

Supplementary Materials: Synthesis of New Polyether Ether Ketone Derivatives with Silver Binding Site and Coordination Compounds of Their Monomers with Different Silver Salts

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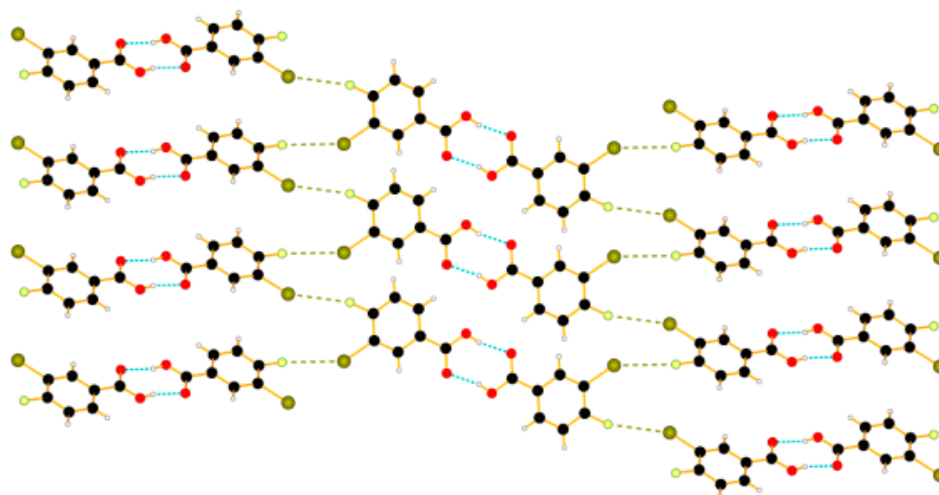


Figure S1. Packing structure of compound 2.

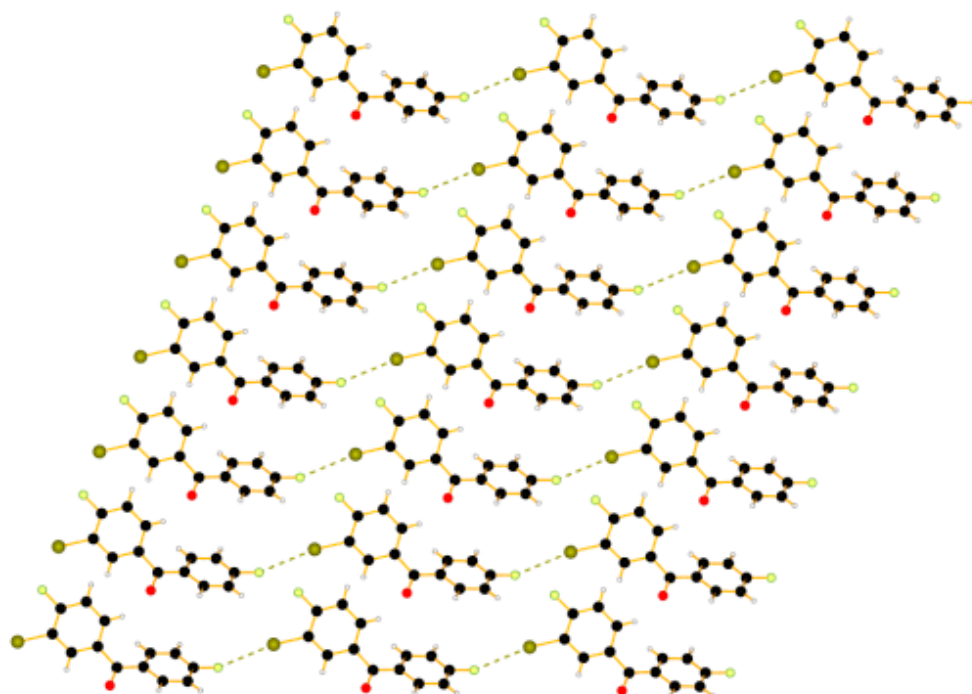


Figure S2. Packing structure of compound 3.

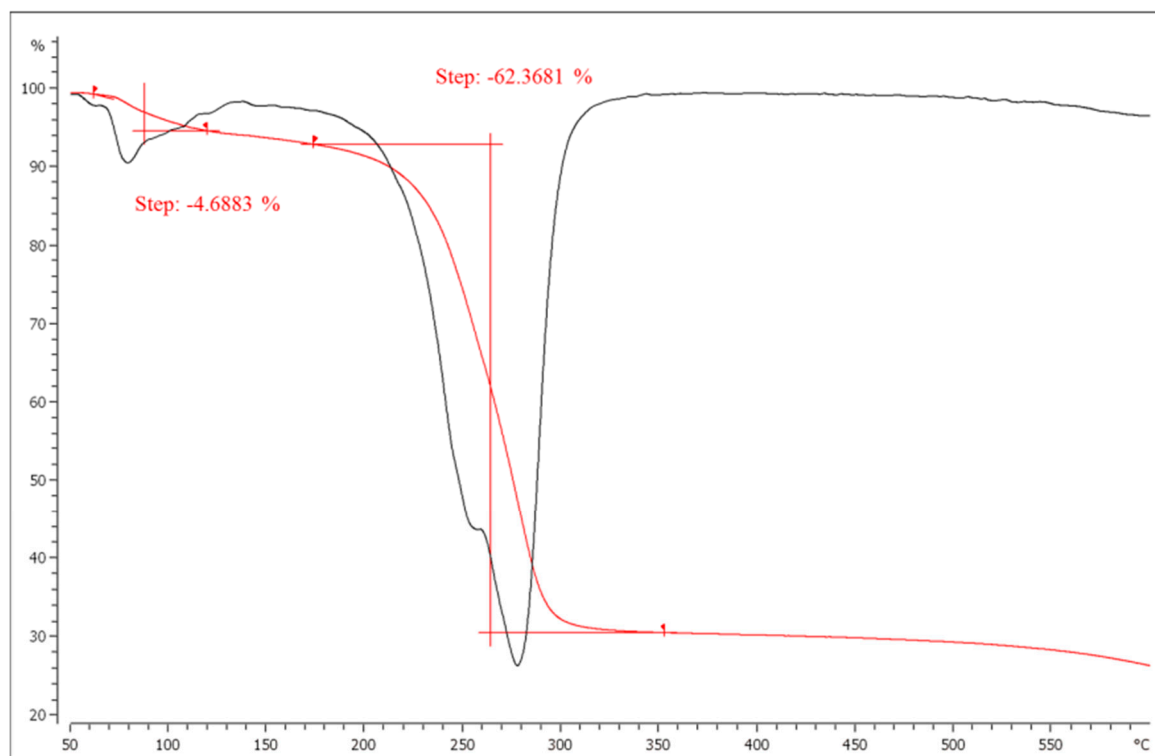


Figure S3. TGA of compound 4b.

Table S1. Crystal data and structures refinement for X-ray structures.

Compound	2	3	4	4a	4b	5a
CCDC number	CCDC-1411840	CCDC-1411841	CCDC-1411842	CCDC-1411843	CCDC-1411844	CCDC-1411845
Empirical formula	C ₇ H ₄ BrFO ₂	C ₁₃ H ₅ BrF ₂ O	C ₁₈ H ₁₁ F ₂ NO	C ₃₇ H ₁₈ AgF ₇ N ₂ O ₅ S	C ₃₇ H ₂₅ AgF ₄ N ₂ O ₃	C ₃₇ H ₂₆ AgF ₄ N ₃ O ₆
Formula weight (g·mol ⁻¹)	219.01	297.10	295.28	843.47	729.46	792.48
Temperature	200(2) K	200(2) K	200(2) K	200(2) K	200(2) K	200(2) K
Wavelength	0.71073 Å	1.54186 Å	0.71073 Å	0.71073 Å	1.54186 Å	0.71073 Å
Crystal system	Monoclinic	Monoclinic	Monoclinic	Monoclinic	Monoclinic	Monoclinic
Space group	<i>P</i> 2 ₁ / <i>n</i>	<i>P</i> 2 ₁ / <i>c</i>	<i>P</i> 2 ₁ / <i>c</i>	<i>C</i> 2/ <i>c</i>	<i>P</i> 2 ₁ / <i>c</i>	<i>P</i> 2 ₁ / <i>n</i>
Unit cell dimensions	<i>a</i> = 4.6710(10) Å	<i>a</i> = 6.2091(8) Å	<i>a</i> = 14.5724(8) Å	<i>a</i> = 38.964(3) Å	<i>a</i> = 24.301(2) Å	<i>a</i> = 7.5262(4) Å
	<i>b</i> = 5.8829(13) Å	<i>b</i> = 14.4523(13) Å	<i>b</i> = 12.5173(14) Å	<i>b</i> = 7.9942(5) Å	<i>b</i> = 3.8259(3) Å	<i>b</i> = 12.1802(4) Å
	<i>c</i> = 26.760(5) Å	<i>c</i> = 12.2712(13) Å	<i>c</i> = 7.5171(15) Å	<i>c</i> = 23.6965(14) Å	<i>c</i> = 34.880(3) Å	<i>c</i> = 35.5300(17) Å
	β = 93.320(17)°	β = 93.510(10)°	β = 101.958(8)°	β = 113.452(4)°	β = 92.941(7)°	β = 96.000(4)°
Volume	734.1(3) Å ³	1,099.1(2) Å ³	1,341.4(3) Å ³	6,771.3(7) Å ³	3,238.6(5) Å ³	3,239.2(3) Å ³
<i>Z</i>	4	4	4	8	4	4
Density (calculated) (Mg/m ³)	1.982	1.795	1.462	1.655	1.496	1.625
F(000)	424	584	608	3,360	1,472	1,600
Crystal size (mm ³)	0.2 × 0.07 × 0.05	0.25 × 0.05 × 0.03	0.180 × 0.120 × 0.050	0.220 × 0.10 × 0.030	0.36 × 0.04 × 0.02	0.250 × 0.117 × 0.040
Theta range for data collection	3.05° to 25.00°	4.73° to 62.72°	1.43° to 25.00°	1.76° to 25.00°	1.82° to 55.00°	1.77° to 25.00°
Index ranges	−5 ≤ <i>h</i> ≤ 5	−6 ≤ <i>h</i> ≤ 6	−17 ≤ <i>h</i> ≤ 17	−46 ≤ <i>h</i> ≤ 46	−22 ≤ <i>h</i> ≤ 25	−8 ≤ <i>h</i> ≤ 8
	−6 ≤ <i>k</i> ≤ 6	0 ≤ <i>k</i> ≤ 16	−14 ≤ <i>k</i> ≤ 14	−9 ≤ <i>k</i> ≤ 9	−3 ≤ <i>k</i> ≤ 4	−14 ≤ <i>k</i> ≤ 14
	−31 ≤ <i>l</i> ≤ 31	0 ≤ <i>l</i> ≤ 14	−8 ≤ <i>l</i> ≤ 8	−27 ≤ <i>l</i> ≤ 28	−37 ≤ <i>l</i> ≤ 37	−42 ≤ <i>l</i> ≤ 42
Reflections collected	7,325	1,563	16,600	63,084	20,891	38,973
Independent reflections	1,271 [<i>R</i> (int) = 0.1760]	1,563 [<i>R</i> (int) = 0.000]	2,346 [<i>R</i> (int) = 0.1828]	5,917 [<i>R</i> (int) = 0.1197]	4,025 [<i>R</i> (int) = 0.0952]	5,551 [<i>R</i> (int) = 0.0775]
Absorption correction	Empirical	Integration	None	None	Integration	Integration
Max. and min. transmission	0.7245 and 0.2754	0.9943 and 0.8995	/	/	0.7674 and 0.2321	0.9420 and 0.8631
Refinement method	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²	Full-matrix least-squares on <i>F</i> ²
Data/restraints/parameters	1,271/0/101	1,563/0/154	2,346/0/199	5,917/0/505	4,025/0/425	5,551/0/443
Goodness-of-fit on <i>F</i> ²	1.140	0.990	1.021	1.037	0.981	1.055
Final <i>R</i> indices [<i>I</i> > 2σ(<i>I</i>)]	<i>R</i> 1 = 0.0755	<i>R</i> 1 = 0.0464	<i>R</i> 1 = 0.0700	<i>R</i> 1 = 0.0711	<i>R</i> 1 = 0.0778	<i>R</i> 1 = 0.0987
	<i>wR</i> 2 = 0.1412	<i>wR</i> 2 = 0.1118	<i>wR</i> 2 = 0.1392	<i>wR</i> 2 = 0.1836	<i>wR</i> 2 = 0.2226	<i>wR</i> 2 = 0.2496
<i>R</i> indices (all data)	<i>R</i> 1 = 0.0898	<i>R</i> 1 = 0.0799	<i>R</i> 1 = 0.1168	<i>R</i> 1 = 0.0955	<i>R</i> 1 = 0.0944	<i>R</i> 1 = 0.1394
	<i>wR</i> 2 = 0.1478	<i>wR</i> 2 = 0.1274	<i>wR</i> 2 = 0.1565	<i>wR</i> 2 = 0.1981	<i>wR</i> 2 = 0.2399	<i>wR</i> 2 = 0.2752
Largest diff. peak and hole	0.859 and −0.537 e·Å ⁻³	0.506 and −0.531 e·Å ⁻³	0.191 and −0.205 e·Å ⁻³	1.409 and −1.211 e·Å ⁻³	2.482 and −1.217 e·Å ⁻³	0.804 and −1.017 e·Å ⁻³

