%	99.9%	99.9%	99.9%	99.8%
Data / param.	8717 / 558	4858 / 333	15153 / 973	3773 / 304	13905 / 987	11916 / 702	24428 / 1445
GOF	1.119	1.054	1.026	1.027	1.082	1.049	1.133
R1 [F>4σ(F)]	0.0645	0.0392	0.0770	0.0603	0.0730	0.0335	0.0864
wR2 (all data)	0.1321	0.0902	0.2591	0.1711	0.1893	0.0859	0.2530
Max. peak/hole (e.Å ⁻³)	1.382 / -1.133	0.832 / -0.929	2.62 / -2.34	2.357 / -2.034	2.527 / -1.958	0.734 / -0.747	3.482 / -3.609
Flack parameter	0.07(3)	n.a	n.a.	n.a.	0.10(3)	n.a.	n.a.

Table S2. Bond length and bond angle for **1a**, **1b**, **2a**, **2b**, **3**, **4a**, and **4b**

Compound	Bond lengths	Bond Angles
AG_216 (1a)	Ag(1)-Ag(2)#1: 3.276(2) Ag(1)-Ag(4): 2.934(2) Ag(1)-Ag(6)#2: 3.056(3) Ag(1)-Ag(7)#2: 2.880(2) Ag(2)-Ag(3): 3.235(2) Ag(2)-Ag(4)#2: 3.011(2) Ag(2)-Ag(5)#3: 3.044(3) Ag(2)-Ag(7)#3: 2.908(2) Ag(2)-O(2): 2.343(13) Ag(3)-Ag(4)#2: 3.083(2) Ag(3)-Ag(4): 3.040(2) Ag(3)-Ag(6): 3.174(2) Ag(3)-O(1): 2.445(12) Ag(3)-O(4): 2.436(12) Ag(4)-Ag(5): 2.941(2) Ag(4)-Ag(6): 2.996(2) Ag(5)-Ag(6): 3.350(2) Ag(5)-Ag(7): 2.937(2) Ag(5)-N(2)#1: 2.316(18) Ag(5)-O(4)#1: 2.498(12) Ag(6)-Ag(7): 2.865(2) Ag(6)-O(3): 2.331(13)	Ag(4)-Ag(1)-Ag(2)#1: 57.68(5) Ag(4)-Ag(1)-Ag(6)#2: 117.68(7) Ag(6)#2-Ag(1)-Ag(2)#1: 93.01(6) Ag(7)#2-Ag(1)-Ag(2)#1: 55.93(5) Ag(7)#2-Ag(1)-Ag(4): 112.66(7) Ag(7)#2-Ag(1)-Ag(6)#2: 57.61(5) N(1)-Ag(1)-Ag(2)#1: 146.0(4) N(1)-Ag(1)-Ag(4): 88.3(4) N(1)-Ag(1)-Ag(6)#2: 104.2(4) N(1)-Ag(1)-Ag(7)#2: 156.6(4) O(1)-Ag(1)-Ag(2)#1: 97.8(3) O(1)-Ag(1)-Ag(4): 72.5(3) O(1)-Ag(1)-Ag(6)#2: 57.5(3) O(1)-Ag(1)-Ag(7)#2: 106.3(3) Ag(3)-Ag(2)-Ag(1)#2: 91.90(5) Ag(4)#2-Ag(2)-Ag(1)#2: 55.44(5) Ag(4)#2-Ag(2)-Ag(3): 59.04(5) Ag(4)#2-Ag(2)-Ag(5)#3: 109.31(7) Ag(5)#3-Ag(2)-Ag(1)#2: 88.08(6) Ag(5)#3-Ag(2)-Ag(3): 164.77(7) Ag(7)#3-Ag(2)-Ag(1)#2: 55.13(5) Ag(7)#3-Ag(2)-Ag(3): 131.91(7) Ag(7)#3-Ag(2)-Ag(4)#2: 109.68(7) Ag(7)#3-Ag(2)-Ag(5)#3: 59.09(6) O(2)-Ag(2)-Ag(1)#2: 153.2(3) O(2)-Ag(2)-Ag(3): 70.8(4) O(2)-Ag(2)-Ag(4)#2: 97.7(3) O(2)-Ag(2)-Ag(5)#3: 103.3(4) O(2)-Ag(2)-Ag(7)#3: 150.9(4) Ag(4)-Ag(3)-Ag(2): 140.92(6) Ag(4)#2-Ag(3)-Ag(2): 56.86(5)

		Ag(4)-Ag(3)-Ag(4)#2: 119.25(5) Ag(4)-Ag(3)-Ag(6): 57.60(5) Ag(4)#2-Ag(3)-Ag(6): 139.99(6) Ag(6)-Ag(3)-Ag(2): 153.70(6) O(4)-Ag(3)-Ag(4)#2: 68.6(3) O(4)-Ag(3)-Ag(4): 71.4(4) O(4)-Ag(3)-Ag(6): 73.8(3) O(4)-Ag(3)-C(2)#2: 95.4(6) Ag(1)-Ag(4)-Ag(2)#1: 66.87(5) Ag(1)-Ag(4)-Ag(3): 90.26(7) Ag(1)-Ag(4)-Ag(3)#1: 102.07(6) Ag(1)-Ag(4)-Ag(5): 133.09(7) Ag(1)-Ag(4)-Ag(6): 150.95(8) Ag(2)#1-Ag(4)-Ag(3): 94.27(6) Ag(2)#1-Ag(4)-Ag(3)#1: 64.10(5) Ag(3)-Ag(4)-Ag(3)#1: 147.12(5) Ag(5)-Ag(4)-Ag(2)#1: 153.24(8) Ag(5)-Ag(4)-Ag(3)#1: 91.49(7) Ag(5)-Ag(4)-Ag(3): 102.17(6) Ag(5)-Ag(4)-Ag(6): 68.69(5) Ag(6)-Ag(4)-Ag(2)#1: 101.13(6) Ag(6)-Ag(4)-Ag(3): 63.46(5) Ag(6)-Ag(4)-Ag(3)#1: 95.17(6) Ag(2)#4-Ag(5)-Ag(6): 91.79(6) Ag(4)-Ag(5)-Ag(2)#4: 114.87(7) Ag(4)-Ag(5)-Ag(6): 56.44(5) Ag(7)-Ag(5)-Ag(2)#4: 58.14(6) Ag(7)-Ag(5)-Ag(4): 109.00(6) Ag(7)-Ag(5)-Ag(6): 53.73(5) N(2)#1-Ag(5)-Ag(2)#4: 104.8(4) N(2)#1-Ag(5)-Ag(4): 90.4(4) N(2)#1-Ag(5)-Ag(6): 146.8(4) N(2)#1-Ag(5)-Ag(7): 158.0(5)
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		N(2)#1-Ag(5)-O(4)#1: 70.4(5) O(4)#1-Ag(5)-Ag(2)#4: 57.5(4) O(4)#1-Ag(5)-Ag(4): 70.4(3) O(4)#1-Ag(5)-Ag(6): 96.3(3) O(4)#1-Ag(5)-Ag(7): 105.7(3) Ag(1)#1-Ag(6)-Ag(3): 162.92(6) Ag(1)#1-Ag(6)-Ag(5): 86.55(6) Ag(3)-Ag(6)-Ag(5): 90.97(6) Ag(4)-Ag(6)-Ag(1)#1: 106.59(7) Ag(4)-Ag(6)-Ag(3): 58.94(5) Ag(4)-Ag(6)-Ag(5): 54.87(5) Ag(7)-Ag(6)-Ag(1)#1: 58.11(5) Ag(7)-Ag(6)-Ag(3): 132.52(7) Ag(7)-Ag(6)-Ag(4): 109.45(7) Ag(7)-Ag(6)-Ag(5): 55.76(5) O(3)-Ag(6)-Ag(7): 150.4(4) O(3)-Ag(6)-C(7): 114.7(6) Ag(1)#1-Ag(7)-Ag(2)#4: 68.94(6) Ag(1)#1-Ag(7)-Ag(5): 98.17(6) Ag(2)#4-Ag(7)-Ag(5): 62.77(6) Ag(6)-Ag(7)-Ag(1)#1: 64.28(6) Ag(6)-Ag(7)-Ag(2)#4: 105.54(6) Ag(6)-Ag(7)-Ag(5): 70.51(6)
AG_85 (3)	Ag(1)-Ag(2): 3.1407(5) Ag(1)-Ag(5): 3.1478(4) Ag(2)-Ag(6)#1: 3.1200(5) Ag(2)-Ag(7)#1: 3.0653(5) Ag(3)-Ag(4): 3.0472(5) Ag(3)-N(2): 2.332(4) Ag(3)-O(4): 2.459(3) Ag(4)-Ag(5): 2.8980(4) Ag(4)-Ag(7)#1: 3.0933(5) Ag(5)-Ag(6): 2.9297(4) Ag(5)-Ag(6)#1: 2.9296(4)	Ag(2)-Ag(1)-Ag(5): 80.740(12) O(2)-Ag(1)-Ag(2): 161.00(11) O(2)-Ag(1)-Ag(5): 107.26(10) Ag(3)-Ag(2)-Ag(1): 69.216(12) Ag(3)-Ag(2)-Ag(6)#1: 118.033(15) Ag(3)-Ag(2)-Ag(7)#1: 84.595(14) Ag(6)#1-Ag(2)-Ag(1): 83.805(13) Ag(7)#1-Ag(2)-Ag(1): 122.533(15) Ag(7)#1-Ag(2)-Ag(6)#1: 64.502(12) N(2)-Ag(3)-Ag(2): 158.98(9) N(2)-Ag(3)-Ag(4): 103.60(9)

	Ag(6)-Ag(7): 3.3008(6) Ag(7)-N(1): 2.315(4) Ag(7)-O(1): 2.483(4)	N(2)-Ag(3)-C(1): 118.36(14) N(2)-Ag(3)-O(4): 70.28(11) O(4)-Ag(3)-Ag(2): 96.48(7) O(4)-Ag(3)-Ag(4): 60.90(7) Ag(3)-Ag(4)-Ag(7)#1: 83.617(14) Ag(5)-Ag(4)-Ag(3): 6.816(13) Ag(5)-Ag(4)-Ag(7)#1: 95.264(13) Ag(1)#1-Ag(5)-Ag(1): 180.0 Ag(4)#1-Ag(5)-Ag(1)#1: 94.307(11) Ag(4)-Ag(5)-Ag(1)#1: 85.693(11) Ag(4)-Ag(5)-Ag(1): 94.306(11) Ag(4)#1-Ag(5)-Ag(1): 85.693(11) Ag(4)-Ag(5)-Ag(4)#1: 180.0 Ag(4)-Ag(5)-Ag(6)#1: 92.250(10) Ag(4)-Ag(5)-Ag(6): 87.751(10) Ag(4)#1-Ag(5)-Ag(6): 92.248(10) Ag(4)#1-Ag(5)-Ag(6)#1: 87.751(10) Ag(6)-Ag(5)-Ag(1)#1: 86.870(10) Ag(6)#1-Ag(5)-Ag(1): 86.868(10) Ag(6)#1-Ag(5)-Ag(1)#1: 93.132(10) Ag(6)-Ag(5)-Ag(1): 93.131(10) Ag(6)#1-Ag(5)-Ag(6): 180.0 Ag(2)#1-Ag(6)-Ag(7): 56.945(12) Ag(5)-Ag(6)-Ag(2)#1: 84.582(11) Ag(5)-Ag(6)-Ag(7): 90.392(12) O(3)-Ag(6)-Ag(2)#1: 167.16(10) O(3)-Ag(6)-Ag(5): 107.21(9) O(3)-Ag(6)-Ag(7): 126.31(11) O(3)-Ag(6)-C(3)#1: 129.65(13) O(3)-Ag(6)-C(4)#1: 100.83(13) O(3)-Ag(6)-C(7): 104.91(14) Ag(2)#1-Ag(7)-Ag(4)#1: 81.070(13) Ag(2)#1-Ag(7)-Ag(6): 58.554(11) Ag(4)#1-Ag(7)-Ag(6): 82.077(14)
AG_221 (2a)	Ag(1)-Ag(2): 2.9846(15) Ag(1)-Ag(2)#1: 3.1295(16) Ag(1)-Ag(3)#1: 3.1122(15)	Ag(2)-Ag(1)-Ag(2)#1: 108.27(4) Ag(2)-Ag(1)-Ag(3)#1: 121.80(5) Ag(2)-Ag(1)-Ag(4)#1: 175.98(5)

Ag(1)-Ag(4)#1: 3.0311(14) Ag(1)-Ag(15)#2: 3.172(2) Ag(1)-Ag(15)#3: 3.163(2) Ag(2)-Ag(1)#1: 3.1294(16) Ag(2)-Ag(3): 2.8446(17) Ag(2)-Ag(15)#2: 3.061(2) Ag(3)-Ag(1)#1: 3.1122(15) Ag(3)-Ag(4): 2.9438(16) Ag(3)-Ag(12)#3: 2.8393(16) Ag(3)-Ag(13)#3: 2.969(2) Ag(3)-Ag(14)#3: 3.048(2) Ag(3)-Ag(15)#3: 3.270(2) Ag(4)-Ag(1)#1: 3.0311(14) Ag(4)-N(1): 2.325(13) Ag(4)-O(1): 2.508(9) Ag(5)-Ag(6): 3.0422(17) Ag(5)-Ag(7): 3.1050(15) Ag(5)-Ag(7)#3: 3.0174(15) Ag(5)-Ag(10)#3: 2.8442(16) Ag(6)-Ag(7)#3: 3.1844(19) Ag(6)-Ag(7): 3.233(2) Ag(6)-Ag(8): 3.197(2) Ag(6)-Ag(9): 2.941(2) Ag(6)-Ag(10): 3.1518(18) Ag(7)-Ag(5)#3: 3.0175(15) Ag(7)-Ag(6)#3: 3.1845(19) Ag(7)-Ag(10): 3.1223(14) Ag(7)-Ag(11): 3.0160(14) Ag(8)-Ag(10): 3.0010(19) Ag(8)-N(3): 2.351(16) Ag(8)-O(5): 2.477(10) Ag(9)-Ag(10): 2.9612(18) Ag(9)-Ag(12): 2.9927(16) Ag(10)-Ag(5)#3: 2.8442(16) Ag(10)-Ag(11): 2.9363(17) Ag(10)-Ag(12): 2.8580(15) Ag(11)-N(2): 2.367(12) Ag(11)-O(1)#3: 2.456(9)	Ag(2)-Ag(1)-Ag(15)#2: 59.54(4) Ag(2)#1-Ag(1)-Ag(15)#2: 80.43(5) Ag(2)-Ag(1)-Ag(15)#3: 82.83(5) Ag(2)#1-Ag(1)-Ag(15)#3: 58.21(5) Ag(3)#1-Ag(1)-Ag(2)#1: 54.23(4) Ag(3)#1-Ag(1)-Ag(15)#2: 62.71(4) Ag(3)#1-Ag(1)-Ag(15)#3: 112.25(5) Ag(4)#1-Ag(1)-Ag(2)#1: 74.53(4) Ag(4)#1-Ag(1)-Ag(3)#1: 57.25(3) Ag(4)#1-Ag(1)-Ag(15)#3: 101.17(5) Ag(4)#1-Ag(1)-Ag(15)#2: 118.83(5) Ag(15)#3-Ag(1)-Ag(15)#2: 111.10(5) Ag(1)-Ag(2)-Ag(1)#1: 71.73(4) Ag(1)-Ag(2)-Ag(15)#2: 63.28(4) Ag(3)-Ag(2)-Ag(1): 103.39(5) Ag(3)-Ag(2)-Ag(1)#1: 62.58(4) Ag(3)-Ag(2)-Ag(15)#2: 123.78(6) Ag(15)#2-Ag(2)-Ag(1)#1: 61.45(5) O(4)#3-Ag(2)-Ag(1): 157.7(2) O(4)#3-Ag(2)-Ag(1)#1: 129.1(2) O(4)#3-Ag(2)-Ag(3): 94.9(3) O(4)#3-Ag(2)-Ag(15)#2: 116.3(3) Ag(1)#1-Ag(3)-Ag(15)#3: 59.54(4) Ag(2)-Ag(3)-Ag(1)#1: 63.20(4) Ag(2)-Ag(3)-Ag(4): 80.25(5) Ag(2)-Ag(3)-Ag(13)#3: 134.72(6) Ag(2)-Ag(3)-Ag(14)#3: 106.16(5) Ag(2)-Ag(3)-Ag(15)#3: 83.11(5) Ag(4)-Ag(3)-Ag(1)#1: 59.99(3) Ag(4)-Ag(3)-Ag(13)#3: 102.57(5) Ag(4)-Ag(3)-Ag(14)#3: 169.55(6) Ag(4)-Ag(3)-Ag(15)#3: 118.41(5) Ag(12)#3-Ag(3)-Ag(1)#1: 129.34(5) Ag(12)#3-Ag(3)-Ag(2): 162.83(6)
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	Ag(11)-O(3): 2.539(10) Ag(12)-Ag(3)#3: 2.8393(16) Ag(12)-Ag(13): 3.0124(16) Ag(12)-O(5): 2.297(11) Ag(12)-O(8): 2.322(10) Ag(13)-Ag(3)#3: 2.969(2) Ag(13)-Ag(14): 3.323(2) Ag(13)-Ag(15): 2.912(2) Ag(13)-O(6): 2.307(13) Ag(14)-Ag(3)#3: 3.048(2) Ag(14)-Ag(15): 2.950(2) Ag(14)-N(4): 2.386(17) Ag(14)-O(8): 2.466(11) Ag(15)-Ag(1)#3: 3.163(2) Ag(15)-Ag(1)#4: 3.172(2) Ag(15)-Ag(2)#4: 3.061(2) Ag(15)-Ag(3)#3: 3.270(2)	
AG_200 (4a)	Ag(1)-Ag(3): 3.267(3) Ag(1)-Ag(4): 2.892(3) Ag(1)-Ag(5): 2.930(3) Ag(2)-Ag(5): 2.926(3) Ag(2)-Ag(7)#1: 3.004(3) Ag(2)-O(2)#1: 2.354(18) Ag(3)-N(1): 2.22(2) Ag(3)-O(1): 2.469(18) Ag(3)-O(3): 2.591(17) Ag(4)-Ag(7)#1: 2.875(3) Ag(4)-O(4): 2.175(17) Ag(5)-Ag(6)#2: 2.849(3) Ag(5)-Ag(9): 2.925(3) Ag(5)-Ag(10): 3.216(3) Ag(6)-Ag(5)#1: 2.849(3) Ag(6)-Ag(7)#1: 2.997(3) Ag(6)-Ag(9)#1: 3.232(3) Ag(6)-O(6): 2.330(17) Ag(7)-Ag(2)#2: 3.004(3) Ag(7)-Ag(4)#2: 2.875(3)	Ag(4)-Ag(1)-Ag(3): 74.70(8) Ag(4)-Ag(1)-Ag(5): 76.69(8) Ag(5)-Ag(1)-Ag(3): 66.85(7) O(1S)-Ag(1)-Ag(3): 130.5(5) O(1S)-Ag(1)-Ag(4): 146.2(5) O(1S)-Ag(1)-Ag(5): 130.4(5) Ag(5)-Ag(2)-Ag(7)#1: 110.78(9) O(2)#1-Ag(2)-Ag(5): 153.7(5) O(2)#1-Ag(2)-Ag(7)#1: 75.0(5) N(1)-Ag(3)-Ag(1): 127.0(6) N(1)-Ag(3)-O(1): 69.1(7) N(1)-Ag(3)-O(3): 86.2(8) O(1)-Ag(3)-Ag(1): 163.9(5) O(1)-Ag(3)-O(3): 96.8(7) O(3)-Ag(3)-Ag(1): 86.1(4) Ag(7)#1-Ag(4)-Ag(1): 107.63(10) O(4)-Ag(4)-Ag(1): 130.7(5) O(4)-Ag(4)-Ag(7)#1: 119.8(5) Ag(1)-Ag(5)-Ag(10): 114.38(9) Ag(2)-Ag(5)-Ag(1): 72.56(8)

Ag(7)-Ag(6)#2: 2.997(3) Ag(7)-Ag(8): 3.006(3) Ag(7)-O(1): 2.302(19) Ag(7)-O(5)#2: 2.371(19) Ag(8)-Ag(9): 3.017(3) Ag(8)-N(2): 2.16(2) Ag(8)-O(3): 2.497(17) Ag(9)-Ag(6)#2: 3.232(3) Ag(9)-Ag(10): 2.924(3) Ag(10)-N(3): 2.20(2) Ag(10)-O(5): 2.41(2)	Ag(2)-Ag(5)-Ag(10): 77.41(7) Ag(6)#2-Ag(5)-Ag(1): 110.88(9) Ag(6)#2-Ag(5)-Ag(2): 159.74(11) Ag(6)#2-Ag(5)-Ag(9): 68.07(7) Ag(6)#2-Ag(5)-Ag(10): 116.58(9) Ag(9)-Ag(5)-Ag(1): 164.53(11) Ag(9)-Ag(5)-Ag(2): 114.12(9) Ag(9)-Ag(5)-Ag(10): 56.63(7) Ag(5)#1-Ag(6)-Ag(7)#1: 127.87(11) Ag(5)#1-Ag(6)-Ag(9)#1: 57.09(7) Ag(7)#1-Ag(6)-Ag(9)#1: 98.54(8) O(6)-Ag(6)-Ag(5)#1: 139.6(5) O(6)-Ag(6)-Ag(7)#1: 84.1(5) O(6)-Ag(6)-Ag(9)#1: 152.8(5) Ag(2)#2-Ag(7)-Ag(8): 112.13(9) Ag(4)#2-Ag(7)-Ag(2)#2: 76.86(8) Ag(4)#2-Ag(7)-Ag(6)#2: 108.22(10) Ag(4)#2-Ag(7)-Ag(8): 140.55(9) Ag(6)#2-Ag(7)-Ag(2)#2: 168.63(10) Ag(6)#2-Ag(7)-Ag(8): 70.75(8) O(1)-Ag(7)-Ag(2)#2: 81.2(5) O(1)-Ag(7)-Ag(4)#2: 149.9(5) O(1)-Ag(7)-Ag(6)#2: 90.2(5) O(1)-Ag(7)-Ag(8): 67.5(5) Ag(7)-Ag(8)-Ag(9): 103.31(9) N(2)-Ag(8)-Ag(7): 118.4(6) N(2)-Ag(8)-Ag(9): 138.3(6) N(2)-Ag(8)-O(3): 72.1(7) O(3)-Ag(8)-Ag(7): 123.8(4) O(3)-Ag(8)-Ag(9): 86.6(5) Ag(5)-Ag(9)-Ag(6)#2: 54.84(7) Ag(5)-Ag(9)-Ag(8): 82.68(8) Ag(8)-Ag(9)-Ag(6)#2: 67.47(7) Ag(10)-Ag(9)-Ag(5): 66.71(7) Ag(10)-Ag(9)-Ag(6)#2: 113.89(9) Ag(10)-Ag(9)-Ag(8): 77.85(8) Ag(9)-Ag(10)-Ag(5): 56.67(7) N(3)-Ag(10)-Ag(5): 144.4(6)
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		N(3)-Ag(10)-Ag(9): 118.8(6)
AG_498 (1b)	Ag(01)-Ag(02): 3.0425(11) Ag(01)-Ag(03)#1: 2.8310(13) Ag(01)-Ag(03): 2.9603(14) Ag(01)-Ag(04)#2: 2.9134(14) Ag(01)-Ag(05)#2: 3.2589(16) Ag(01)-O(5): 2.168(4) Ag(01)-O(1): 2.557(5) Ag(02)-Ag(03): 2.9683(12) Ag(02)-Ag(03)#1: 2.9682(12) Ag(02)-Ag(05)#2: 3.0986(9) Ag(02)-Ag(05)#3: 3.0986(9) Ag(02)-O(2): 2.364(5) Ag(02)-O(2)#1: 2.364(5) Ag(03)-O(6): 2.225(5) Ag(03)-O(3): 2.441(5) Ag(03)-O(1): 2.477(5) Ag(04)-Ag(05): 3.0818(13) Ag(04)-O(4): 2.307(5) Ag(04)-O(1): 2.363(5) Ag(04)-N(00L): 2.335(6) Ag(05)-N(1): 2.213(6)	Ag(02)-Ag(01)-Ag(05)#2: 58.79(3) Ag(03)-Ag(01)-Ag(02): 59.25(2) Ag(03)#1-Ag(01)-Ag(02): 60.58(2) Ag(03)#1-Ag(01)-Ag(03): 83.91(3) Ag(03)#1-Ag(01)-Ag(04)#2: 90.69(3) Ag(03)-Ag(01)-Ag(05)#2: 108.63(2) Ag(03)#1-Ag(01)-Ag(05)#2: 94.25(2) Ag(04)#2-Ag(01)-Ag(02): 107.59(3) Ag(04)#2-Ag(01)-Ag(03): 166.75(3) Ag(04)#2-Ag(01)-Ag(05)#2: 59.596(19) O(5)-Ag(01)-Ag(02): 137.37(13) O(5)-Ag(01)-Ag(03)#1: 119.35(13) O(5)-Ag(01)-Ag(03): 78.13(13) O(5)-Ag(01)-Ag(04)#2: 114.98(13) O(5)-Ag(01)-Ag(05)#2: 146.38(13) O(5)-Ag(01)-O(1): 79.74(17) O(1)-Ag(01)-Ag(02): 74.07(11) O(1)-Ag(01)-Ag(03): 52.74(11) Ag(01)#1-Ag(02)-Ag(01): 90.01(4) Ag(01)-Ag(02)-Ag(05)#3: 151.57(3) Ag(01)-Ag(02)-Ag(05)#2: 64.09(3) Ag(01)#1-Ag(02)-Ag(05)#3: 64.09(3) Ag(01)#1-Ag(02)-Ag(05)#2: 151.58(3) Ag(03)#1-Ag(02)-Ag(01): 56.18(3) Ag(03)-Ag(02)-Ag(01)#1: 56.18(3) Ag(03)-Ag(02)-Ag(01): 58.99(3) Ag(03)#1-Ag(02)-Ag(01)#1: 58.99(3) Ag(03)#1-Ag(02)-Ag(03): 81.45(4) Ag(03)#1-Ag(02)-Ag(05)#2: 94.96(3) Ag(03)-Ag(02)-Ag(05)#3: 94.96(3) Ag(03)#1-Ag(02)-Ag(05)#3: 112.82(3) Ag(03)-Ag(02)-Ag(05)#2: 112.82(3) Ag(05)#2-Ag(02)-Ag(05)#3: 143.52(4) O(2)#1-Ag(02)-Ag(01)#1: 76.85(12) O(2)-Ag(02)-Ag(01)#1: 135.07(13)

		O(2)-Ag(02)-Ag(01): 76.85(12) O(2)-Ag(02)-Ag(03)#1: 132.37(11) O(2)#1-Ag(02)-Ag(03): 132.37(11) O(2)-Ag(02)-Ag(03): 80.85(12) O(2)#1-Ag(02)-Ag(03)#1: 80.85(12) O(2)-Ag(02)-Ag(05)#2: 53.47(13) O(2)-Ag(02)-Ag(05)#3: 112.50(12) O(2)#1-Ag(02)-Ag(05)#3: 53.47(13) O(2)#1-Ag(02)-Ag(05)#2: 112.50(12) O(2)-Ag(02)-O(2)#1: 140.3(2) Ag(01)#1-Ag(03)-Ag(01): 95.95(3)
AG_501 (4b)	Ag(1)-Ag(2): 3.1771(16) Ag(1)-Ag(6)#1: 3.0297(17) Ag(1)-N(2)#1: 2.335(13) Ag(1)-O(8)#1: 2.457(9) Ag(2)-Ag(3): 2.9934(18) Ag(2)-Ag(5): 2.9811(18) Ag(2)-Ag(7)#1: 3.1795(1) Ag(3)-Ag(4)#1: 2.686(3) Ag(3)-Ag(4): 3.277(3) Ag(3)-O(6): 2.235(12) Ag(4)-Ag(4)#1: 0.941(5) Ag(4)-Ag(6)#1: 2.989(3) Ag(4)-Ag(6): 2.870(3) Ag(4)-Ag(5)#1: 3.260(3) Ag(4)-Ag(5): 2.619(3) Ag(6)-Ag(7): 3.0322(17) Ag(5)-O(7): 2.231(12) Ag(7)-N(1): 2.321(11) Ag(7)-O(5): 2.504(10) Ag(8)-Ag(12)#2: 3.2287(16) Ag(8)-Ag(13)#2: 3.0687(15) Ag(8)-Ag(14)#2: 3.3267(17) Ag(8)-N(3): 2.314(12) Ag(8)-O(9): 2.501(10) Ag(9)-Ag(10): 3.0279(13) Ag(9)-Ag(10)#2: 3.0278(13) Ag(9)-Ag(13)#2: 2.9099(11)	Ag(6)#1-Ag(1)-Ag(2): 73.58(4) N(2)#1-Ag(1)-Ag(2): 165.3(3) N(2)#1-Ag(1)-Ag(6)#1: 100.4(3) O(8)#1-Ag(1)-Ag(2): 95.1(2) O(8)#1-Ag(1)-Ag(6)#1: 59.9(2) Ag(1)-Ag(2)-Ag(7)#1: 88.56(5) Ag(3)-Ag(2)-Ag(1): 67.34(4) Ag(3)-Ag(2)-Ag(7)#1: 121.99(6) Ag(5)-Ag(2)-Ag(1): 121.37(6) Ag(5)-Ag(2)-Ag(3): 81.82(6) Ag(5)-Ag(2)-Ag(7)#1: 66.85(4) Ag(2)-Ag(3)-Ag(4): 81.09(7) Ag(4)#1-Ag(3)-Ag(2): 91.11(8) Ag(4)#1-Ag(3)-Ag(4): 14.18(9) O(6)-Ag(3)-Ag(2): 164.0(3) O(6)-Ag(3)-Ag(4)#1: 102.4(3) O(6)-Ag(3)-Ag(4): 110.6(3) Ag(3)#1-Ag(4)-Ag(3): 165.81(9) Ag(3)#1-Ag(4)-Ag(6)#1: 95.44(9) Ag(3)#1-Ag(4)-Ag(6): 94.15(8) Ag(3)#1-Ag(4)-Ag(5)#1: 81.68(8) Ag(4)#1-Ag(4)-Ag(3)#1: 121.4(3) Ag(4)#1-Ag(4)-Ag(3): 44.4(3) Ag(4)#1-Ag(4)-Ag(6)#1: 73.6(3) Ag(4)#1-Ag(4)-Ag(6): 88.0(3) Ag(4)#1-Ag(4)-Ag(5)#1: 40.7(3) Ag(4)#1-Ag(4)-Ag(5): 125.8(3)

	Ag(9)-Ag(13): 2.9099(11) Ag(9)-Ag(14)#2: 3.0505(13) Ag(9)-Ag(14): 3.0505(13) Ag(10)-Ag(12): 3.0870(14) Ag(10)-O(10): 2.290(10) Ag(11)-Ag(12): 2.9243(15) Ag(11)-Ag(13): 3.0755(15) Ag(11)-N(4)#2: 2.319(11) Ag(11)-O(12)#2: 2.477(9) Ag(12)-Ag(14): 3.1881(15) Ag(14)-O(11): 2.247(10)	Ag(6)-Ag(4)-Ag(3): 86.03(7) Ag(6)#1-Ag(4)-Ag(3): 80.87(6) Ag(6)-Ag(4)-Ag(6)#1: 161.66(9) Ag(6)#1-Ag(4)-Ag(5)#1: 83.93(7) Ag(6)-Ag(4)-Ag(5)#1: 82.04(7) Ag(5)#1-Ag(4)-Ag(3): 84.31(7) Ag(5)-Ag(4)-Ag(3): 82.33(8) Ag(5)-Ag(4)-Ag(3)#1: 111.57(10) Ag(5)-Ag(4)-Ag(6)#1: 91.74(8) Ag(5)-Ag(4)-Ag(6): 99.22(9) Ag(5)-Ag(4)-Ag(5)#1: 166.45(9) Ag(1)#1-Ag(6)-Ag(7): 94.13(5) Ag(4)-Ag(6)-Ag(1)#1: 94.88(6) Ag(4)#1-Ag(6)-Ag(1)#1: 108.00(7) Ag(4)-Ag(6)-Ag(4)#1: 18.34(9) Ag(4)-Ag(6)-Ag(7): 108.48(7) Ag(4)#1-Ag(6)-Ag(7): 94.28(6) Ag(2)-Ag(5)-Ag(4)#1: 81.03(7) Ag(4)-Ag(5)-Ag(2): 93.34(8) Ag(4)-Ag(5)-Ag(4)#1: 13.55(9) Ag(6)-Ag(7)-Ag(2)#1: 73.51(4) O(5)-Ag(7)-Ag(2)#1: 95.1(2) O(5)-Ag(7)-Ag(6): 59.3(2) Ag(12)#2-Ag(8)-Ag(14)#2: 58.18(3) Ag(13)#2-Ag(8)-Ag(12)#2: 79.73(4) Ag(13)#2-Ag(8)-Ag(14)#2: 83.75(4) O(9)-Ag(8)-Ag(12)#2: 101.8(2) O(9)-Ag(8)-Ag(13)#2: 60.3(2) O(9)-Ag(8)-Ag(14)#2: 53.6(2) O(9)-Ag(8)-C(82)#2: 92.1(4) Ag(10)#2-Ag(9)-Ag(10): 180.0 Ag(10)#2-Ag(9)-Ag(14): 91.76(3) Ag(10)-Ag(9)-Ag(14): 88.24(3) Ag(10)#2-Ag(9)-Ag(14)#2: 88.24(3)
AG_504 (2b)	Ag(1)-Ag(2): 2.8460(14) Ag(1)-Ag(4)#1: 3.0558(16) Ag(1)-N(1): 2.290(11) Ag(1)-O(1): 2.594(9)	Ag(2)-Ag(1)-Ag(4)#1: 77.85(4) N(1)-Ag(1)-Ag(2): 125.9(2) N(1)-Ag(1)-Ag(4)#1: 151.5(3) N(1)-Ag(1)-O(1): 67.4(3)

Ag(2)-Ag(3)#1: 3.0882(17) Ag(2)-Ag(3): 3.0882(17) Ag(2)-Ag(5)#2: 2.8109(15) Ag(2)-Ag(5)#3: 2.8109(15) Ag(3)-Ag(4): 2.8381(18) Ag(3)-Ag(5): 2.8653(18) Ag(3)-O(1): 2.337(8) Ag(4)-Ag(5)#3: 3.1264(18) Ag(4)-Ag(5): 3.1265(18) Ag(5)-O(2): 2.216(9)	O(1)-Ag(1)-Ag(2): 66.31(19) O(1)-Ag(1)-Ag(4)#1: 141.01(19) Ag(1)#1-Ag(2)-Ag(1): 180.0 Ag(1)-Ag(2)-Ag(3): 93.04(3) Ag(1)-Ag(2)-Ag(3)#1: 86.96(3) Ag(1)#1-Ag(2)-Ag(3): 86.96(3) Ag(1)#1-Ag(2)-Ag(3)#1: 93.04(3) Ag(3)#1-Ag(2)-Ag(3): 180.0 Ag(5)#3-Ag(2)-Ag(1)#1: 82.70(4) Ag(5)#2-Ag(2)-Ag(1)#1: 97.30(4) Ag(5)#2-Ag(2)-Ag(1): 82.70(4) Ag(5)#3-Ag(2)-Ag(1); 97.30(4) Ag(5)#2-Ag(2)-Ag(3): 90.80(4) Ag(5)#2-Ag(2)-Ag(3)#1: 89.20(4) Ag(5)#3-Ag(2)-Ag(3)#1: 90.80(4) Ag(5)#3-Ag(2)-Ag(3): 89.20(4) Ag(5)#2-Ag(2)-Ag(5)#3: 180.0 Ag(4)-Ag(3)-Ag(2): 77.43(3) Ag(4)-Ag(3)-Ag(5): 66.48(5) Ag(5)-Ag(3)-Ag(2): 118.93(6) O(1)-Ag(3)-Ag(2): 65.0(2) O(1)-Ag(3)-Ag(4): 105.0(3) O(1)-Ag(3)-Ag(5): 78.6(2) O(1C)-Ag(3)-Ag(2): 138.0(5) O(1C)-Ag(3)-Ag(4): 144.4(5) O(1C)-Ag(3)-Ag(5): 91.3(6) Ag(1)#4-Ag(4)-Ag(1)#1: 135.35(7) Ag(1)#4-Ag(4)-Ag(5): 74.38(4) Ag(1)#4-Ag(4)-Ag(5)#3: 143.02(4) Ag(1)#1-Ag(4)-Ag(5): 143.02(4) Ag(1)#1-Ag(4)-Ag(5)#3: 74.38(4) Ag(3)-Ag(4)-Ag(1)#4: 110.76(3) Ag(3)#3-Ag(4)-Ag(1)#4: 87.73(3) Ag(3)#3-Ag(4)-Ag(1)#1: 110.76(3) Ag(3)-Ag(4)-Ag(1)#1: 87.73(3) Ag(3)#3-Ag(4)-Ag(3): 131.04(8) Ag(3)-Ag(4)-Ag(5): 57.18(4) Ag(3)#3-Ag(4)-Ag(5)#3: 57.18(4)
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		Ag(3)#3-Ag(4)-Ag(5): 87.96(5) Ag(3)-Ag(4)-Ag(5)#3: 87.96(5) Ag(5)#3-Ag(4)-Ag(5): 91.61(7) Ag(2)#3-Ag(5)-Ag(3): 133.34(5)
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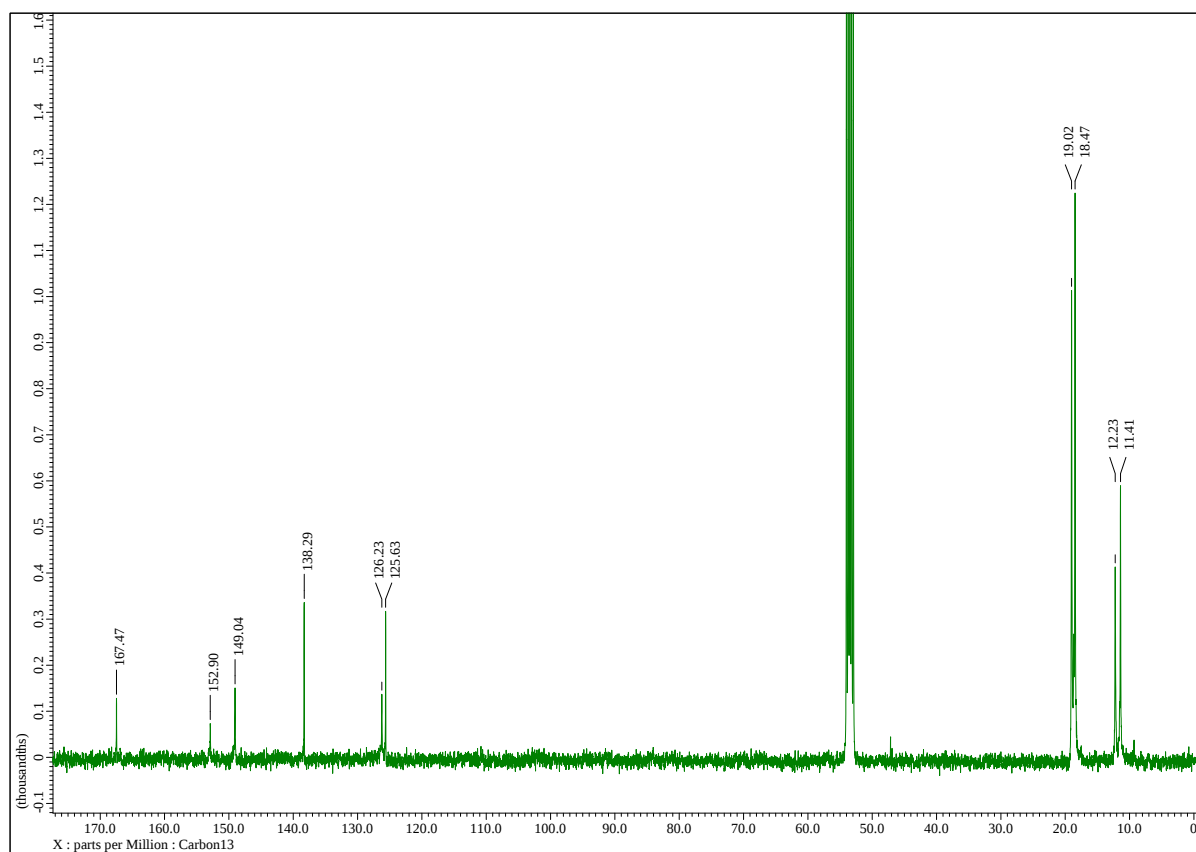


Figure S1: ¹³C-NMR (CDCl₂) of compound 4a

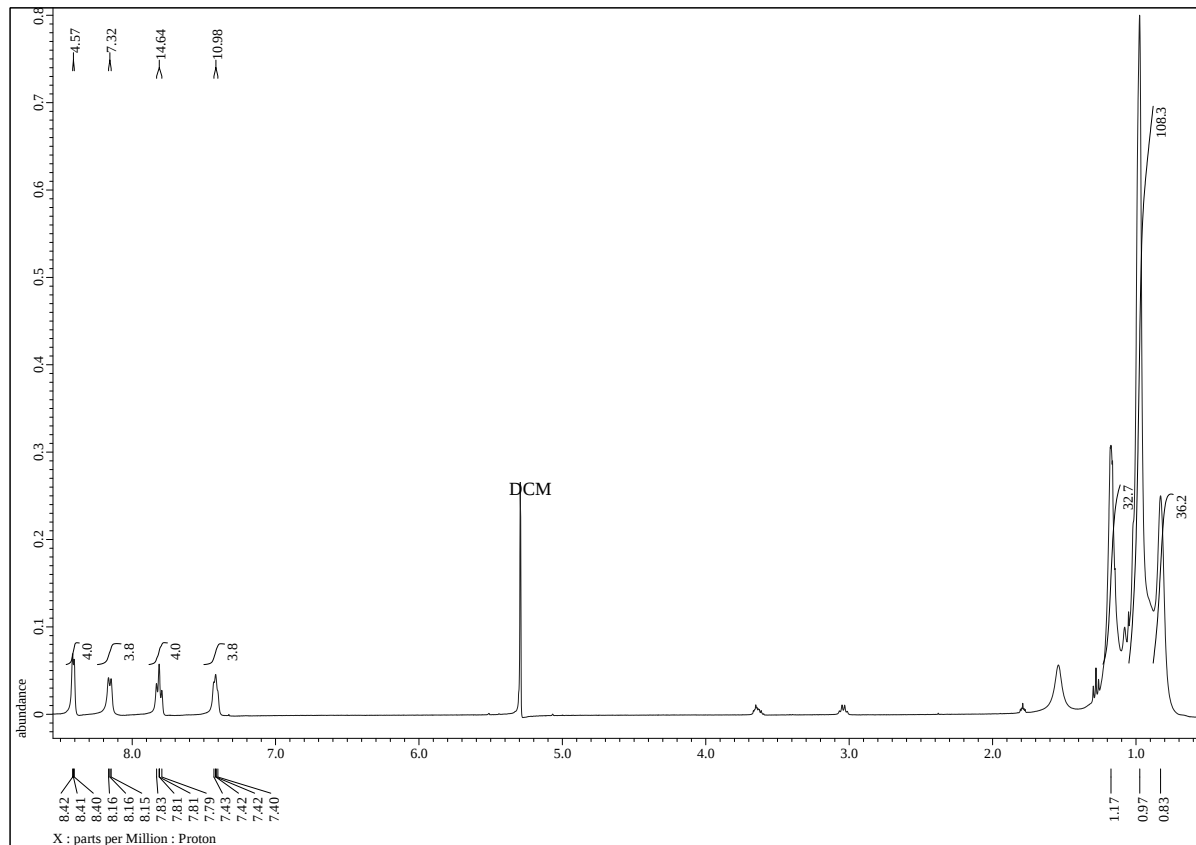


Figure S2: ¹H-NMR (CDCl₂) of compound 4a.

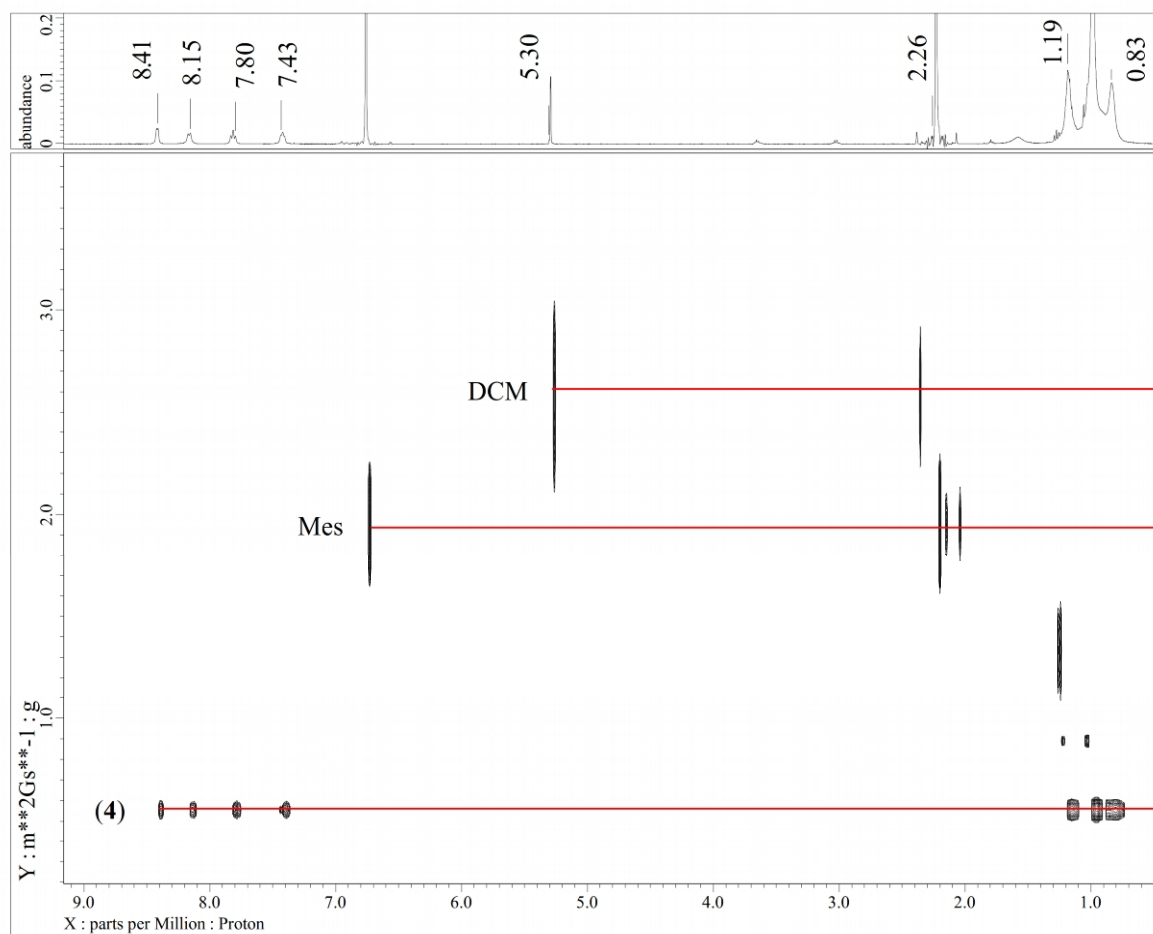


Figure S3: ^1H -DOSY NMR of a mixture of mesitylene and cluster 4a in DCM-d_2 . The diffusion coefficient is calibrated internally to the a radius of 3 Å for mesitylene.

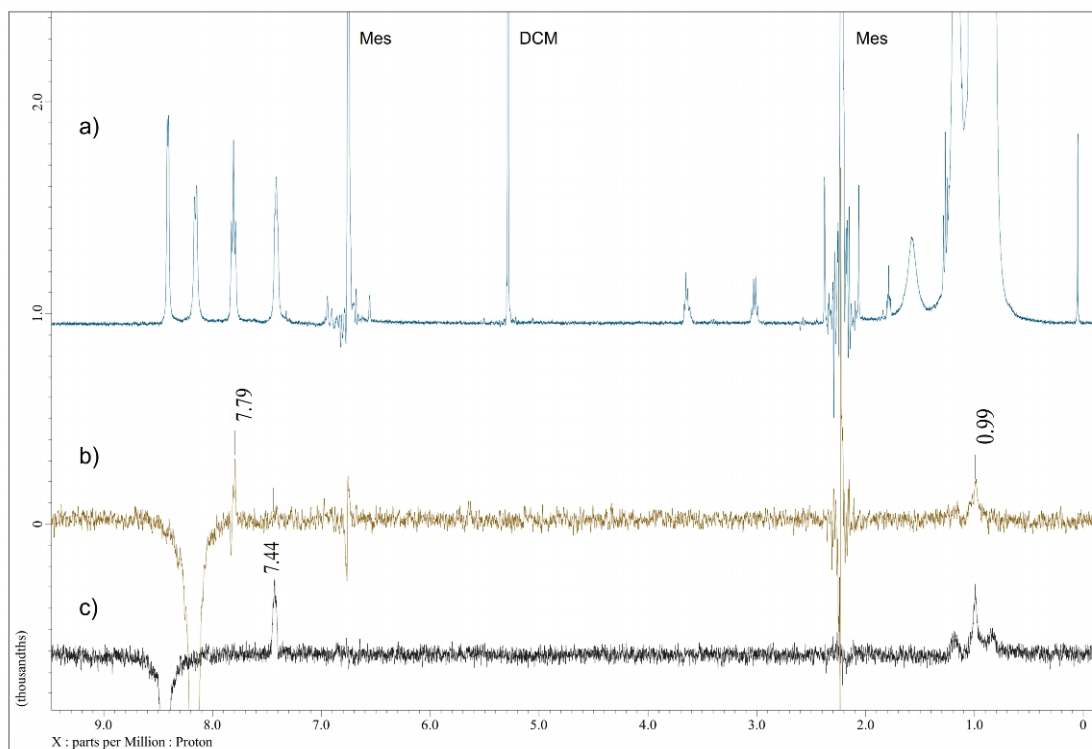


Figure S4: ^1H -NMR spectrum of a mixture of mesitylene and cluster 4a. (a, blue). 1D-NOE traces irradiating at 8.16 ppm (b, brown traces, 2-H) and 8.41 ppm (c, black trace, 4-H).

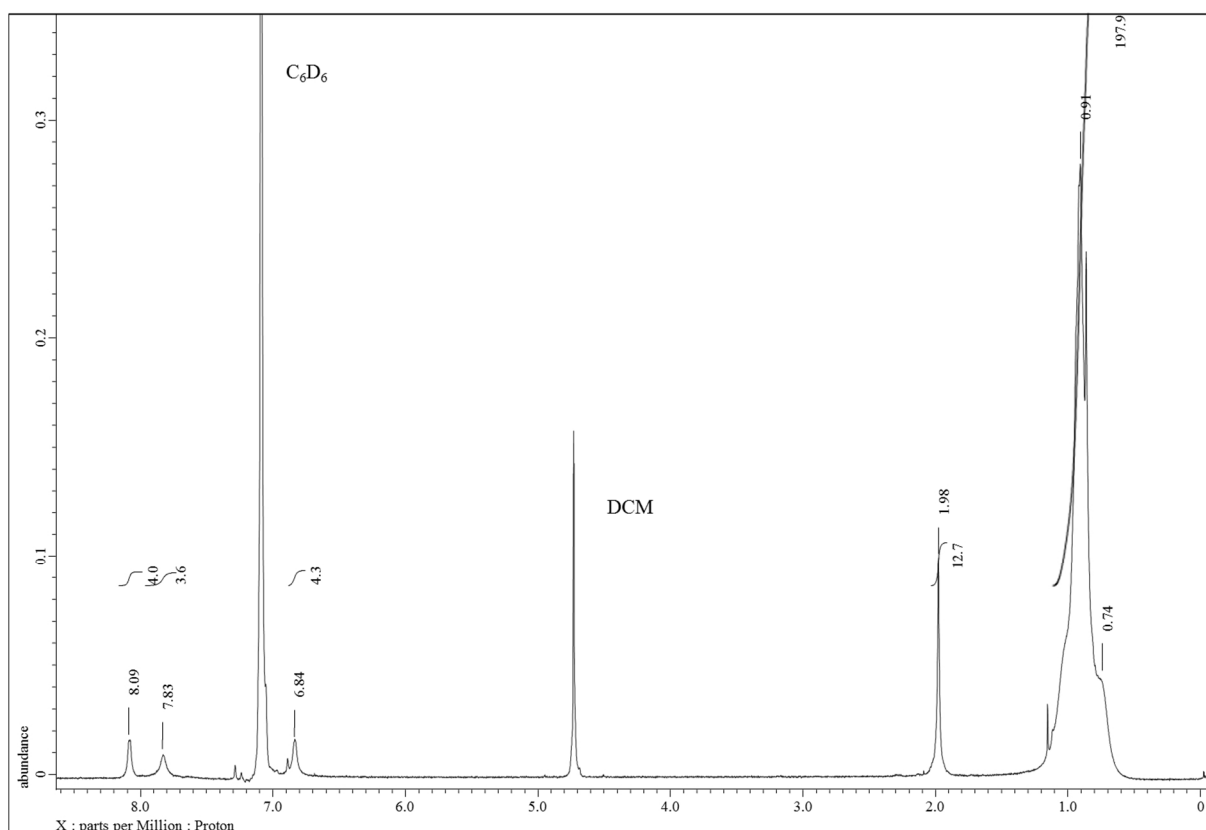


Figure S5: ^1H -NMR (C_6D_6 , CD_2Cl_2) of compound 4b

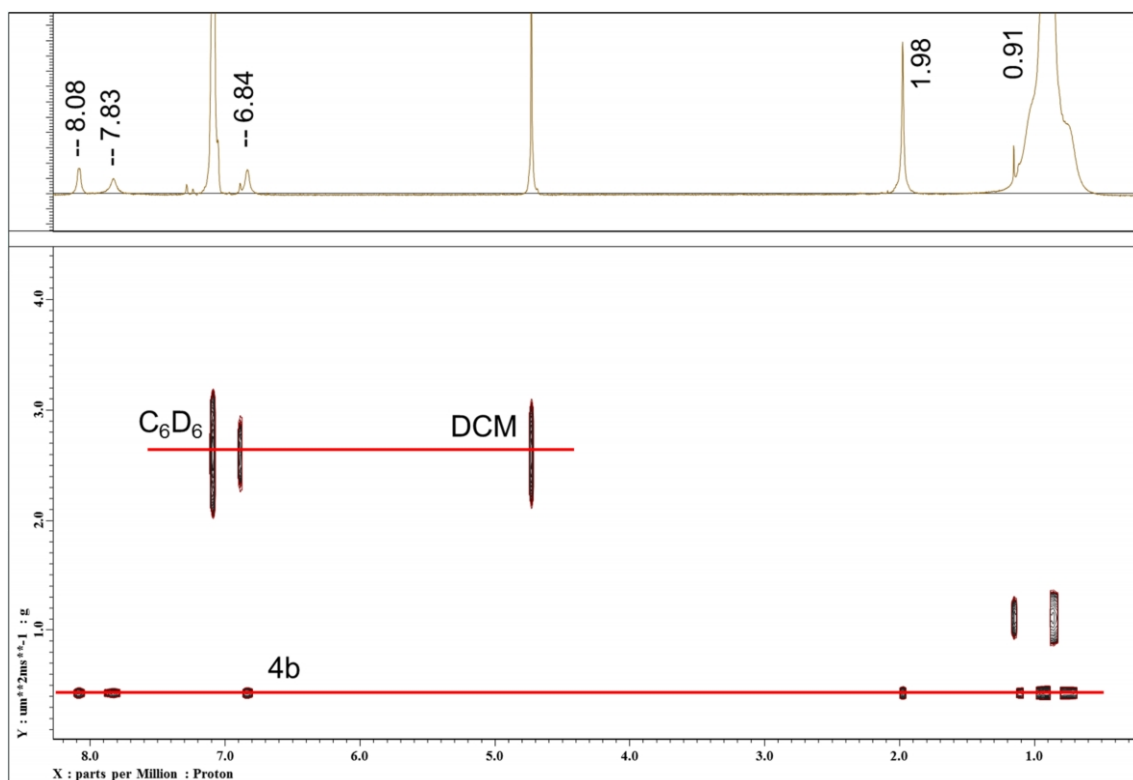


Figure S6: ^1H -DOSY NMR of cluster 4b in benzene- d_6 and DCM- d_2 . The diffusion coefficient is calibrated internally to the a radius of 2.03 Å for DCM.

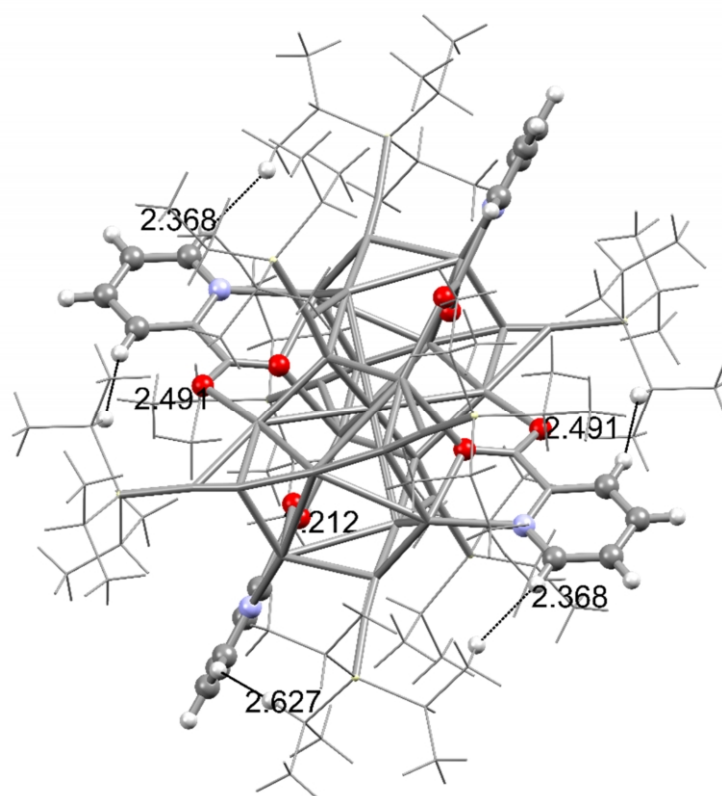


Figure S7: Solid-state structure of 4a indicating relevant H···H distances for 1D-NOE measurements.

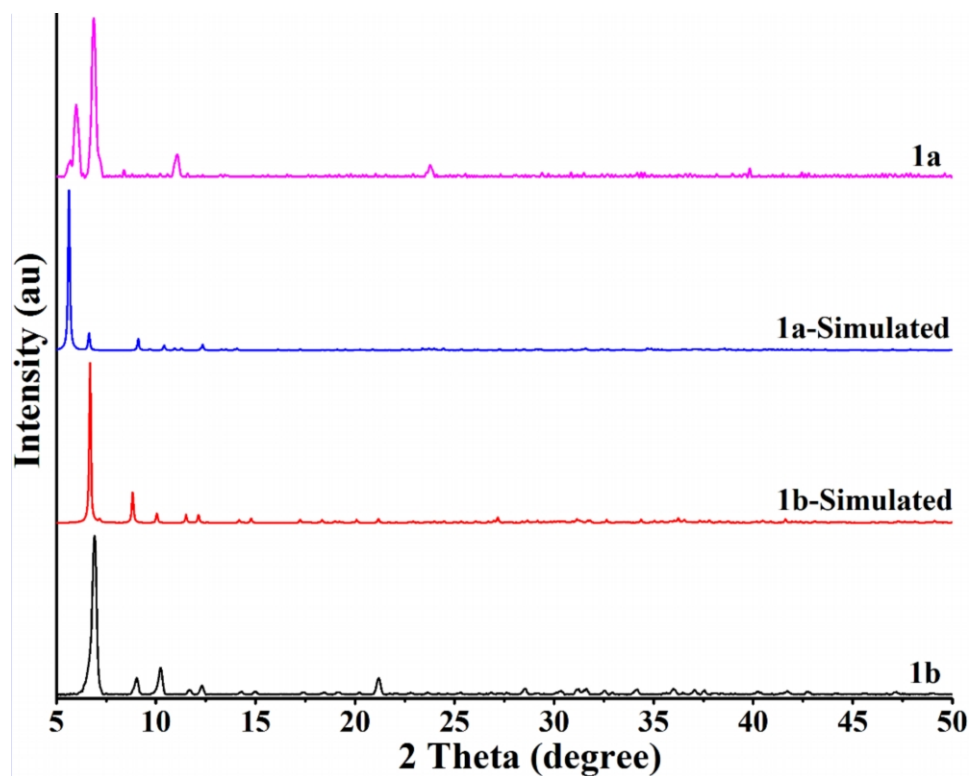


Figure S8: PXRD data of different reactions from which 1a and 1b have been isolated. Trace “1a” is obtained from the filtrate, while trace “1b” is obtained from the precipitated powders after prolonged reaction times illustrating that coordination compound 1b predominantly forms under the later conditions.

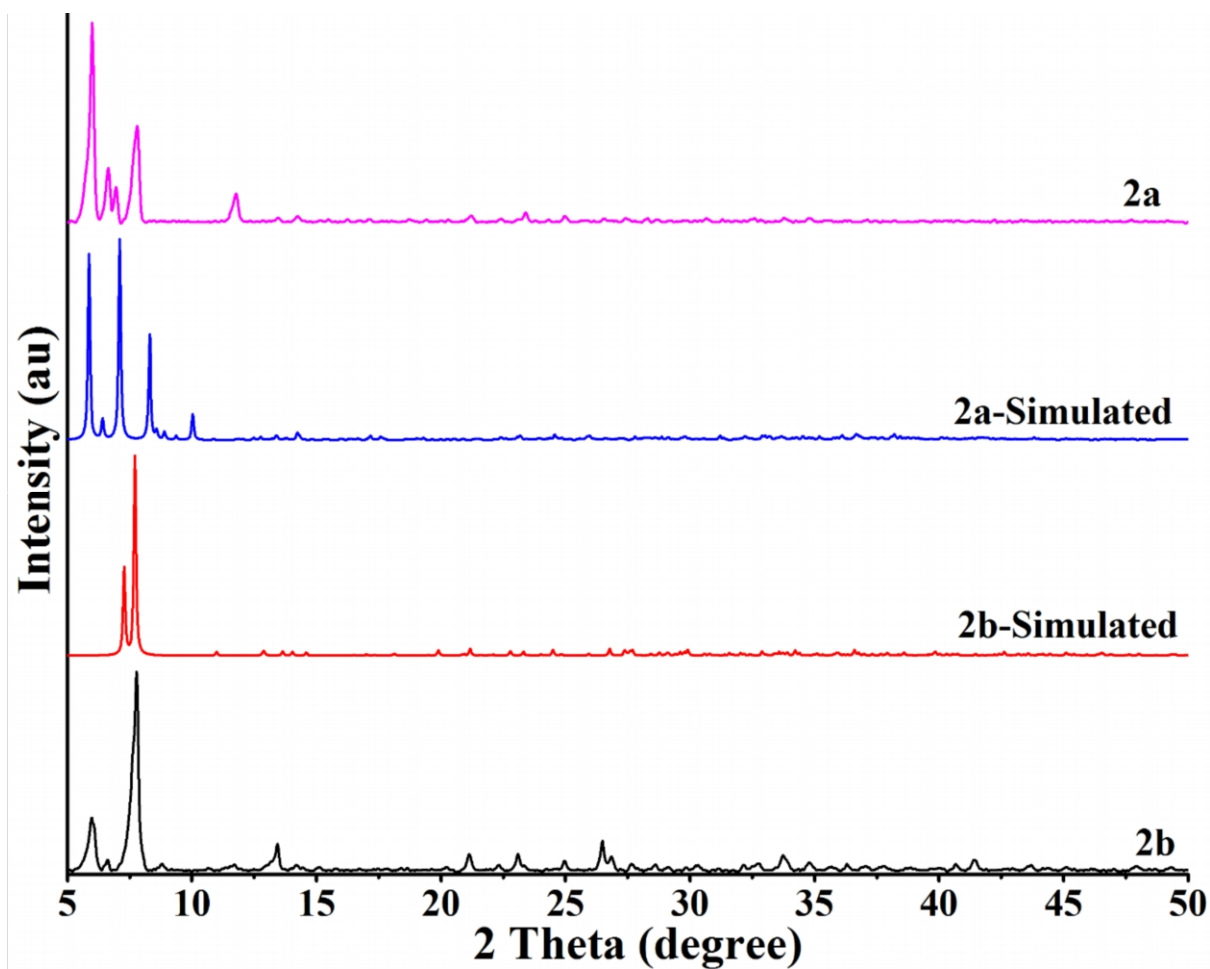


Figure S9: Simulated PXRD patterns of 2a and 2b, together with two preparations “2a” (shorter time 4 hours) and “2b” longer time (over night) before the filtration step.

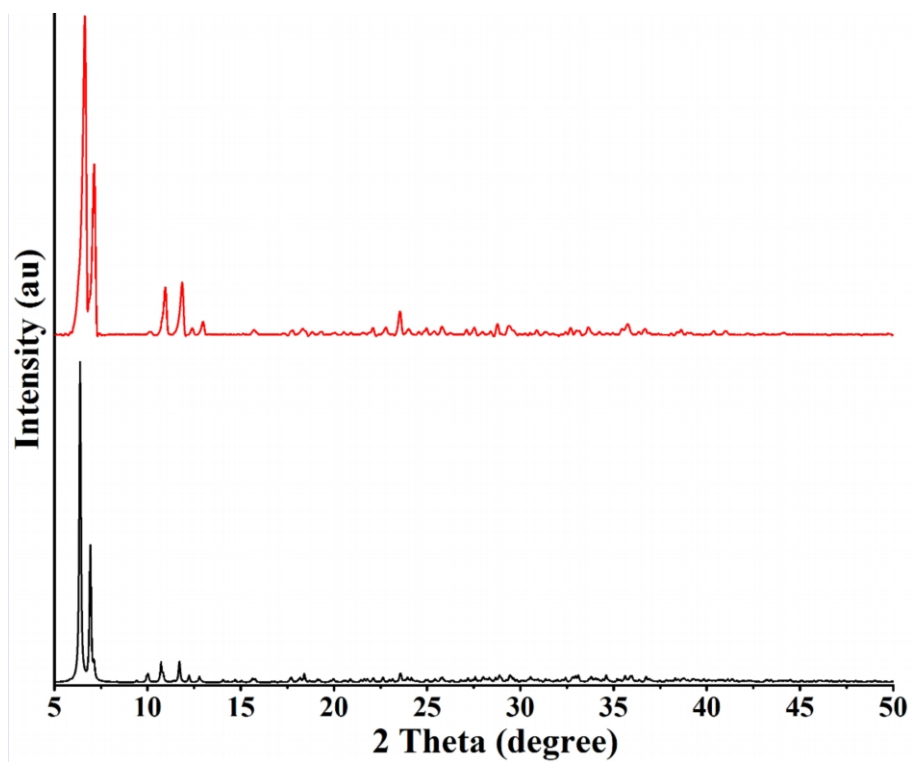


Figure S10. PXRD data for compound 3 (black: simulated; red: experimental)

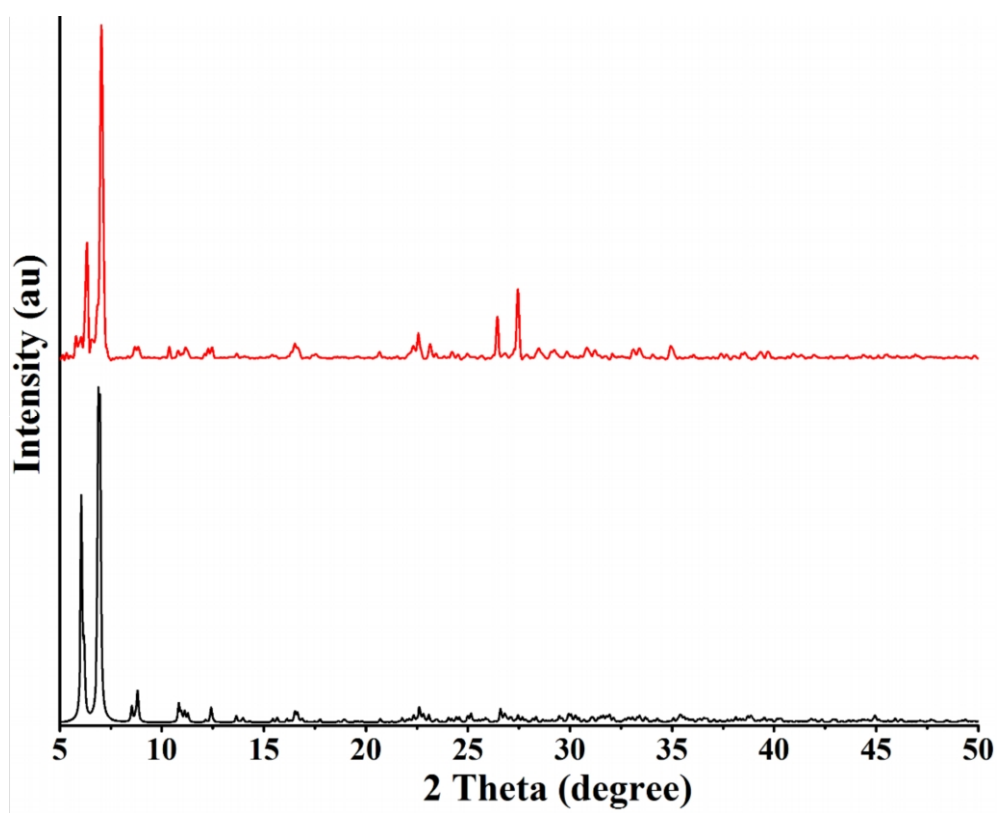


Figure S11: PXRD pattern for 4a (red: experimental and black: simulated)

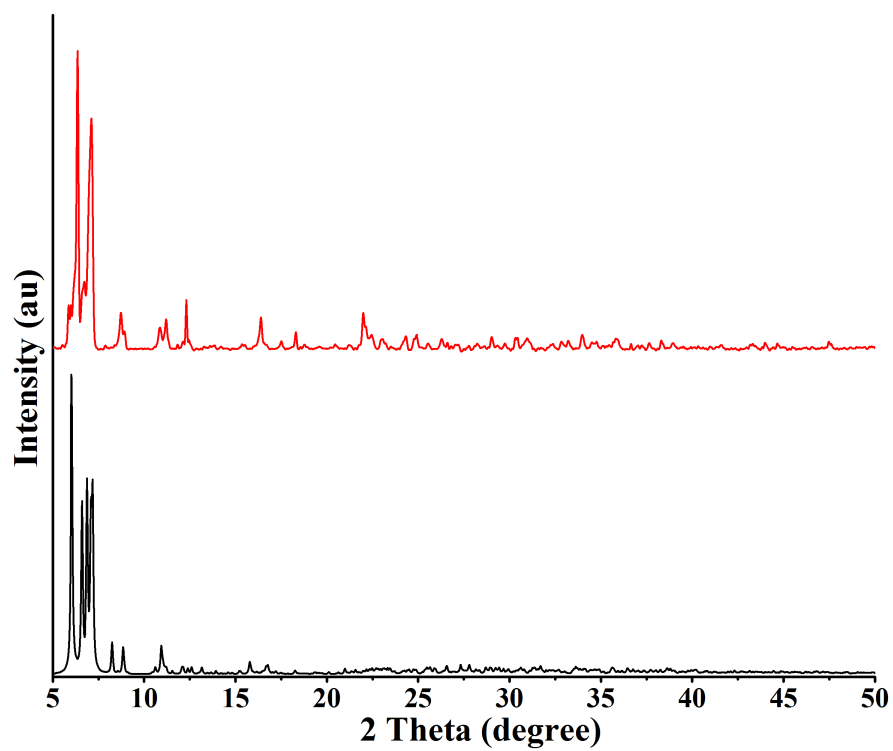


Figure S12: PXRD pattern for 4b (red: experimental and black: simulated)

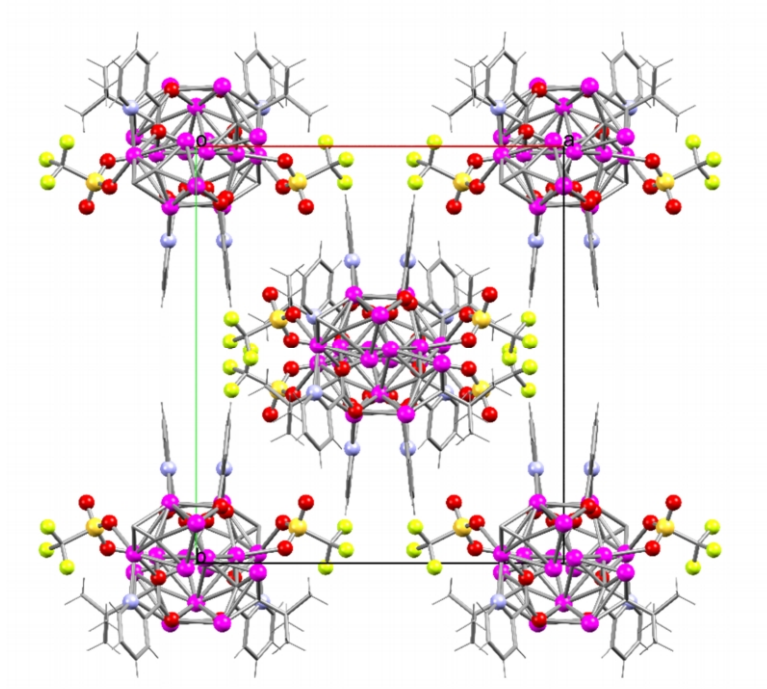


Figure S13: View along the [101] of coordination polymer 1b.

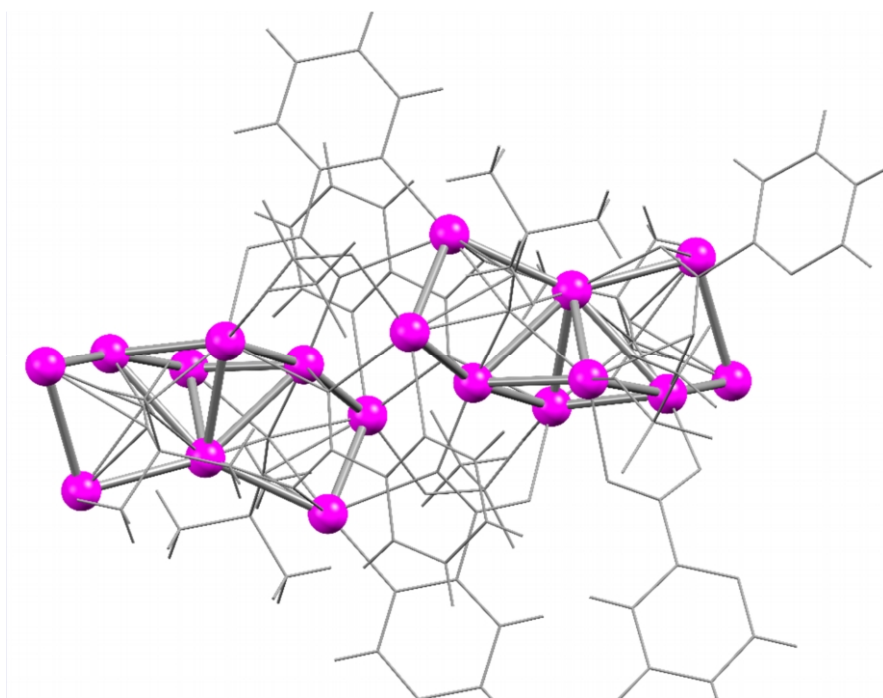


Figure S14: Two nonanuclear entities and their coordination environment in compound 1b showing no direct silver-silver actions.

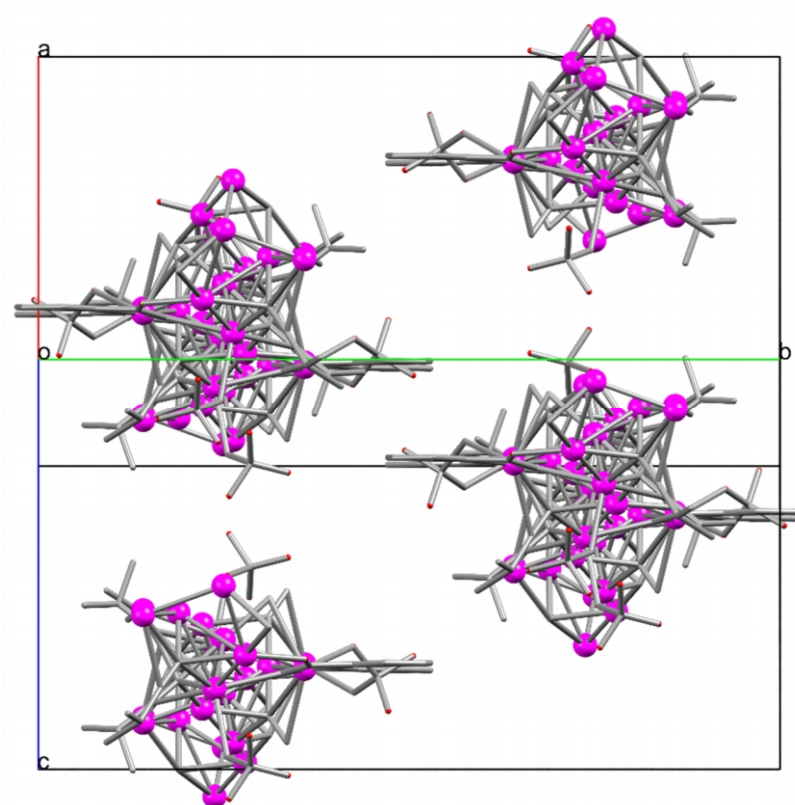


Figure S15: View along the [101] axis of the solid-state structure of 2b.

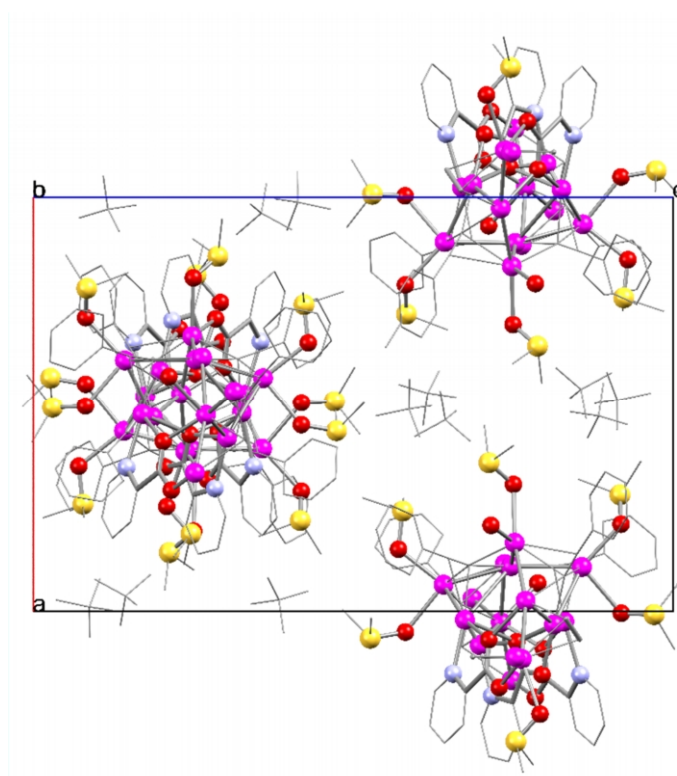


Figure S16. View along [010] of the solid state structure of 3.

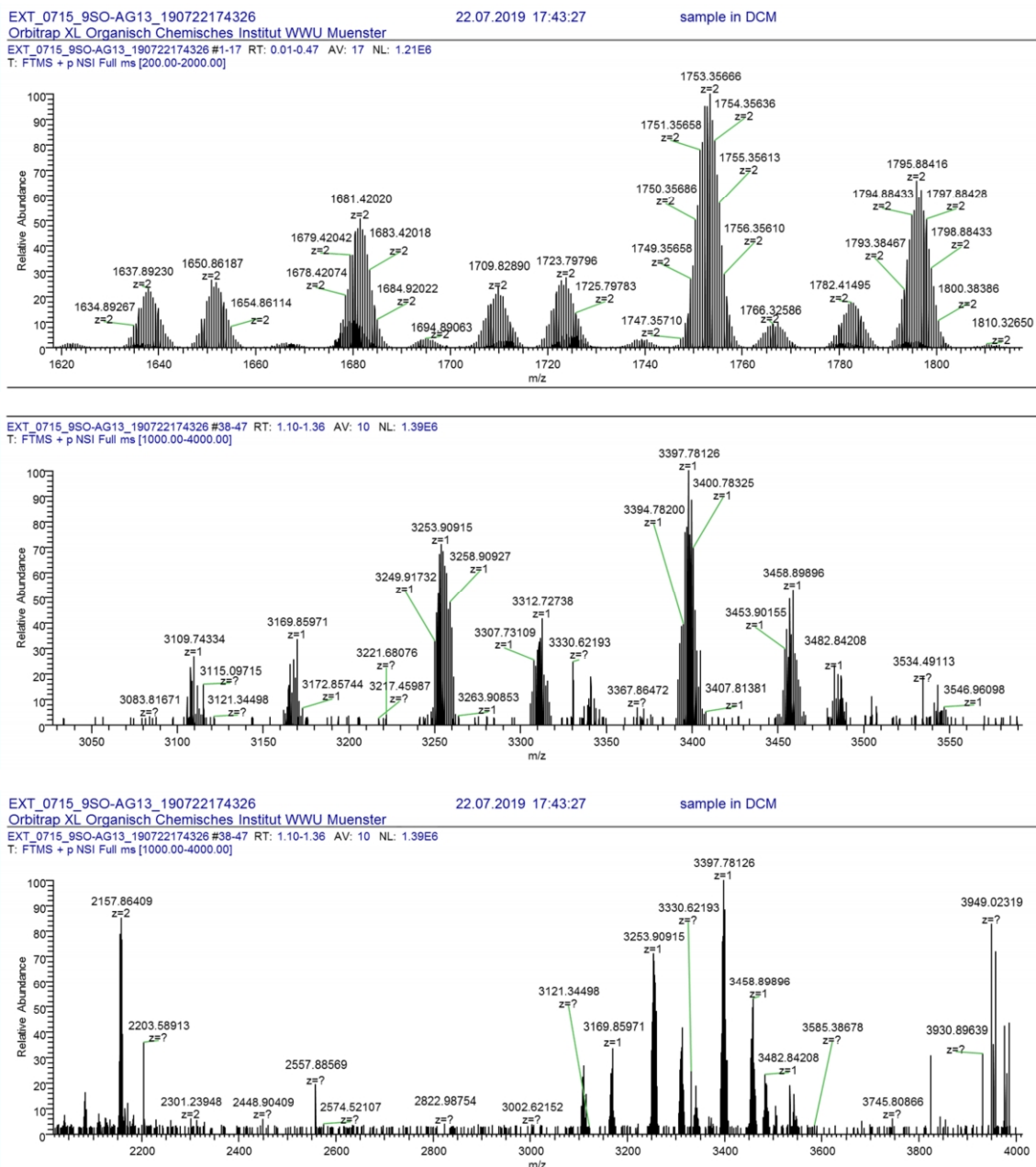
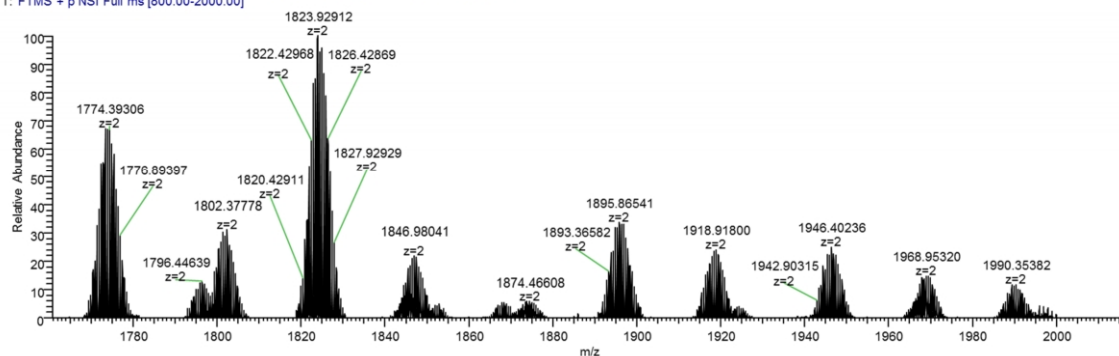


Figure S17. Selected ESI-MS spectra of cluster 4a.

EXT_0822_9SO-AG-501_190827170702 #121-142 RT: 1.19-1.40 AV: 22 NL: 8.98E5
T: FTMS + p NSI Full ms [800.00-2000.00]

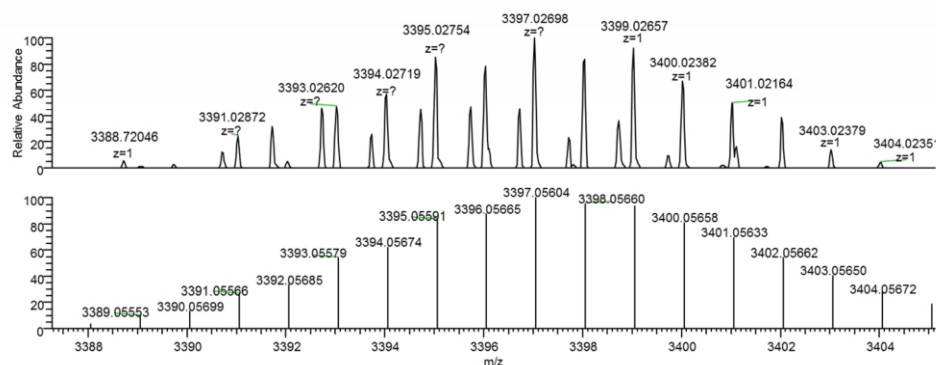
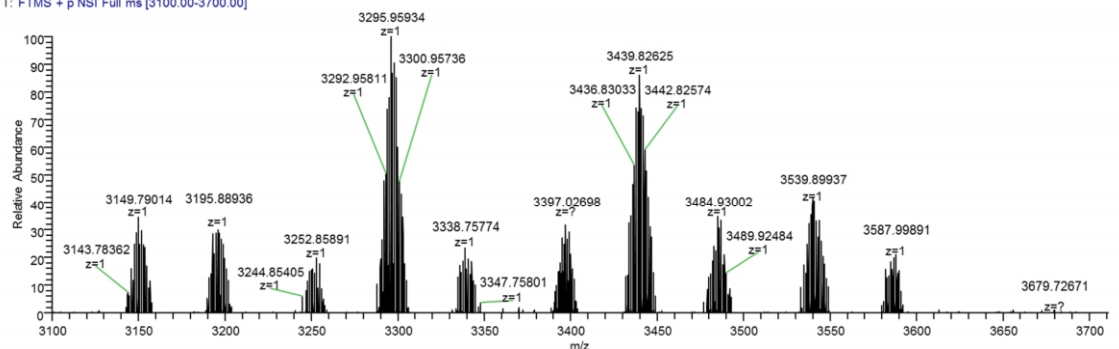


EXT_0822_9SO-AG-501_190827173904
Orbitrap XL Organisch Chemisches Institut WWU Muenster

27.08.2019 17:39:04

Sample in DCM

EXT_0822_9SO-AG-501_190827173904 #2-20 RT: 0.05-0.57 AV: 19 NL: 8.19E5
T: FTMS + p NSI Full ms [3100.00-3700.00]



NL:
2.58E5
EXT_0822_9SO-AG-
501_190827173904#2-20
RT: 0.05-0.57 AV: 19 T:
FTMS + p NSI Full ms
[3100.00-3700.00]

NL:
1.02E5
C₁₁₆H₁₉₂N₄O₈Ag₁₃Si₈:
C₁₁₆H₁₉₂N₄O₈Ag₁₃Si₈:
c(gss, s/p.40)(Val) Chrg 1
R: 20000 Res.Pwr. @FWHM

Figure S18. Selected ESI-MS spectra of cluster 4b.

References

1. SAINT, Bruker, Bruker AXS Inc., Madison, Wisconsin, USA, 2007.
2. (a) G. Sheldrick, *Acta Crystallogr. Sect. C: Cryst. Struct. Commun.*, 2015, **71**, 3-8; (b) G. Sheldrick, *Acta Crystallogr., Sect. A: Found. Crystallogr.*, 2008, **A64**, 112-122.
3. O. V. Dolomanov, L. J. Bourhis, R. J. Gildea, J. A. K. Howard, H. Puschmann, *J. Appl. Crystallogr.* **2009**, *42*, 339-341.
4. (a) P. Timmerman, J.-L. Weidmann, K. A. Jolliffe, L. J. Prins, D. N. Reinhoudt, S. Shinkai, L. Frish, Y. Cohen, *J. Chem. Soc., Perkin Trans. 2* **2000**, 2077-2089. (b) Y. Cohen, L. Avram, L. Frish, *Angew. Chem., Int. Ed.* **2005**, *44*, 520-554.