Supplementary Material (ESI) for Chemical Communications

Single-crystal to single-crystal phase transitions of bis(N-phenyl-isonicotinamide) silver (I) nitrate reveal cooperativity properties of porous molecular materials

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The X-ray crystallographic data was collected at 150(1) K on a Nonius Kappa CCD diffractometer equipped with Mo-Kα radiation (λ = 0.71073 Å). The structure refinement was carried out by full-matrix least-squares on F^2 and Fourier Transform techniques and location of hydrogen atoms and their isotropically refinement was done using SHELXTL-97 (Bruker-AXS, Inc. Madison, WI). The DSC runs were performed by using a Mettler-Toledo DSC821 module. In all experiments, samples of ~5 mg were heated in open 40 μL Al pans in a flowing atmosphere of nitrogen at a flow rate 70 mL min^{-1} and a temperature ramp of 5 ^oC min^{-1}.

Synthesis of L (NPI). A solution of isonicotylchloride hydrochloride (890 mg, 5 mmol) and triethylamine (1.6 mL, 11 mmol) in 50 mL of chloroform was prepared and chilled to 4 C in an ice bath for 5 min. Then, aniline (465 mg, 5 mmol) was added slowly to the cold solution over a period of 10 min. The reaction was allowed to stir at room temperature overnight. The resulting solution was washed with $NaHCO_3$ solution thrice and the chloroform layer separated which upon concentration gave a white precipitate as the product. The solid was filtered and washed several times with ether. Yield 85 %. ^1H NMR spectrum ($CDCl_3$, 300 MHz) from TMS: 8.82 (d, 2H, Py), 7.73 (d, 2H, Py), 7.65 (d, 2H, *o*-Bz), 7.40 (t, 2H, m-Bz), 7.20 (t, 1H, p-Bz), 10.60 (s, NH).

Preparation of $[Ag(L)_2](NO_3)$ (1a). A solution of **L** (19.8 mg, 0.10 mmol) in 5 mL of methanol was added to a 5 mL methanolic solution of silver nitrate (8.45 mg, 0.050 mmol) and the mixture was stirred for 30 min in the dark. Slow evaporation of the resulting solution for 48 h generated large colorless crystals of **1a**. Yield 93%. Anal.

Calcd. for $C_{26}H_{28}N_5O_7Ag$ (**1a**): C 49.53, H 4.45, N 11.11 %. Found: C 49.80, H 4.37, N 11.44 %. Anal. Calcd. for $C_{24}H_{20}N_5O_5Ag$ (**1b**): C 50.89, H 3.53, N 12.36 %. Found: C 50.96, H 3.51, N 12.24%.

Table S1. Crystal data and structure refinement for **1a**.

Identification code	1a	
Empirical formula	C26 H28 Ag N5 O7	
Formula weight	630.40	
Temperature	150(1) K	
Wavelength	0.71073 Å	
Crystal system	Triclinic	
Space group	$P\bar{1}$	
Unit cell dimensions	a = 8.72340(10) Å	α= 74.6602(12)°.
	b = 9.6897(3) Å	β= 76.7586(16)°.
	c = 16.9513(5) Å	γ = 76.8878(16)°.
Volume	1323.80(6) Å^3	
Z	2	
Density (calculated)	1.582 Mg/m^3	
Absorption coefficient	0.816 mm^{-1}	
F(000)	644	
Crystal size	0.30 x 0.25 x 0.05 mm^3	
Theta range for data collection	3.77 to 27.49°.	
Index ranges	-11<=h<=11, -12<=k<=12, -19<=l<=21	
Reflections collected	9546	
Independent reflections	5982 [R(int) = 0.0226]	
Completeness to theta = 27.49°	98.6 %	
Absorption correction	Multi-scan	
Max. and min. transmission	0.9603 and 0.7918	
Refinement method	Full-matrix least-squares on F^2	
Data / restraints / parameters	5982 / 0 / 453	
Goodness-of-fit on F^2	1.061	
Final R indices [I>2sigma(I)]	R1 = 0.0285, wR2 = 0.0621	
R indices (all data)	R1 = 0.0348, wR2 = 0.0657	
Largest diff. peak and hole	0.396 and -0.585 e.Å^{-3}	

Table S2. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters ($Å^2$x 10^3) for 1a. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U(eq)
Ag(1)	5738(1)	3704(1)	4478(1)	23(1)
O(1)	8139(2)	10271(2)	1954(1)	27(1)
O(2)	2057(2)	-2441(1)	6696(1)	22(1)
O(3)	7713(2)	4353(2)	5573(1)	45(1)
O(4)	8485(2)	2420(2)	6474(1)	33(1)
O(5)	8050(2)	2240(2)	5304(1)	36(1)
O(6)	7375(2)	6726(2)	583(1)	29(1)
O(7)	8382(2)	4196(2)	1651(1)	45(1)
N(1)	6405(2)	5613(2)	3561(1)	19(1)
N(2)	7524(2)	9436(2)	934(1)	22(1)
N(3)	4295(2)	2064(2)	5176(1)	17(1)
N(4)	-200(2)	-727(2)	6528(1)	20(1)
N(5)	8092(2)	3019(2)	5783(1)	22(1)
C(1)	5490(2)	6317(2)	2987(1)	21(1)
C(2)	5886(2)	7491(2)	2365(1)	20(1)
C(3)	7276(2)	7999(2)	2332(1)	18(1)
C(4)	8221(2)	7280(2)	2929(1)	20(1)
C(5)	7760(2)	6096(2)	3522(1)	19(1)
C(6)	7708(2)	9349(2)	1720(1)	20(1)
C(7)	7818(2)	10568(2)	231(1)	21(1)
C(8)	7922(2)	11956(2)	285(2)	26(1)
C(9)	8221(3)	13007(3)	-440(2)	33(1)
C(10)	8402(3)	12714(3)	-1211(2)	34(1)
C(11)	8277(3)	11344(3)	-1264(2)	33(1)
C(12)	7987(3)	10277(3)	-552(1)	27(1)
C(13)	4786(2)	917(2)	5770(1)	18(1)
C(14)	3872(2)	-141(2)	6183(1)	18(1)
C(15)	2383(2)	-32(2)	5982(1)	16(1)
C(16)	1886(2)	1124(2)	5357(1)	18(1)
C(17)	2861(2)	2152(2)	4978(1)	18(1)
C(18)	1401(2)	-1183(2)	6439(1)	18(1)

C(19)	-1356(2)	-1638(2)	6913(1)	20(1)
C(20)	-1147(3)	-3022(2)	6769(1)	25(1)
C(21)	-2317(3)	-3875(3)	7149(2)	31(1)
C(22)	-3676(3)	-3354(3)	7665(2)	37(1)
C(23)	-3880(3)	-1976(3)	7799(2)	35(1)
C(24)	-2730(2)	-1105(2)	7423(1)	27(1)
C(25)	5978(3)	6581(3)	343(2)	45(1)
C(26)	9908(3)	3513(3)	1299(2)	31(1)

Table S3. Bond lengths [Å] and angles [°] for 1a.

Ag(1)-N(1)	2.1746(17)
Ag(1)-N(3)	2.1773(16)
Ag(1)-O(5)	2.6436(16)
Ag(1)-Ag(1)#1	3.3090(3)
O(1)-C(6)	1.227(2)
O(2)-C(18)	1.233(2)
O(3)-N(5)	1.235(2)
O(4)-N(5)	1.248(2)
O(5)-N(5)	1.257(2)
O(6)-C(25)	1.415(3)
O(6)-H(6A)	0.75(3)
O(7)-C(26)	1.419(3)
O(7)-H(7A)	0.75(3)
N(1)-C(1)	1.344(3)
N(1)-C(5)	1.349(2)
N(2)-C(6)	1.357(3)
N(2)-C(7)	1.409(3)
N(2)-H(2N)	0.82(3)
N(3)-C(17)	1.347(2)
N(3)-C(13)	1.349(3)
N(4)-C(18)	1.351(2)
N(4)-C(19)	1.421(2)
N(4)-H(4N)	0.82(2)
C(1)-C(2)	1.379(3)

C(1)-H(1)	0.95(2)
C(2)-C(3)	1.393(3)
C(2)-H(2)	0.93(2)
C(3)-C(4)	1.391(3)
C(3)-C(6)	1.502(3)
C(4)-C(5)	1.380(3)
C(4)-H(4)	0.97(2)
C(5)-H(5)	0.96(2)
C(7)-C(8)	1.396(3)
C(7)-C(12)	1.397(3)
C(8)-C(9)	1.388(3)
C(8)-H(8)	0.94(3)
C(9)-C(10)	1.377(4)
C(9)-H(9)	0.94(3)
C(10)-C(11)	1.384(4)
C(10)-H(10)	0.94(3)
C(11)-C(12)	1.382(3)
C(11)-H(11)	0.95(3)
C(12)-H(12)	0.91(3)
C(13)-C(14)	1.383(3)
C(13)-H(13)	0.95(2)
C(14)-C(15)	1.391(3)
C(14)-H(14)	0.92(2)
C(15)-C(16)	1.389(3)
C(15)-C(18)	1.500(3)
C(16)-C(17)	1.386(3)
C(16)-H(16)	0.93(2)
C(17)-H(17)	0.91(3)
C(19)-C(20)	1.390(3)
C(19)-C(24)	1.391(3)
C(20)-C(21)	1.393(3)
C(20)-H(20)	0.97(2)
C(21)-C(22)	1.383(4)
C(21)-H(21)	0.92(3)
C(22)-C(23)	1.379(4)
C(22)-H(22)	0.93(3)

C(23)-C(24)	1.389(3)
C(23)-H(23)	0.94(3)
C(24)-H(24)	0.93(2)
C(25)-H(25A)	0.9800
C(25)-H(25B)	0.9800
C(25)-H(25C)	0.9800
C(26)-H(26A)	0.99(3)
C(26)-H(26B)	0.98(3)
C(26)-H(26C)	0.99(3)

N(1)-Ag(1)-N(3)	158.69(6)
N(1)-Ag(1)-O(5)	112.85(6)
N(3)-Ag(1)-O(5)	88.39(6)
N(1)-Ag(1)-Ag(1)#1	78.25(4)
N(3)-Ag(1)-Ag(1)#1	100.77(4)
O(5)-Ag(1)-Ag(1)#1	99.50(3)
N(5)-O(5)-Ag(1)	104.58(11)
C(25)-O(6)-H(6A)	109(2)
C(26)-O(7)-H(7A)	109(2)
C(1)-N(1)-C(5)	117.78(17)
C(1)-N(1)-Ag(1)	120.03(13)
C(5)-N(1)-Ag(1)	122.14(13)
C(6)-N(2)-C(7)	127.23(18)
C(6)-N(2)-H(2N)	114.7(18)
C(7)-N(2)-H(2N)	116.5(18)
C(17)-N(3)-C(13)	117.67(16)
C(17)-N(3)-Ag(1)	118.40(13)
C(13)-N(3)-Ag(1)	123.84(12)
C(18)-N(4)-C(19)	124.67(17)
C(18)-N(4)-H(4N)	117.8(16)
C(19)-N(4)-H(4N)	116.5(16)
O(3)-N(5)-O(4)	121.19(18)
O(3)-N(5)-O(5)	119.77(18)
O(4)-N(5)-O(5)	119.02(17)
N(1)-C(1)-C(2)	122.85(18)
N(1)-C(1)-H(1)	115.9(14)

C(2)-C(1)-H(1)	121.3(14)
C(1)-C(2)-C(3)	119.26(19)
C(1)-C(2)-H(2)	119.3(14)
C(3)-C(2)-H(2)	121.4(14)
C(4)-C(3)-C(2)	118.09(19)
C(4)-C(3)-C(6)	119.56(17)
C(2)-C(3)-C(6)	122.18(18)
C(5)-C(4)-C(3)	119.26(18)
C(5)-C(4)-H(4)	119.0(14)
C(3)-C(4)-H(4)	121.7(14)
N(1)-C(5)-C(4)	122.74(19)
N(1)-C(5)-H(5)	115.4(12)
C(4)-C(5)-H(5)	121.8(12)
O(1)-C(6)-N(2)	125.81(19)
O(1)-C(6)-C(3)	120.14(18)
N(2)-C(6)-C(3)	114.02(17)
C(8)-C(7)-C(12)	119.2(2)
C(8)-C(7)-N(2)	123.06(19)
C(12)-C(7)-N(2)	117.72(18)
C(9)-C(8)-C(7)	119.3(2)
C(9)-C(8)-H(8)	122.2(16)
C(7)-C(8)-H(8)	118.5(16)
C(10)-C(9)-C(8)	121.4(2)
C(10)-C(9)-H(9)	118.9(17)
C(8)-C(9)-H(9)	119.7(17)
C(9)-C(10)-C(11)	119.2(2)
C(9)-C(10)-H(10)	120.1(16)
C(11)-C(10)-H(10)	120.6(16)
C(12)-C(11)-C(10)	120.5(2)
C(12)-C(11)-H(11)	117.3(17)
C(10)-C(11)-H(11)	122.2(17)
C(11)-C(12)-C(7)	120.4(2)
C(11)-C(12)-H(12)	122.4(17)
C(7)-C(12)-H(12)	117.2(17)
N(3)-C(13)-C(14)	122.79(17)
N(3)-C(13)-H(13)	116.5(14)

C(14)-C(13)-H(13)	120.7(14)
C(13)-C(14)-C(15)	119.16(18)
C(13)-C(14)-H(14)	121.0(14)
C(15)-C(14)-H(14)	119.9(14)
C(16)-C(15)-C(14)	118.46(17)
C(16)-C(15)-C(18)	122.93(16)
C(14)-C(15)-C(18)	118.60(17)
C(17)-C(16)-C(15)	118.98(17)
C(17)-C(16)-H(16)	117.7(15)
C(15)-C(16)-H(16)	123.4(15)
N(3)-C(17)-C(16)	122.89(18)
N(3)-C(17)-H(17)	116.9(15)
C(16)-C(17)-H(17)	120.2(15)
O(2)-C(18)-N(4)	124.58(18)
O(2)-C(18)-C(15)	120.40(16)
N(4)-C(18)-C(15)	115.01(16)
C(20)-C(19)-C(24)	120.22(19)
C(20)-C(19)-N(4)	121.10(18)
C(24)-C(19)-N(4)	118.66(18)
C(19)-C(20)-C(21)	119.4(2)
C(19)-C(20)-H(20)	119.9(15)
C(21)-C(20)-H(20)	120.6(15)
C(22)-C(21)-C(20)	120.4(2)
C(22)-C(21)-H(21)	120.6(16)
C(20)-C(21)-H(21)	118.8(16)
C(23)-C(22)-C(21)	119.8(2)
C(23)-C(22)-H(22)	120.7(17)
C(21)-C(22)-H(22)	119.5(17)
C(22)-C(23)-C(24)	120.7(2)
C(22)-C(23)-H(23)	121.6(17)
C(24)-C(23)-H(23)	117.7(17)
C(23)-C(24)-C(19)	119.4(2)
C(23)-C(24)-H(24)	121.6(14)
C(19)-C(24)-H(24)	119.0(15)
O(6)-C(25)-H(25A)	109.5
O(6)-C(25)-H(25B)	109.5

H(25A)-C(25)-H(25B)	109.5
O(6)-C(25)-H(25C)	109.5
H(25A)-C(25)-H(25C)	109.5
H(25B)-C(25)-H(25C)	109.5
O(7)-C(26)-H(26A)	110.4(15)
O(7)-C(26)-H(26B)	106.8(15)
H(26A)-C(26)-H(26B)	108(2)
O(7)-C(26)-H(26C)	111.3(15)
H(26A)-C(26)-H(26C)	110(2)
H(26B)-C(26)-H(26C)	110(2)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y+1,-z+1

Table S4. Anisotropic displacement parameters ($Å^2 x\ 10^3$)for 1a. The anisotropic displacement factor exponent takes the form: $-2\pi^2[\ h^2 a^{*2} U^{11} + ... + 2\ h\ k\ a^*\ b^*\ U^{12}\ ]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Ag(1)	25(1)	18(1)	22(1)	1(1)	-2(1)	-8(1)
O(1)	40(1)	22(1)	21(1)	-5(1)	-4(1)	-14(1)
O(2)	24(1)	14(1)	22(1)	0(1)	-2(1)	-2(1)
O(3)	64(1)	19(1)	42(1)	3(1)	-5(1)	1(1)
O(4)	34(1)	35(1)	27(1)	-1(1)	-11(1)	1(1)
O(5)	28(1)	44(1)	46(1)	-24(1)	-14(1)	-2(1)
O(6)	35(1)	23(1)	29(1)	-1(1)	-11(1)	-6(1)
O(7)	54(1)	35(1)	27(1)	8(1)	0(1)	8(1)
N(1)	23(1)	15(1)	18(1)	-3(1)	-1(1)	-4(1)
N(2)	30(1)	17(1)	20(1)	-1(1)	-5(1)	-8(1)
N(3)	19(1)	16(1)	15(1)	-2(1)	-1(1)	-5(1)
N(4)	19(1)	13(1)	27(1)	-1(1)	-3(1)	-3(1)
N(5)	19(1)	22(1)	23(1)	-2(1)	-4(1)	-2(1)
C(1)	22(1)	20(1)	21(1)	-5(1)	-2(1)	-7(1)
C(2)	22(1)	20(1)	18(1)	-3(1)	-5(1)	-3(1)
C(3)	22(1)	18(1)	15(1)	-5(1)	0(1)	-4(1)
C(4)	20(1)	21(1)	20(1)	-7(1)	-2(1)	-5(1)

C(5)	21(1)	18(1)	18(1)	-4(1)	-2(1)	-1(1)
C(6)	21(1)	19(1)	18(1)	-2(1)	-2(1)	-4(1)
C(7)	19(1)	21(1)	19(1)	1(1)	-3(1)	-4(1)
C(8)	31(1)	22(1)	24(1)	1(1)	-6(1)	-8(1)
C(9)	36(1)	23(1)	35(1)	6(1)	-7(1)	-10(1)
C(10)	28(1)	36(1)	27(1)	10(1)	-1(1)	-7(1)
C(11)	32(1)	41(1)	18(1)	-1(1)	-2(1)	-2(1)
C(12)	30(1)	27(1)	22(1)	-4(1)	-2(1)	-5(1)
C(13)	18(1)	17(1)	18(1)	-4(1)	-4(1)	-2(1)
C(14)	22(1)	16(1)	15(1)	-2(1)	-4(1)	0(1)
C(15)	18(1)	14(1)	15(1)	-5(1)	-1(1)	-2(1)
C(16)	17(1)	19(1)	20(1)	-3(1)	-4(1)	-3(1)
C(17)	20(1)	16(1)	15(1)	-1(1)	-4(1)	-2(1)
C(18)	24(1)	17(1)	13(1)	-3(1)	-2(1)	-5(1)
C(19)	20(1)	21(1)	19(1)	2(1)	-8(1)	-6(1)
C(20)	31(1)	24(1)	23(1)	0(1)	-10(1)	-10(1)
C(21)	44(1)	27(1)	28(1)	5(1)	-19(1)	-18(1)
C(22)	33(1)	42(1)	36(1)	14(1)	-16(1)	-23(1)
C(23)	21(1)	42(1)	35(1)	5(1)	-5(1)	-8(1)
C(24)	22(1)	27(1)	29(1)	-1(1)	-6(1)	-4(1)
C(25)	37(1)	47(2)	57(2)	-17(1)	-17(1)	-6(1)
C(26)	35(1)	32(1)	26(1)	-2(1)	-9(1)	-8(1)

Table S5. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3) for 1a.

	x	y	z	U(eq)
H(25A)	6242	5812	32	67
H(25B)	5552	7502	-8	67
H(25C)	5174	6328	841	67
H(1)	4540(30)	5950(20)	3032(14)	22(6)
H(2)	5200(30)	7950(20)	1992(15)	20(5)
H(2N)	7430(30)	8670(30)	845(16)	28(6)
H(4)	9190(30)	7600(20)	2945(15)	24(6)
H(4N)	-530(30)	150(30)	6432(15)	23(6)
H(5)	8380(20)	5570(20)	3940(13)	11(5)
H(6A)	7600(30)	6070(30)	921(19)	41(9)
H(7A)	8220(40)	3860(40)	2100(20)	51(10)
H(8)	7780(30)	12150(30)	812(17)	33(7)
H(9)	8330(30)	13930(30)	-407(17)	35(7)
H(10)	8650(30)	13430(30)	-1697(18)	42(7)
H(11)	8430(30)	11080(30)	-1782(18)	40(7)
H(12)	7910(30)	9360(30)	-567(16)	32(7)
H(13)	5800(30)	870(20)	5903(14)	22(6)
H(14)	4250(30)	-930(30)	6577(15)	20(5)
H(16)	920(30)	1250(20)	5175(15)	24(6)
H(17)	2560(30)	2920(30)	4563(16)	29(6)
H(20)	-200(30)	-3380(30)	6405(16)	31(6)
H(21)	-2200(30)	-4760(30)	7024(17)	34(7)
H(22)	-4430(30)	-3940(30)	7927(18)	44(7)
H(23)	-4800(30)	-1580(30)	8137(18)	44(8)
H(24)	-2870(30)	-160(30)	7495(15)	27(6)
H(26A)	10760(30)	3780(30)	1493(17)	38(7)
H(26B)	10030(30)	3880(30)	697(19)	40(7)
H(26C)	10000(30)	2440(30)	1436(17)	40(7)

Table S6. Torsion angles [°] for 1a.

N(1)-Ag(1)-O(5)-N(5)	72.80(13)
N(3)-Ag(1)-O(5)-N(5)	-109.02(13)
Ag(1)#1-Ag(1)-O(5)-N(5)	-8.38(13)
N(3)-Ag(1)-N(1)-C(1)	-7.3(2)
O(5)-Ag(1)-N(1)-C(1)	167.66(13)
Ag(1)#1-Ag(1)-N(1)-C(1)	-96.87(14)
N(3)-Ag(1)-N(1)-C(5)	175.42(14)
O(5)-Ag(1)-N(1)-C(5)	-9.59(15)
Ag(1)#1-Ag(1)-N(1)-C(5)	85.88(14)
N(1)-Ag(1)-N(3)-C(17)	0.3(2)
O(5)-Ag(1)-N(3)-C(17)	-175.09(13)
Ag(1)#1-Ag(1)-N(3)-C(17)	85.55(13)
N(1)-Ag(1)-N(3)-C(13)	176.82(15)
O(5)-Ag(1)-N(3)-C(13)	1.43(15)
Ag(1)#1-Ag(1)-N(3)-C(13)	-97.93(14)
Ag(1)-O(5)-N(5)-O(3)	-30.3(2)
Ag(1)-O(5)-N(5)-O(4)	148.15(14)
C(5)-N(1)-C(1)-C(2)	0.5(3)
Ag(1)-N(1)-C(1)-C(2)	-176.85(14)
N(1)-C(1)-C(2)-C(3)	-1.3(3)
C(1)-C(2)-C(3)-C(4)	0.7(3)
C(1)-C(2)-C(3)-C(6)	-174.51(17)
C(2)-C(3)-C(4)-C(5)	0.5(3)
C(6)-C(3)-C(4)-C(5)	175.84(17)
C(1)-N(1)-C(5)-C(4)	0.8(3)
Ag(1)-N(1)-C(5)-C(4)	178.08(14)
C(3)-C(4)-C(5)-N(1)	-1.3(3)
C(7)-N(2)-C(6)-O(1)	1.5(3)
C(7)-N(2)-C(6)-C(3)	179.44(17)
C(4)-C(3)-C(6)-O(1)	-42.5(3)
C(2)-C(3)-C(6)-O(1)	132.7(2)
C(4)-C(3)-C(6)-N(2)	139.43(18)
C(2)-C(3)-C(6)-N(2)	-45.4(2)
C(6)-N(2)-C(7)-C(8)	-18.5(3)

C(6)-N(2)-C(7)-C(12)	162.47(19)
C(12)-C(7)-C(8)-C(9)	-1.2(3)
N(2)-C(7)-C(8)-C(9)	179.74(19)
C(7)-C(8)-C(9)-C(10)	0.6(3)
C(8)-C(9)-C(10)-C(11)	0.3(3)
C(9)-C(10)-C(11)-C(12)	-0.5(3)
C(10)-C(11)-C(12)-C(7)	-0.1(3)
C(8)-C(7)-C(12)-C(11)	1.0(3)
N(2)-C(7)-C(12)-C(11)	-179.94(19)
C(17)-N(3)-C(13)-C(14)	-1.0(3)
Ag(1)-N(3)-C(13)-C(14)	-177.51(13)
N(3)-C(13)-C(14)-C(15)	0.2(3)
C(13)-C(14)-C(15)-C(16)	1.4(3)
C(13)-C(14)-C(15)-C(18)	-179.70(17)
C(14)-C(15)-C(16)-C(17)	-2.3(3)
C(18)-C(15)-C(16)-C(17)	178.94(17)
C(13)-N(3)-C(17)-C(16)	0.1(3)
Ag(1)-N(3)-C(17)-C(16)	176.83(14)
C(15)-C(16)-C(17)-N(3)	1.5(3)
C(19)-N(4)-C(18)-O(2)	-1.5(3)
C(19)-N(4)-C(18)-C(15)	177.77(17)
C(16)-C(15)-C(18)-O(2)	147.97(19)
C(14)-C(15)-C(18)-O(2)	-30.8(3)
C(16)-C(15)-C(18)-N(4)	-31.4(3)
C(14)-C(15)-C(18)-N(4)	149.83(17)
C(18)-N(4)-C(19)-C(20)	-41.6(3)
C(18)-N(4)-C(19)-C(24)	140.1(2)
C(24)-C(19)-C(20)-C(21)	-0.8(3)
N(4)-C(19)-C(20)-C(21)	-179.14(19)
C(19)-C(20)-C(21)-C(22)	0.0(3)
C(20)-C(21)-C(22)-C(23)	0.6(3)
C(21)-C(22)-C(23)-C(24)	-0.3(4)
C(22)-C(23)-C(24)-C(19)	-0.5(3)
C(20)-C(19)-C(24)-C(23)	1.1(3)
N(4)-C(19)-C(24)-C(23)	179.42(19)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y+1,-z+1

Table S7. Hydrogen bonds for 1a [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
N(2)-H(2N)...O(6)	0.82(3)	2.06(3)	2.878(2)	176(2)
N(4)-H(4N)...O(4)#2	0.82(2)	2.19(2)	2.989(2)	167(2)
O(6)-H(6A)...O(7)	0.75(3)	1.99(3)	2.732(3)	170(3)
O(7)-H(7A)...O(2)#3	0.75(3)	2.13(4)	2.859(2)	167(3)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y+1,-z+1 #2 x-1,y,z #3 -x+1,-y,-z+1

Table S8. Crystal data and structure refinement for **1b**.

Identification code	1b	
Empirical formula	C24 H20 Ag N5 O5	
Formula weight	566.32	
Temperature	150(1) K	
Wavelength	0.71073 Å	
Crystal system	Monoclinic	
Space group	$P2_1/n$	
Unit cell dimensions	a = 12.7187(6) Å	α= 90°.
	b = 8.4330(2) Å	β= 98.274(2)°.
	c = 21.2767(9) Å	γ = 90°.
Volume	2258.32(15) Å^3	
Z	4	
Density (calculated)	1.666 Mg/m^3	
Absorption coefficient	0.940 mm^{-1}	
F(000)	1144	
Crystal size	0.25 x 0.25 x 0.08 mm^3	
Theta range for data collection	3.62 to 27.48°.	
Index ranges	-16<=h<=16, -10<=k<=10, -27<=l<=27	
Reflections collected	9388	

Independent reflections	5111 [R(int) = 0.0328]
Completeness to theta = 27.48°	98.7 %
Absorption correction	Multi-scan
Max. and min. transmission	0.9286 and 0.7989
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	5111 / 2 / 396
Goodness-of-fit on F^2	1.075
Final R indices [I>2sigma(I)]	R1 = 0.0371, wR2 = 0.0703
R indices (all data)	R1 = 0.0660, wR2 = 0.0796
Largest diff. peak and hole	0.567 and -0.552 e.Å^{-3}

Table S9. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters (Å^{2}x 10^3) for 1b. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U(eq)
Ag(1)	8901(1)	4457(1)	4540(1)	33(1)
O(1)	4094(2)	8466(2)	4910(1)	35(1)
O(2)	13456(2)	1567(2)	3314(1)	28(1)
O(3)	10921(2)	7431(3)	4368(1)	44(1)
O(4)	9298(2)	7091(2)	3906(1)	44(1)
O(5)	10507(2)	7929(3)	3366(1)	47(1)
N(1)	7498(2)	5573(3)	4797(1)	26(1)
N(2)	4537(2)	7580(3)	5930(1)	30(1)
N(3)	10186(2)	3217(3)	4196(1)	28(1)
N(4)	12688(2)	-815(2)	3498(1)	25(1)
N(5)	10239(2)	7490(3)	3878(1)	32(1)
C(1)	7064(2)	6879(3)	4499(2)	30(1)
C(2)	6172(2)	7607(3)	4663(1)	29(1)
C(3)	5698(2)	7011(3)	5160(1)	23(1)
C(4)	6142(2)	5664(3)	5470(1)	25(1)
C(5)	7034(2)	5000(3)	5277(1)	25(1)
C(6)	4696(2)	7774(3)	5319(1)	24(1)
C(7)	3696(2)	8178(3)	6231(2)	29(1)
C(8)	2743(2)	8720(3)	5891(2)	35(1)
C(9)	1978(3)	9346(4)	6222(2)	49(1)

C(10)	2135(3)	9412(4)	6874(2)	59(1)
C(11)	3063(3)	8823(4)	7214(2)	53(1)
C(12)	3847(3)	8217(4)	6891(2)	36(1)
C(13)	10557(2)	3679(3)	3665(1)	27(1)
C(14)	11387(2)	2929(3)	3437(1)	26(1)
C(15)	11840(2)	1599(3)	3751(1)	23(1)
C(16)	11455(2)	1100(3)	4292(1)	28(1)
C(17)	10643(2)	1945(3)	4503(2)	30(1)
C(18)	12746(2)	784(3)	3499(1)	24(1)
C(19)	13409(2)	-1900(3)	3284(1)	25(1)
C(20)	14458(2)	-1507(4)	3244(1)	32(1)
C(21)	15120(3)	-2641(4)	3031(2)	36(1)
C(22)	14753(3)	-4152(3)	2873(2)	34(1)
C(23)	13709(3)	-4538(3)	2917(1)	31(1)
C(24)	13031(2)	-3414(3)	3119(1)	28(1)

Table S10. Bond lengths [Å] and angles [°] for 1b.

Ag(1)-N(3)	2.156(2)
Ag(1)-N(1)	2.156(2)
Ag(1)-O(4)	2.685(2)
Ag(1)-Ag(1)#1	3.3021(5)
O(1)-C(6)	1.222(3)
O(2)-C(18)	1.229(3)
O(3)-N(5)	1.257(3)
O(4)-N(5)	1.253(3)
O(5)-N(5)	1.244(3)
N(1)-C(5)	1.340(4)
N(1)-C(1)	1.349(3)
N(2)-C(6)	1.354(4)
N(2)-C(7)	1.416(4)
N(2)-H(2N)	0.814(10)
N(3)-C(13)	1.343(4)
N(3)-C(17)	1.344(4)
N(4)-C(18)	1.351(3)

N(4)-C(19)	1.417(3)
N(4)-H(4N)	0.817(10)
C(1)-C(2)	1.378(4)
C(1)-H(1)	0.91(3)
C(2)-C(3)	1.385(4)
C(2)-H(2)	0.91(3)
C(3)-C(4)	1.392(4)
C(3)-C(6)	1.510(4)
C(4)-C(5)	1.380(4)
C(4)-H(4)	0.93(3)
C(5)-H(5)	0.81(3)
C(7)-C(12)	1.389(4)
C(7)-C(8)	1.396(4)
C(8)-C(9)	1.384(5)
C(8)-H(8)	0.93(3)
C(9)-C(10)	1.375(6)
C(9)-H(9)	0.92(4)
C(10)-C(11)	1.385(6)
C(10)-H(10)	0.91(4)
C(11)-C(12)	1.388(5)
C(11)-H(11)	0.88(3)
C(12)-H(12)	0.93(3)
C(13)-C(14)	1.377(4)
C(13)-H(13)	0.91(3)
C(14)-C(15)	1.387(4)
C(14)-H(14)	0.94(3)
C(15)-C(16)	1.381(4)
C(15)-C(18)	1.504(4)
C(16)-C(17)	1.383(4)
C(16)-H(16)	0.94(3)
C(17)-H(17)	0.91(3)
C(19)-C(20)	1.388(4)
C(19)-C(24)	1.391(4)
C(20)-C(21)	1.393(4)
C(20)-H(20)	0.93(3)
C(21)-C(22)	1.381(4)

C(21)-H(21)	0.96(3)
C(22)-C(23)	1.383(5)
C(22)-H(22)	0.96(3)
C(23)-C(24)	1.391(4)
C(23)-H(23)	0.96(3)
C(24)-H(24)	0.92(3)

N(3)-Ag(1)-N(1)	173.46(9)
N(3)-Ag(1)-O(4)	91.37(8)
N(1)-Ag(1)-O(4)	89.36(7)
N(3)-Ag(1)-Ag(1)#1	73.58(6)
N(1)-Ag(1)-Ag(1)#1	112.95(6)
O(4)-Ag(1)-Ag(1)#1	82.20(5)
N(5)-O(4)-Ag(1)	119.70(17)
C(5)-N(1)-C(1)	117.2(2)
C(5)-N(1)-Ag(1)	120.45(19)
C(1)-N(1)-Ag(1)	122.35(19)
C(6)-N(2)-C(7)	128.2(2)
C(6)-N(2)-H(2N)	115(3)
C(7)-N(2)-H(2N)	112(2)
C(13)-N(3)-C(17)	117.5(2)
C(13)-N(3)-Ag(1)	121.33(18)
C(17)-N(3)-Ag(1)	121.17(19)
C(18)-N(4)-C(19)	127.5(2)
C(18)-N(4)-H(4N)	116.6(19)
C(19)-N(4)-H(4N)	115.4(19)
O(5)-N(5)-O(4)	120.3(3)
O(5)-N(5)-O(3)	119.6(3)
O(4)-N(5)-O(3)	120.1(3)
N(1)-C(1)-C(2)	122.8(3)
N(1)-C(1)-H(1)	117.3(19)
C(2)-C(1)-H(1)	119.9(18)
C(1)-C(2)-C(3)	119.7(3)
C(1)-C(2)-H(2)	118.4(17)
C(3)-C(2)-H(2)	121.9(17)
C(2)-C(3)-C(4)	117.8(2)

C(2)-C(3)-C(6)	119.4(2)
C(4)-C(3)-C(6)	122.7(2)
C(5)-C(4)-C(3)	119.0(3)
C(5)-C(4)-H(4)	120.2(18)
C(3)-C(4)-H(4)	120.8(18)
N(1)-C(5)-C(4)	123.5(3)
N(1)-C(5)-H(5)	116(2)
C(4)-C(5)-H(5)	120(2)
O(1)-C(6)-N(2)	125.2(3)
O(1)-C(6)-C(3)	120.4(3)
N(2)-C(6)-C(3)	114.3(2)
C(12)-C(7)-C(8)	120.0(3)
C(12)-C(7)-N(2)	117.5(3)
C(8)-C(7)-N(2)	122.6(3)
C(9)-C(8)-C(7)	118.9(3)
C(9)-C(8)-H(8)	121(2)
C(7)-C(8)-H(8)	120(2)
C(10)-C(9)-C(8)	121.2(4)
C(10)-C(9)-H(9)	118(2)
C(8)-C(9)-H(9)	121(2)
C(9)-C(10)-C(11)	120.1(3)
C(9)-C(10)-H(10)	123(3)
C(11)-C(10)-H(10)	117(3)
C(10)-C(11)-C(12)	119.5(4)
C(10)-C(11)-H(11)	124(2)
C(12)-C(11)-H(11)	117(2)
C(11)-C(12)-C(7)	120.3(3)
C(11)-C(12)-H(12)	121.7(19)
C(7)-C(12)-H(12)	118.0(19)
N(3)-C(13)-C(14)	122.8(3)
N(3)-C(13)-H(13)	116.7(18)
C(14)-C(13)-H(13)	120.5(18)
C(13)-C(14)-C(15)	119.3(3)
C(13)-C(14)-H(14)	120.0(17)
C(15)-C(14)-H(14)	120.7(17)
C(16)-C(15)-C(14)	118.4(3)

C(16)-C(15)-C(18)	122.6(2)
C(14)-C(15)-C(18)	119.0(2)
C(15)-C(16)-C(17)	119.0(3)
C(15)-C(16)-H(16)	123(2)
C(17)-C(16)-H(16)	118(2)
N(3)-C(17)-C(16)	123.0(3)
N(3)-C(17)-H(17)	116.2(18)
C(16)-C(17)-H(17)	120.8(18)
O(2)-C(18)-N(4)	125.3(3)
O(2)-C(18)-C(15)	120.3(2)
N(4)-C(18)-C(15)	114.4(2)
C(20)-C(19)-C(24)	120.3(3)
C(20)-C(19)-N(4)	122.5(2)
C(24)-C(19)-N(4)	117.2(2)
C(19)-C(20)-C(21)	119.1(3)
C(19)-C(20)-H(20)	122(2)
C(21)-C(20)-H(20)	119(2)
C(22)-C(21)-C(20)	120.9(3)
C(22)-C(21)-H(21)	119(2)
C(20)-C(21)-H(21)	120(2)
C(21)-C(22)-C(23)	119.7(3)
C(21)-C(22)-H(22)	121.5(19)
C(23)-C(22)-H(22)	118.6(19)
C(22)-C(23)-C(24)	120.3(3)
C(22)-C(23)-H(23)	119.4(18)
C(24)-C(23)-H(23)	120.3(18)
C(23)-C(24)-C(19)	119.7(3)
C(23)-C(24)-H(24)	123.3(19)
C(19)-C(24)-H(24)	116.9(19)

Symmetry transformations used to generate equivalent atoms:

#1 -x+2,-y+1,-z+1

Table S11. Anisotropic displacement parameters ($Å^2 x\ 10^3$)for 1b. The anisotropic displacement factor exponent takes the form: $-2\pi^2[\ h^2 a^{*2} U^{11} + ... + 2\ h\ k\ a^*\ b^*\ U^{12}\ ]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Ag(1)	29(1)	29(1)	43(1)	-2(1)	14(1)	6(1)
O(1)	29(1)	35(1)	41(1)	4(1)	4(1)	10(1)
O(2)	24(1)	25(1)	37(1)	-1(1)	7(1)	1(1)
O(3)	43(1)	38(1)	50(2)	10(1)	1(1)	6(1)
O(4)	28(1)	38(1)	70(2)	9(1)	23(1)	5(1)
O(5)	50(2)	52(1)	42(1)	4(1)	22(1)	-12(1)
N(1)	22(1)	25(1)	32(1)	-5(1)	7(1)	0(1)
N(2)	20(1)	36(1)	32(2)	-1(1)	4(1)	9(1)
N(3)	26(1)	25(1)	32(1)	-6(1)	6(1)	2(1)
N(4)	22(1)	21(1)	33(1)	-2(1)	8(1)	1(1)
N(5)	35(2)	20(1)	45(2)	2(1)	17(1)	6(1)
C(1)	30(2)	26(2)	37(2)	6(1)	13(1)	3(1)
C(2)	29(2)	22(2)	37(2)	4(1)	4(1)	3(1)
C(3)	19(1)	22(1)	27(2)	-6(1)	2(1)	-1(1)
C(4)	25(1)	24(1)	26(1)	0(1)	6(1)	-1(1)
C(5)	22(2)	21(1)	33(2)	2(1)	3(1)	4(1)
C(6)	20(1)	19(1)	34(2)	-2(1)	3(1)	1(1)
C(7)	20(2)	21(1)	47(2)	2(1)	14(1)	-1(1)
C(8)	27(2)	28(2)	52(2)	3(1)	11(2)	1(1)
C(9)	26(2)	36(2)	88(3)	10(2)	20(2)	6(2)
C(10)	44(2)	47(2)	97(4)	-2(2)	46(2)	8(2)
C(11)	59(3)	53(2)	54(3)	-3(2)	34(2)	-1(2)
C(12)	34(2)	34(2)	45(2)	0(1)	16(2)	3(1)
C(13)	30(2)	19(1)	32(2)	-2(1)	1(1)	2(1)
C(14)	29(2)	22(1)	26(2)	-2(1)	6(1)	3(1)
C(15)	24(2)	20(1)	26(2)	-7(1)	2(1)	-1(1)
C(16)	32(2)	23(1)	29(2)	-2(1)	6(1)	3(1)
C(17)	37(2)	25(2)	31(2)	2(1)	13(1)	2(1)
C(18)	25(2)	23(2)	24(2)	-1(1)	2(1)	4(1)
C(19)	29(2)	23(1)	22(2)	0(1)	4(1)	7(1)
C(20)	26(2)	31(2)	38(2)	-6(1)	2(1)	2(1)

C(21)	25(2)	38(2)	46(2)	-1(1)	9(2)	8(1)
C(22)	42(2)	30(2)	34(2)	2(1)	11(2)	15(1)
C(23)	45(2)	21(1)	28(2)	2(1)	11(1)	7(1)
C(24)	32(2)	24(1)	28(2)	5(1)	9(1)	4(1)

Table S12. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3) for 1b.

	x	y	z	U(eq)
H(1)	7390(20)	7290(30)	4184(14)	29(8)
H(2)	5910(20)	8470(30)	4436(13)	22(7)
H(2N)	5069(17)	7410(40)	6182(13)	45(11)
H(4)	5850(20)	5220(30)	5804(15)	27(8)
H(4N)	12138(13)	-1200(30)	3585(12)	15(7)
H(5)	7280(20)	4180(30)	5437(13)	18(7)
H(8)	2640(20)	8690(40)	5452(15)	34(9)
H(9)	1360(30)	9760(40)	6012(17)	52(11)
H(10)	1650(30)	9840(50)	7100(20)	70(12)
H(11)	3190(30)	8800(40)	7631(17)	40(10)
H(12)	4480(20)	7830(30)	7103(14)	33(9)
H(13)	10230(20)	4520(30)	3454(14)	25(7)
H(14)	11640(20)	3310(30)	3071(13)	23(7)
H(16)	11760(30)	250(40)	4545(16)	46(9)
H(17)	10380(20)	1650(30)	4859(14)	26(8)
H(20)	14730(30)	-500(40)	3349(17)	49(10)
H(21)	15840(30)	-2380(40)	2992(16)	47(10)
H(22)	15190(20)	-4920(40)	2708(14)	33(8)
H(23)	13460(20)	-5600(30)	2817(14)	29(8)
H(24)	12340(20)	-3630(30)	3173(13)	29(8)

Table S13. Torsion angles [°] for 1b.

N(3)-Ag(1)-O(4)-N(5)	-39.1(2)
N(1)-Ag(1)-O(4)-N(5)	147.4(2)
Ag(1)#1-Ag(1)-O(4)-N(5)	34.1(2)
N(3)-Ag(1)-N(1)-C(5)	101.0(8)
O(4)-Ag(1)-N(1)-C(5)	-162.5(2)
Ag(1)#1-Ag(1)-N(1)-C(5)	-81.2(2)
N(3)-Ag(1)-N(1)-C(1)	-80.6(8)
O(4)-Ag(1)-N(1)-C(1)	15.9(2)
Ag(1)#1-Ag(1)-N(1)-C(1)	97.2(2)
N(1)-Ag(1)-N(3)-C(13)	74.0(8)
O(4)-Ag(1)-N(3)-C(13)	-22.3(2)
Ag(1)#1-Ag(1)-N(3)-C(13)	-103.8(2)
N(1)-Ag(1)-N(3)-C(17)	-105.6(8)
O(4)-Ag(1)-N(3)-C(17)	158.0(2)
Ag(1)#1-Ag(1)-N(3)-C(17)	76.6(2)
Ag(1)-O(4)-N(5)-O(5)	135.2(2)
Ag(1)-O(4)-N(5)-O(3)	-44.0(3)
C(5)-N(1)-C(1)-C(2)	-1.1(4)
Ag(1)-N(1)-C(1)-C(2)	-179.5(2)
N(1)-C(1)-C(2)-C(3)	1.2(5)
C(1)-C(2)-C(3)-C(4)	-1.1(4)
C(1)-C(2)-C(3)-C(6)	-177.6(3)
C(2)-C(3)-C(4)-C(5)	0.8(4)
C(6)-C(3)-C(4)-C(5)	177.2(3)
C(1)-N(1)-C(5)-C(4)	0.9(4)
Ag(1)-N(1)-C(5)-C(4)	179.3(2)
C(3)-C(4)-C(5)-N(1)	-0.8(4)
C(7)-N(2)-C(6)-O(1)	-3.3(5)
C(7)-N(2)-C(6)-C(3)	178.3(2)
C(2)-C(3)-C(6)-O(1)	27.0(4)
C(4)-C(3)-C(6)-O(1)	-149.3(3)
C(2)-C(3)-C(6)-N(2)	-154.5(3)
C(4)-C(3)-C(6)-N(2)	29.2(4)
C(6)-N(2)-C(7)-C(12)	-162.1(3)

C(6)-N(2)-C(7)-C(8)	17.7(4)
C(12)-C(7)-C(8)-C(9)	2.4(4)
N(2)-C(7)-C(8)-C(9)	-177.4(3)
C(7)-C(8)-C(9)-C(10)	-1.3(5)
C(8)-C(9)-C(10)-C(11)	-1.0(5)
C(9)-C(10)-C(11)-C(12)	2.1(6)
C(10)-C(11)-C(12)-C(7)	-1.0(5)
C(8)-C(7)-C(12)-C(11)	-1.3(4)
N(2)-C(7)-C(12)-C(11)	178.5(3)
C(17)-N(3)-C(13)-C(14)	-1.4(4)
Ag(1)-N(3)-C(13)-C(14)	179.0(2)
N(3)-C(13)-C(14)-C(15)	2.7(4)
C(13)-C(14)-C(15)-C(16)	-1.7(4)
C(13)-C(14)-C(15)-C(18)	180.0(2)
C(14)-C(15)-C(16)-C(17)	-0.4(4)
C(18)-C(15)-C(16)-C(17)	177.9(3)
C(13)-N(3)-C(17)-C(16)	-0.8(4)
Ag(1)-N(3)-C(17)-C(16)	178.8(2)
C(15)-C(16)-C(17)-N(3)	1.7(4)
C(19)-N(4)-C(18)-O(2)	-0.4(5)
C(19)-N(4)-C(18)-C(15)	179.2(2)
C(16)-C(15)-C(18)-O(2)	-136.2(3)
C(14)-C(15)-C(18)-O(2)	42.0(4)
C(16)-C(15)-C(18)-N(4)	44.2(4)
C(14)-C(15)-C(18)-N(4)	-137.5(3)
C(18)-N(4)-C(19)-C(20)	22.6(4)
C(18)-N(4)-C(19)-C(24)	-158.2(3)
C(24)-C(19)-C(20)-C(21)	0.6(4)
N(4)-C(19)-C(20)-C(21)	179.8(3)
C(19)-C(20)-C(21)-C(22)	-1.4(5)
C(20)-C(21)-C(22)-C(23)	1.1(5)
C(21)-C(22)-C(23)-C(24)	-0.1(5)
C(22)-C(23)-C(24)-C(19)	-0.6(4)
C(20)-C(19)-C(24)-C(23)	0.4(4)
N(4)-C(19)-C(24)-C(23)	-178.8(3)

Symmetry transformations used to generate equivalent atoms:

#1 -x+2,-y+1,-z+1

Table S14. Hydrogen bonds for 1b [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
N(2)-H(2N)...O(2)#1	0.814(10)	2.20(2)	2.906(3)	145(3)
N(4)-H(4N)...O(5)#2	0.817(10)	2.186(15)	2.944(3)	154(3)

Symmetry transformations used to generate equivalent atoms:

#1 -x+2,-y+1,-z+1 #2 x,y-1,z

Table S15. Crystal data and structure refinement for **1c**.

Identification code	1c	
Empirical formula	C24 H20 Ag N5 O5	
Formula weight	566.32	
Temperature	150(1) K	
Wavelength	0.71073 Å	
Crystal system	Monoclinic	
Space group	$P2_1/c$	
Unit cell dimensions	a = 8.87310(10) Å	α= 90°.
	b = 36.1311(5) Å	β= 93.3705(5)°.
	c = 13.9696(2) Å	γ = 90°.
Volume	4470.83(10) Å^3	
Z	8	
Density (calculated)	1.683 Mg/m^3	
Absorption coefficient	0.950 mm^{-1}	
F(000)	2288	
Crystal size	0.25 x 0.10 x 0.10 mm^3	
Theta range for data collection	3.13 to 28.14°.	
Index ranges	-11<=h<=11, -47<=k<=43, -18<=l<=18	
Reflections collected	19602	
Independent reflections	10777 [R(int) = 0.0479]	
Completeness to theta = 28.14°	98.4 %	
Absorption correction	Multi-scan	

Max. and min. transmission	0.9110 and 0.7971
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	10777 / 0 / 791
Goodness-of-fit on F^2	1.023
Final R indices [I>2sigma(I)]	R1 = 0.0414, wR2 = 0.0747
R indices (all data)	R1 = 0.0774, wR2 = 0.0843
Largest diff. peak and hole	0.843 and -0.711 e.Å^{-3}

Table S16. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters (Å^{2}x 10^3) for 1c. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U(eq)
Ag(1)	7082(1)	1309(1)	1624(1)	26(1)
Ag(2)	8075(1)	1043(1)	3913(1)	24(1)
O(1)	10058(2)	-486(1)	995(2)	30(1)
O(1A)	12231(2)	-641(1)	4321(2)	28(1)
O(2)	2826(2)	2952(1)	901(2)	32(1)
O(2A)	5058(2)	2865(1)	4156(2)	30(1)
O(3)	10612(2)	1463(1)	3356(2)	40(1)
O(3A)	5643(2)	604(1)	3445(2)	34(1)
O(4)	9514(2)	1723(1)	2099(2)	34(1)
O(4A)	4579(3)	893(1)	2224(2)	39(1)
O(5)	10698(2)	2058(1)	3182(1)	25(1)
O(5A)	4398(2)	297(1)	2333(2)	27(1)
N(1)	8419(2)	816(1)	1487(2)	22(1)
N(1A)	9688(2)	588(1)	3898(2)	20(1)
N(2)	12337(3)	-210(1)	1346(2)	22(1)
N(2A)	14141(3)	-286(1)	3788(2)	22(1)
N(3)	5530(2)	1767(1)	1565(2)	20(1)
N(3A)	6752(2)	1549(1)	3999(2)	20(1)
N(4)	1070(3)	2642(1)	1729(2)	19(1)
N(4A)	2789(3)	2568(1)	4032(2)	20(1)
N(5)	10275(2)	1744(1)	2883(2)	21(1)
N(5A)	4876(2)	602(1)	2666(2)	20(1)

C(1)	9927(3)	811(1)	1592(2)	23(1)
C(1A)	11170(3)	641(1)	4107(2)	23(1)
C(2)	10764(3)	493(1)	1518(2)	21(1)
C(2A)	12195(3)	353(1)	4162(2)	21(1)
C(3)	10043(3)	159(1)	1336(2)	19(1)
C(3A)	11704(3)	-8(1)	4000(2)	18(1)
C(4)	8474(3)	165(1)	1218(2)	21(1)
C(4A)	10166(3)	-62(1)	3801(2)	20(1)
C(5)	7717(3)	493(1)	1294(2)	23(1)
C(5A)	9208(3)	238(1)	3754(2)	21(1)
C(6)	10803(3)	-211(1)	1218(2)	20(1)
C(6A)	12715(3)	-346(1)	4058(2)	19(1)
C(7)	13308(3)	-504(1)	1097(2)	19(1)
C(7A)	15248(3)	-561(1)	3653(2)	19(1)
C(8)	12935(3)	-872(1)	1180(2)	27(1)
C(8A)	15280(3)	-898(1)	4119(2)	25(1)
C(9)	13906(3)	-1139(1)	863(3)	30(1)
C(9A)	16375(3)	-1155(1)	3919(2)	29(1)
C(10)	15245(4)	-1044(1)	485(2)	32(1)
C(10A)	17441(3)	-1076(1)	3258(2)	31(1)
C(11)	15650(3)	-676(1)	439(2)	28(1)
C(11A)	17430(3)	-735(1)	2812(2)	27(1)
C(12)	14694(3)	-406(1)	754(2)	24(1)
C(12A)	16346(3)	-477(1)	3010(2)	24(1)
C(13)	5993(3)	2121(1)	1579(2)	21(1)
C(13A)	7438(3)	1876(1)	4152(2)	22(1)
C(14)	5007(3)	2416(1)	1516(2)	22(1)
C(14A)	6668(3)	2206(1)	4178(2)	21(1)
C(15)	3469(3)	2350(1)	1451(2)	17(1)
C(15A)	5098(3)	2207(1)	4051(2)	18(1)
C(16)	2978(3)	1987(1)	1435(2)	18(1)
C(16A)	4382(3)	1868(1)	3915(2)	18(1)
C(17)	4028(3)	1703(1)	1491(2)	19(1)
C(17A)	5230(3)	1549(1)	3886(2)	20(1)
C(18)	2422(3)	2680(1)	1336(2)	19(1)
C(18A)	4322(3)	2579(1)	4083(2)	20(1)

C(19)	-105(3)	2909(1)	1737(2)	19(1)
C(19A)	1793(3)	2867(1)	4170(2)	19(1)
C(20)	-148(3)	3231(1)	1188(2)	25(1)
C(20A)	2112(3)	3227(1)	3905(2)	23(1)
C(21)	-1315(3)	3480(1)	1286(2)	29(1)
C(21A)	1128(4)	3508(1)	4117(3)	31(1)
C(22)	-2440(4)	3412(1)	1902(2)	32(1)
C(22A)	-176(3)	3433(1)	4577(2)	29(1)
C(23)	-2408(3)	3092(1)	2430(2)	29(1)
C(23A)	-522(3)	3073(1)	4807(2)	26(1)
C(24)	-1254(3)	2837(1)	2352(2)	23(1)
C(24A)	457(3)	2788(1)	4601(2)	22(1)

Table S17. Bond lengths [Å] and angles [°] for 1c.

Ag(1)-N(3)	2.153(2)
Ag(1)-N(1)	2.154(2)
Ag(2)-N(3A)	2.179(2)
Ag(2)-N(1A)	2.183(2)
O(1)-C(6)	1.222(3)
O(1A)-C(6A)	1.216(3)
O(2)-C(18)	1.220(3)
O(2A)-C(18A)	1.225(3)
O(3)-N(5)	1.239(3)
O(3A)-N(5A)	1.249(3)
O(4)-N(5)	1.255(3)
O(4A)-N(5A)	1.239(3)
O(5)-N(5)	1.260(3)
O(5A)-N(5A)	1.262(3)
N(1)-C(1)	1.338(3)
N(1)-C(5)	1.343(4)
N(1A)-C(5A)	1.343(4)
N(1A)-C(1A)	1.344(4)
N(2)-C(6)	1.363(3)
N(2)-C(7)	1.422(4)

N(2)-H(2N)	0.82(3)
N(2A)-C(6A)	1.358(3)
N(2A)-C(7A)	1.417(4)
N(2A)-H(2NA)	0.83(3)
N(3)-C(13)	1.341(4)
N(3)-C(17)	1.350(3)
N(3A)-C(13A)	1.340(4)
N(3A)-C(17A)	1.351(3)
N(4)-C(18)	1.355(3)
N(4)-C(19)	1.420(4)
N(4)-H(4N)	0.79(3)
N(4A)-C(18A)	1.358(3)
N(4A)-C(19A)	1.416(4)
N(4A)-H(4NA)	0.77(3)
C(1)-C(2)	1.375(4)
C(1)-H(1)	0.94(3)
C(1A)-C(2A)	1.383(4)
C(1A)-H(1A)	0.88(3)
C(2)-C(3)	1.382(4)
C(2)-H(2)	0.89(3)
C(2A)-C(3A)	1.387(4)
C(2A)-H(2A)	0.86(3)
C(3)-C(4)	1.393(4)
C(3)-C(6)	1.512(4)
C(3A)-C(4A)	1.391(4)
C(3A)-C(6A)	1.516(4)
C(4)-C(5)	1.370(4)
C(4)-H(4)	0.89(3)
C(4A)-C(5A)	1.378(4)
C(4A)-H(4A)	0.90(3)
C(5)-H(5)	0.89(2)
C(5A)-H(5A)	0.95(3)
C(7)-C(8)	1.377(4)
C(7)-C(12)	1.391(4)
C(7A)-C(8A)	1.381(4)
C(7A)-C(12A)	1.397(4)

C(8)-C(9)	1.384(4)
C(8)-H(8)	0.88(3)
C(8A)-C(9A)	1.383(4)
C(8A)-H(8A)	0.91(3)
C(9)-C(10)	1.372(5)
C(9)-H(9)	0.84(3)
C(9A)-C(10A)	1.390(5)
C(9A)-H(9A)	0.90(3)
C(10)-C(11)	1.381(5)
C(10)-H(10)	0.92(3)
C(10A)-C(11A)	1.379(5)
C(10A)-H(10A)	0.90(3)
C(11)-C(12)	1.382(4)
C(11)-H(11)	0.96(3)
C(11A)-C(12A)	1.379(4)
C(11A)-H(11A)	0.98(3)
C(12)-H(12)	0.81(3)
C(12A)-H(12A)	0.86(3)
C(13)-C(14)	1.381(4)
C(13)-H(13)	0.97(3)
C(13A)-C(14A)	1.374(4)
C(13A)-H(13A)	0.90(2)
C(14)-C(15)	1.383(4)
C(14)-H(14)	0.94(3)
C(14A)-C(15A)	1.394(4)
C(14A)-H(14A)	0.88(3)
C(15)-C(16)	1.382(4)
C(15)-C(18)	1.515(4)
C(15A)-C(16A)	1.387(4)
C(15A)-C(18A)	1.511(4)
C(16)-C(17)	1.384(4)
C(16)-H(16)	0.89(2)
C(16A)-C(17A)	1.380(4)
C(16A)-H(16A)	0.92(3)
C(17)-H(17)	0.93(3)
C(17A)-H(17A)	0.91(3)

C(19)-C(24)	1.395(4)
C(19)-C(20)	1.395(4)
C(19A)-C(20A)	1.385(4)
C(19A)-C(24A)	1.390(4)
C(20)-C(21)	1.384(4)
C(20)-H(20)	0.90(3)
C(20A)-C(21A)	1.383(4)
C(20A)-H(20A)	0.92(3)
C(21)-C(22)	1.378(5)
C(21)-H(21)	0.91(3)
C(21A)-C(22A)	1.383(4)
C(21A)-H(21A)	0.86(3)
C(22)-C(23)	1.372(5)
C(22)-H(22)	0.87(3)
C(22A)-C(23A)	1.378(5)
C(22A)-H(22A)	0.92(3)
C(23)-C(24)	1.385(4)
C(23)-H(23)	0.90(3)
C(23A)-C(24A)	1.387(4)
C(23A)-H(23A)	0.98(3)
C(24)-H(24)	0.91(3)
C(24A)-H(24A)	0.90(3)

N(3)-Ag(1)-N(1)	170.72(9)
N(3A)-Ag(2)-N(1A)	171.46(9)
C(1)-N(1)-C(5)	117.3(3)
C(1)-N(1)-Ag(1)	123.7(2)
C(5)-N(1)-Ag(1)	119.01(18)
C(5A)-N(1A)-C(1A)	117.7(3)
C(5A)-N(1A)-Ag(2)	120.55(18)
C(1A)-N(1A)-Ag(2)	121.5(2)
C(6)-N(2)-C(7)	125.5(3)
C(6)-N(2)-H(2N)	118.4(19)
C(7)-N(2)-H(2N)	115.3(19)
C(6A)-N(2A)-C(7A)	126.1(3)
C(6A)-N(2A)-H(2NA)	118(2)

C(7A)-N(2A)-H(2NA)	114(2)
C(13)-N(3)-C(17)	117.7(3)
C(13)-N(3)-Ag(1)	122.46(18)
C(17)-N(3)-Ag(1)	119.9(2)
C(13A)-N(3A)-C(17A)	117.5(3)
C(13A)-N(3A)-Ag(2)	120.46(18)
C(17A)-N(3A)-Ag(2)	122.0(2)
C(18)-N(4)-C(19)	127.0(3)
C(18)-N(4)-H(4N)	117(2)
C(19)-N(4)-H(4N)	115(2)
C(18A)-N(4A)-C(19A)	127.0(3)
C(18A)-N(4A)-H(4NA)	118(2)
C(19A)-N(4A)-H(4NA)	113(2)
O(3)-N(5)-O(4)	121.1(3)
O(3)-N(5)-O(5)	120.3(3)
O(4)-N(5)-O(5)	118.6(3)
O(4A)-N(5A)-O(3A)	121.3(3)
O(4A)-N(5A)-O(5A)	120.0(3)
O(3A)-N(5A)-O(5A)	118.6(3)
N(1)-C(1)-C(2)	123.0(3)
N(1)-C(1)-H(1)	116.4(17)
C(2)-C(1)-H(1)	120.6(17)
N(1A)-C(1A)-C(2A)	122.3(3)
N(1A)-C(1A)-H(1A)	116.0(18)
C(2A)-C(1A)-H(1A)	121.7(18)
C(1)-C(2)-C(3)	119.8(3)
C(1)-C(2)-H(2)	120(2)
C(3)-C(2)-H(2)	120(2)
C(1A)-C(2A)-C(3A)	120.0(3)
C(1A)-C(2A)-H(2A)	119(2)
C(3A)-C(2A)-H(2A)	121(2)
C(2)-C(3)-C(4)	117.3(3)
C(2)-C(3)-C(6)	126.0(2)
C(4)-C(3)-C(6)	116.7(3)
C(2A)-C(3A)-C(4A)	117.5(3)
C(2A)-C(3A)-C(6A)	124.7(2)

C(4A)-C(3A)-C(6A)	117.8(3)
C(5)-C(4)-C(3)	119.7(3)
C(5)-C(4)-H(4)	121.9(17)
C(3)-C(4)-H(4)	118.2(17)
C(5A)-C(4A)-C(3A)	119.5(3)
C(5A)-C(4A)-H(4A)	121.5(19)
C(3A)-C(4A)-H(4A)	119.0(19)
N(1)-C(5)-C(4)	123.0(3)
N(1)-C(5)-H(5)	117.0(18)
C(4)-C(5)-H(5)	120.0(19)
N(1A)-C(5A)-C(4A)	123.0(3)
N(1A)-C(5A)-H(5A)	114(2)
C(4A)-C(5A)-H(5A)	123(2)
O(1)-C(6)-N(2)	123.8(3)
O(1)-C(6)-C(3)	120.6(2)
N(2)-C(6)-C(3)	115.6(3)
O(1A)-C(6A)-N(2A)	125.1(3)
O(1A)-C(6A)-C(3A)	120.4(2)
N(2A)-C(6A)-C(3A)	114.5(3)
C(8)-C(7)-C(12)	119.7(3)
C(8)-C(7)-N(2)	123.2(3)
C(12)-C(7)-N(2)	117.1(3)
C(8A)-C(7A)-C(12A)	119.8(3)
C(8A)-C(7A)-N(2A)	123.4(3)
C(12A)-C(7A)-N(2A)	116.7(3)
C(7)-C(8)-C(9)	119.3(3)
C(7)-C(8)-H(8)	116(2)
C(9)-C(8)-H(8)	124(2)
C(7A)-C(8A)-C(9A)	119.5(3)
C(7A)-C(8A)-H(8A)	119.8(18)
C(9A)-C(8A)-H(8A)	120.6(18)
C(10)-C(9)-C(8)	121.2(3)
C(10)-C(9)-H(9)	119(2)
C(8)-C(9)-H(9)	119(2)
C(8A)-C(9A)-C(10A)	120.7(3)
C(8A)-C(9A)-H(9A)	117.9(19)

C(10A)-C(9A)-H(9A)	121.3(19)
C(9)-C(10)-C(11)	119.5(3)
C(9)-C(10)-H(10)	121(2)
C(11)-C(10)-H(10)	119(2)
C(11A)-C(10A)-C(9A)	119.7(3)
C(11A)-C(10A)-H(10A)	118(2)
C(9A)-C(10A)-H(10A)	122(2)
C(10)-C(11)-C(12)	119.9(3)
C(10)-C(11)-H(11)	118.6(19)
C(12)-C(11)-H(11)	121.5(19)
C(10A)-C(11A)-C(12A)	120.0(3)
C(10A)-C(11A)-H(11A)	122(2)
C(12A)-C(11A)-H(11A)	118(2)
C(11)-C(12)-C(7)	120.2(3)
C(11)-C(12)-H(12)	122(2)
C(7)-C(12)-H(12)	118(2)
C(11A)-C(12A)-C(7A)	120.3(3)
C(11A)-C(12A)-H(12A)	124.8(19)
C(7A)-C(12A)-H(12A)	115.0(19)
N(3)-C(13)-C(14)	122.9(3)
N(3)-C(13)-H(13)	119.2(19)
C(14)-C(13)-H(13)	117.8(19)
N(3A)-C(13A)-C(14A)	123.1(3)
N(3A)-C(13A)-H(13A)	115.1(18)
C(14A)-C(13A)-H(13A)	121.8(18)
C(13)-C(14)-C(15)	119.3(3)
C(13)-C(14)-H(14)	122.1(17)
C(15)-C(14)-H(14)	118.6(17)
C(13A)-C(14A)-C(15A)	119.7(3)
C(13A)-C(14A)-H(14A)	118.0(19)
C(15A)-C(14A)-H(14A)	122.2(19)
C(16)-C(15)-C(14)	118.3(3)
C(16)-C(15)-C(18)	123.7(2)
C(14)-C(15)-C(18)	117.9(3)
C(16A)-C(15A)-C(14A)	117.4(3)
C(16A)-C(15A)-C(18A)	125.6(2)

C(14A)-C(15A)-C(18A)	117.0(3)
C(15)-C(16)-C(17)	119.4(3)
C(15)-C(16)-H(16)	122.1(18)
C(17)-C(16)-H(16)	118.2(18)
C(17A)-C(16A)-C(15A)	119.8(3)
C(17A)-C(16A)-H(16A)	113(2)
C(15A)-C(16A)-H(16A)	128(2)
N(3)-C(17)-C(16)	122.4(3)
N(3)-C(17)-H(17)	117.4(17)
C(16)-C(17)-H(17)	120.2(17)
N(3A)-C(17A)-C(16A)	122.6(3)
N(3A)-C(17A)-H(17A)	115.4(17)
C(16A)-C(17A)-H(17A)	121.9(17)
O(2)-C(18)-N(4)	125.2(3)
O(2)-C(18)-C(15)	119.3(2)
N(4)-C(18)-C(15)	115.4(3)
O(2A)-C(18A)-N(4A)	123.8(3)
O(2A)-C(18A)-C(15A)	120.8(2)
N(4A)-C(18A)-C(15A)	115.4(3)
C(24)-C(19)-C(20)	119.7(3)
C(24)-C(19)-N(4)	116.4(3)
C(20)-C(19)-N(4)	123.9(3)
C(20A)-C(19A)-C(24A)	120.1(3)
C(20A)-C(19A)-N(4A)	122.7(3)
C(24A)-C(19A)-N(4A)	117.2(3)
C(21)-C(20)-C(19)	119.0(3)
C(21)-C(20)-H(20)	122(2)
C(19)-C(20)-H(20)	119(2)
C(21A)-C(20A)-C(19A)	119.4(3)
C(21A)-C(20A)-H(20A)	121(2)
C(19A)-C(20A)-H(20A)	119(2)
C(22)-C(21)-C(20)	121.4(3)
C(22)-C(21)-H(21)	125.4(18)
C(20)-C(21)-H(21)	113.2(18)
C(22A)-C(21A)-C(20A)	120.7(3)
C(22A)-C(21A)-H(21A)	120.9(19)

C(20A)-C(21A)-H(21A)	118.2(19)
C(23)-C(22)-C(21)	119.4(3)
C(23)-C(22)-H(22)	118(2)
C(21)-C(22)-H(22)	122(2)
C(23A)-C(22A)-C(21A)	119.9(3)
C(23A)-C(22A)-H(22A)	121.4(19)
C(21A)-C(22A)-H(22A)	118.7(19)
C(22)-C(23)-C(24)	120.7(3)
C(22)-C(23)-H(23)	121(2)
C(24)-C(23)-H(23)	118(2)
C(22A)-C(23A)-C(24A)	120.0(3)
C(22A)-C(23A)-H(23A)	117(2)
C(24A)-C(23A)-H(23A)	123(2)
C(23)-C(24)-C(19)	119.8(3)
C(23)-C(24)-H(24)	122.4(18)
C(19)-C(24)-H(24)	117.8(18)
C(23A)-C(24A)-C(19A)	119.9(3)
C(23A)-C(24A)-H(24A)	120.4(17)
C(19A)-C(24A)-H(24A)	119.7(17)

Symmetry transformations used to generate equivalent atoms:

Table S18. Anisotropic displacement parameters ($Å^2 x\ 10^3$)for 1c. The anisotropic displacement factor exponent takes the form: $-2\pi^2[\ h^2 a^{*2} U^{11} + ... + 2\ h\ k\ a^*\ b^*\ U^{12}\ ]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Ag(1)	20(1)	23(1)	35(1)	1(1)	3(1)	7(1)
Ag(2)	21(1)	21(1)	31(1)	0(1)	3(1)	7(1)
O(1)	21(1)	22(1)	47(1)	-7(1)	1(1)	-2(1)
O(1A)	26(1)	17(1)	41(1)	6(1)	9(1)	0(1)
O(2)	35(1)	18(1)	45(1)	10(1)	15(1)	5(1)
O(2A)	20(1)	22(1)	49(1)	0(1)	4(1)	-2(1)
O(3)	46(1)	21(1)	54(2)	12(1)	3(1)	4(1)
O(3A)	26(1)	44(2)	32(1)	-3(1)	-8(1)	-8(1)

O(4)	29(1)	42(2)	32(1)	-4(1)	-5(1)	-12(1)
O(4A)	54(1)	16(1)	48(2)	9(1)	4(1)	4(1)
O(5)	25(1)	16(1)	33(1)	-1(1)	2(1)	-5(1)
O(5A)	28(1)	16(1)	36(1)	-4(1)	-1(1)	-4(1)
N(1)	20(1)	22(2)	24(1)	0(1)	1(1)	3(1)
N(1A)	20(1)	20(2)	21(1)	2(1)	3(1)	2(1)
N(2)	18(1)	15(2)	31(2)	-7(1)	-1(1)	-2(1)
N(2A)	21(1)	14(2)	32(2)	5(1)	6(1)	1(1)
N(3)	19(1)	21(2)	21(1)	-1(1)	2(1)	4(1)
N(3A)	21(1)	20(2)	19(1)	2(1)	2(1)	3(1)
N(4)	20(1)	14(1)	24(1)	2(1)	1(1)	3(1)
N(4A)	16(1)	13(1)	31(2)	2(1)	2(1)	1(1)
N(5)	16(1)	19(2)	29(1)	2(1)	6(1)	-1(1)
N(5A)	16(1)	14(1)	31(2)	0(1)	8(1)	0(1)
C(1)	20(2)	21(2)	28(2)	1(2)	2(1)	-1(1)
C(1A)	23(2)	17(2)	29(2)	-1(1)	3(1)	-2(1)
C(2)	16(2)	22(2)	23(2)	-1(1)	0(1)	1(1)
C(2A)	16(1)	24(2)	24(2)	0(1)	0(1)	0(1)
C(3)	20(1)	20(2)	16(2)	-1(1)	2(1)	1(1)
C(3A)	20(1)	20(2)	15(1)	1(1)	6(1)	1(1)
C(4)	19(2)	21(2)	24(2)	-2(1)	3(1)	-4(1)
C(4A)	21(2)	18(2)	22(2)	-1(1)	3(1)	-3(1)
C(5)	14(1)	30(2)	25(2)	-1(1)	1(1)	2(1)
C(5A)	18(2)	27(2)	17(2)	0(1)	1(1)	-2(1)
C(6)	20(1)	21(2)	19(2)	1(1)	2(1)	1(1)
C(6A)	22(1)	16(2)	20(2)	-2(1)	1(1)	2(1)
C(7)	21(1)	18(2)	20(2)	-2(1)	-2(1)	4(1)
C(7A)	15(1)	16(2)	26(2)	-1(1)	-3(1)	3(1)
C(8)	22(2)	23(2)	36(2)	4(2)	3(1)	1(1)
C(8A)	22(2)	22(2)	30(2)	5(1)	1(1)	3(1)
C(9)	28(2)	16(2)	45(2)	-5(2)	-2(1)	3(1)
C(9A)	30(2)	19(2)	37(2)	2(2)	-4(1)	4(1)
C(10)	30(2)	33(2)	31(2)	-10(2)	-5(1)	13(2)
C(10A)	25(2)	29(2)	37(2)	-4(2)	0(1)	12(2)
C(11)	21(2)	33(2)	29(2)	-3(2)	4(1)	4(1)
C(11A)	20(2)	29(2)	31(2)	-3(2)	2(1)	3(1)

C(12)	25(2)	20(2)	26(2)	2(2)	1(1)	-2(1)
C(12A)	23(2)	22(2)	27(2)	1(2)	-1(1)	0(1)
C(13)	18(2)	25(2)	20(2)	-2(1)	3(1)	-1(1)
C(13A)	14(1)	26(2)	24(2)	-1(1)	2(1)	0(1)
C(14)	24(2)	16(2)	25(2)	-5(1)	4(1)	-4(1)
C(14A)	16(1)	21(2)	27(2)	-3(1)	3(1)	-3(1)
C(15)	20(1)	16(2)	15(1)	-1(1)	3(1)	1(1)
C(15A)	20(1)	21(2)	13(1)	-1(1)	2(1)	4(1)
C(16)	15(1)	18(2)	21(2)	0(1)	1(1)	-1(1)
C(16A)	15(1)	20(2)	20(2)	0(1)	1(1)	0(1)
C(17)	20(1)	15(2)	22(2)	2(1)	2(1)	1(1)
C(17A)	22(2)	17(2)	22(2)	0(1)	1(1)	-1(1)
C(18)	23(1)	14(2)	21(2)	-1(1)	0(1)	1(1)
C(18A)	19(1)	21(2)	19(2)	1(1)	3(1)	2(1)
C(19)	18(1)	16(2)	21(2)	-3(1)	-4(1)	2(1)
C(19A)	17(1)	19(2)	20(2)	-3(1)	-5(1)	4(1)
C(20)	29(2)	21(2)	25(2)	2(1)	0(1)	1(1)
C(20A)	19(2)	22(2)	29(2)	1(1)	2(1)	-1(1)
C(21)	35(2)	22(2)	29(2)	1(2)	-9(1)	9(2)
C(21A)	35(2)	16(2)	42(2)	4(2)	-4(2)	4(2)
C(22)	25(2)	32(2)	39(2)	-12(2)	-7(1)	13(2)
C(22A)	23(2)	31(2)	34(2)	-10(2)	-3(1)	11(2)
C(23)	20(2)	34(2)	35(2)	-10(2)	1(1)	3(1)
C(23A)	20(2)	33(2)	25(2)	-3(2)	1(1)	4(1)
C(24)	20(2)	19(2)	29(2)	-1(2)	-4(1)	-1(1)
C(24A)	18(1)	23(2)	23(2)	0(1)	-3(1)	-1(1)

Table S19. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3) for 1c.

	x	y	z	U(eq)
H(1)	10400(30)	1039(9)	1700(20)	19(8)
H(1A)	11460(30)	872(8)	4180(20)	14(7)
H(2)	11770(40)	500(10)	1620(20)	36(9)
H(2A)	13140(30)	400(9)	4300(20)	31(9)
H(2N)	12760(30)	-16(8)	1498(19)	11(8)
H(2NA)	14320(30)	-86(9)	3530(20)	21(9)
H(4)	7990(30)	-50(8)	1153(19)	11(7)
H(4A)	9810(30)	-296(9)	3740(20)	28(9)
H(4N)	940(30)	2460(10)	2030(20)	36(11)
H(5)	6710(30)	498(8)	1220(18)	11(7)
H(4NA)	2400(30)	2378(9)	4040(20)	16(9)
H(5A)	8140(30)	217(9)	3640(20)	27(8)
H(8)	12100(30)	-920(10)	1470(20)	32(9)
H(8A)	14550(30)	-955(8)	4528(19)	17(8)
H(9)	13660(30)	-1362(9)	880(20)	26(9)
H(9A)	16340(30)	-1378(9)	4200(20)	30(9)
H(10)	15860(40)	-1220(10)	240(20)	42(10)
H(10A)	18170(30)	-1237(9)	3130(20)	31(9)
H(11)	16590(30)	-614(9)	170(20)	26(8)
H(11A)	18130(30)	-676(9)	2320(20)	34(9)
H(12)	14910(30)	-188(9)	730(20)	19(9)
H(12A)	16280(30)	-259(9)	2770(20)	22(9)
H(13)	7060(30)	2173(9)	1585(19)	21(8)
H(13A)	8460(30)	1866(8)	4226(17)	9(7)
H(14)	5350(30)	2663(9)	1520(20)	23(8)
H(14A)	7200(30)	2411(9)	4240(20)	21(8)
H(16)	2010(30)	1928(7)	1333(17)	4(6)
H(16A)	3360(30)	1824(9)	3824(19)	23(8)
H(17)	3710(30)	1457(9)	1460(20)	18(8)
H(17A)	4800(30)	1324(8)	3762(19)	14(7)

H(20)	580(30)	3273(9)	780(20)	30(9)
H(20A)	2970(30)	3274(10)	3580(20)	42(10)
H(21)	-1220(30)	3689(9)	930(20)	20(8)
H(21A)	1310(30)	3728(9)	3910(20)	17(8)
H(22)	-3150(40)	3573(11)	1990(20)	46(11)
H(22A)	-810(30)	3625(9)	4710(20)	24(8)
H(23)	-3120(30)	3043(9)	2850(20)	28(9)
H(23A)	-1430(30)	3033(9)	5170(20)	39(9)
H(24)	-1200(30)	2623(9)	2700(20)	22(8)
H(24A)	220(30)	2553(8)	4730(19)	11(7)

Table S20. Torsion angles [°] for 1c.

N(3)-Ag(1)-N(1)-C(1)	139.1(5)
N(3)-Ag(1)-N(1)-C(5)	-41.5(6)
N(3A)-Ag(2)-N(1A)-C(5A)	172.2(5)
N(3A)-Ag(2)-N(1A)-C(1A)	-2.3(7)
N(1)-Ag(1)-N(3)-C(13)	-130.3(5)
N(1)-Ag(1)-N(3)-C(17)	48.3(6)
N(1A)-Ag(2)-N(3A)-C(13A)	8.4(7)
N(1A)-Ag(2)-N(3A)-C(17A)	-172.7(5)
C(5)-N(1)-C(1)-C(2)	-0.5(4)
Ag(1)-N(1)-C(1)-C(2)	178.9(2)
C(5A)-N(1A)-C(1A)-C(2A)	1.0(4)
Ag(2)-N(1A)-C(1A)-C(2A)	175.7(2)
N(1)-C(1)-C(2)-C(3)	-0.7(5)
N(1A)-C(1A)-C(2A)-C(3A)	-0.1(5)
C(1)-C(2)-C(3)-C(4)	1.2(4)
C(1)-C(2)-C(3)-C(6)	178.9(3)
C(1A)-C(2A)-C(3A)-C(4A)	-1.1(4)
C(1A)-C(2A)-C(3A)-C(6A)	-178.8(3)
C(2)-C(3)-C(4)-C(5)	-0.7(4)
C(6)-C(3)-C(4)-C(5)	-178.6(3)
C(2A)-C(3A)-C(4A)-C(5A)	1.3(4)
C(6A)-C(3A)-C(4A)-C(5A)	179.2(2)
C(1)-N(1)-C(5)-C(4)	1.0(4)
Ag(1)-N(1)-C(5)-C(4)	-178.4(2)
C(3)-C(4)-C(5)-N(1)	-0.4(5)
C(1A)-N(1A)-C(5A)-C(4A)	-0.8(4)
Ag(2)-N(1A)-C(5A)-C(4A)	-175.5(2)
C(3A)-C(4A)-C(5A)-N(1A)	-0.3(4)
C(7)-N(2)-C(6)-O(1)	10.7(5)
C(7)-N(2)-C(6)-C(3)	-167.3(3)
C(2)-C(3)-C(6)-O(1)	-175.1(3)
C(4)-C(3)-C(6)-O(1)	2.6(4)
C(2)-C(3)-C(6)-N(2)	2.9(4)
C(4)-C(3)-C(6)-N(2)	-179.4(2)

C(7A)-N(2A)-C(6A)-O(1A)	8.2(5)
C(7A)-N(2A)-C(6A)-C(3A)	-171.2(3)
C(2A)-C(3A)-C(6A)-O(1A)	147.8(3)
C(4A)-C(3A)-C(6A)-O(1A)	-30.0(4)
C(2A)-C(3A)-C(6A)-N(2A)	-32.9(4)
C(4A)-C(3A)-C(6A)-N(2A)	149.4(3)
C(6)-N(2)-C(7)-C(8)	-35.8(4)
C(6)-N(2)-C(7)-C(12)	144.1(3)
C(6A)-N(2A)-C(7A)-C(8A)	-26.7(5)
C(6A)-N(2A)-C(7A)-C(12A)	153.2(3)
C(12)-C(7)-C(8)-C(9)	-4.1(5)
N(2)-C(7)-C(8)-C(9)	175.8(3)
C(12A)-C(7A)-C(8A)-C(9A)	-2.0(5)
N(2A)-C(7A)-C(8A)-C(9A)	177.9(3)
C(7)-C(8)-C(9)-C(10)	1.3(5)
C(7A)-C(8A)-C(9A)-C(10A)	0.1(5)
C(8)-C(9)-C(10)-C(11)	1.5(5)
C(8A)-C(9A)-C(10A)-C(11A)	1.5(5)
C(9)-C(10)-C(11)-C(12)	-1.4(5)
C(9A)-C(10A)-C(11A)-C(12A)	-1.3(5)
C(10)-C(11)-C(12)-C(7)	-1.5(5)
C(8)-C(7)-C(12)-C(11)	4.3(5)
N(2)-C(7)-C(12)-C(11)	-175.7(3)
C(10A)-C(11A)-C(12A)-C(7A)	-0.6(5)
C(8A)-C(7A)-C(12A)-C(11A)	2.3(4)
N(2A)-C(7A)-C(12A)-C(11A)	-177.6(3)
C(17)-N(3)-C(13)-C(14)	-0.4(4)
Ag(1)-N(3)-C(13)-C(14)	178.3(2)
C(17A)-N(3A)-C(13A)-C(14A)	-1.4(4)
Ag(2)-N(3A)-C(13A)-C(14A)	177.6(2)
N(3)-C(13)-C(14)-C(15)	1.1(4)
N(3A)-C(13A)-C(14A)-C(15A)	0.7(5)
C(13)-C(14)-C(15)-C(16)	-1.0(4)
C(13)-C(14)-C(15)-C(18)	-177.2(3)
C(13A)-C(14A)-C(15A)-C(16A)	0.9(4)
C(13A)-C(14A)-C(15A)-C(18A)	-179.7(3)

C(14)-C(15)-C(16)-C(17)	0.4(4)
C(18)-C(15)-C(16)-C(17)	176.4(3)
C(14A)-C(15A)-C(16A)-C(17A)	-1.6(4)
C(18A)-C(15A)-C(16A)-C(17A)	179.0(3)
C(13)-N(3)-C(17)-C(16)	-0.3(4)
Ag(1)-N(3)-C(17)-C(16)	-179.0(2)
C(15)-C(16)-C(17)-N(3)	0.2(4)
C(13A)-N(3A)-C(17A)-C(16A)	0.6(4)
Ag(2)-N(3A)-C(17A)-C(16A)	-178.4(2)
C(15A)-C(16A)-C(17A)-N(3A)	1.0(4)
C(19)-N(4)-C(18)-O(2)	-2.0(5)
C(19)-N(4)-C(18)-C(15)	179.0(3)
C(16)-C(15)-C(18)-O(2)	-143.9(3)
C(14)-C(15)-C(18)-O(2)	32.1(4)
C(16)-C(15)-C(18)-N(4)	35.1(4)
C(14)-C(15)-C(18)-N(4)	-148.9(3)
C(19A)-N(4A)-C(18A)-O(2A)	-8.4(5)
C(19A)-N(4A)-C(18A)-C(15A)	171.2(3)
C(16A)-C(15A)-C(18A)-O(2A)	-176.1(3)
C(14A)-C(15A)-C(18A)-O(2A)	4.5(4)
C(16A)-C(15A)-C(18A)-N(4A)	4.3(4)
C(14A)-C(15A)-C(18A)-N(4A)	-175.1(2)
C(18)-N(4)-C(19)-C(24)	-167.0(3)
C(18)-N(4)-C(19)-C(20)	12.0(5)
C(18A)-N(4A)-C(19A)-C(20A)	33.9(4)
C(18A)-N(4A)-C(19A)-C(24A)	-145.4(3)
C(24)-C(19)-C(20)-C(21)	1.9(4)
N(4)-C(19)-C(20)-C(21)	-177.1(3)
C(24A)-C(19A)-C(20A)-C(21A)	3.3(4)
N(4A)-C(19A)-C(20A)-C(21A)	-176.0(3)
C(19)-C(20)-C(21)-C(22)	-1.0(5)
C(19A)-C(20A)-C(21A)-C(22A)	-0.9(5)
C(20)-C(21)-C(22)-C(23)	-0.1(5)
C(20A)-C(21A)-C(22A)-C(23A)	-1.6(5)
C(21)-C(22)-C(23)-C(24)	0.3(5)
C(21A)-C(22A)-C(23A)-C(24A)	1.7(5)

C(22)-C(23)-C(24)-C(19)	0.6(5)
C(20)-C(19)-C(24)-C(23)	-1.7(4)
N(4)-C(19)-C(24)-C(23)	177.4(3)
C(22A)-C(23A)-C(24A)-C(19A)	0.6(5)
C(20A)-C(19A)-C(24A)-C(23A)	-3.1(4)
N(4A)-C(19A)-C(24A)-C(23A)	176.1(3)

Symmetry transformations used to generate equivalent atoms:

Table S21. Hydrogen bonds for 1c [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
N(2)-H(2N)...O(5A)#1	0.82(3)	2.13(3)	2.883(3)	152(3)
N(2A)-H(2NA)...O(5A)#1	0.83(3)	2.17(3)	2.946(3)	155(3)
N(4)-H(4N)...O(5)#2	0.79(3)	2.18(3)	2.958(3)	165(3)
N(4A)-H(4NA)...O(5)#2	0.77(3)	2.20(3)	2.826(3)	139(3)

Symmetry transformations used to generate equivalent atoms:

#1 x+1,y,z #2 x-1,y,z