

## Supporting Information

### Silver(I)-based Energetic Coordination Polymers: Synthesis, Structure and Energy Performance

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**Table S1.** Selected bond lengths (Å) and bond angles (°) for **1**.

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Ag(1)-N(3)#1	2.212(3)	N(2)-Ag(1)-N(1)#2	108.07(13)
Ag(1)-N(2)	2.267(4)	C(2)-N(2)-Ag(1)	127.4(3)
Ag(1)-N(1)#2	2.269(4)	N(1)-N(2)-Ag(1)	126.3(3)
N(1)-Ag(1)#2	2.269(4)	C(1)-N(1)-Ag(1)#2	127.0(3)
N(3)-Ag(1)#3	2.212(3)	N(2)-N(1)-Ag(1)#2	123.3(3)
N(3)#1-Ag(1)-N(2)	125.06(13)	C(1)-N(3)-Ag(1)#3	126.0(3)
N(3)#1-Ag(1)-N(1)#2	126.86(13)	C(2)-N(3)-Ag(1)#3	127.7(3)

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Symmetry transformations used to generate equivalent atoms:

#1  $x+1/2, -y+1/2, z+1/2$ ; #2  $-x+2, -y, -z+2$ ; #3  $x-1/2, -y+1/2, z-1/2$ .

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**Table S2.** Selected bond lengths (Å) and bond angles (°) for **2**.

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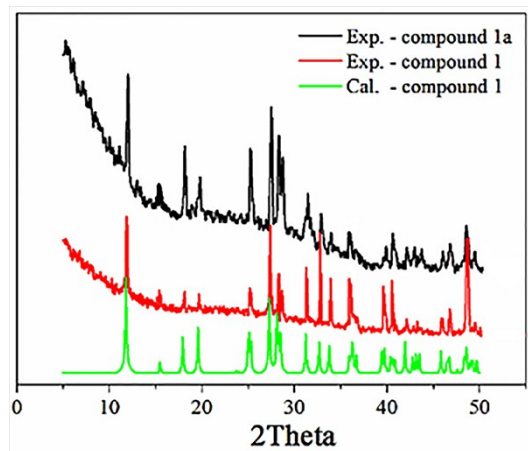
N(4)-Ag(1)#1	2.258(3)	C(4)-N(3)-Ag(1)#2	129.6(2)
N(3)-Ag(1)#2	2.261(3)	C(3)-N(3)-Ag(1)#2	129.3(2)
Ag(1)-N(4)#1	2.258(3)	N(4)#1-Ag(1)-N(3)#3	124.81(10)
Ag(1)-N(3)#3	2.261(3)	N(4)#1-Ag(1)-N(2)	106.86(9)
Ag(1)-N(2)	2.307(3)	N(3)#3-Ag(1)-N(2)	126.87(10)
C(3)-N(4)-Ag(1)#1	126.9(2)	C(4)-N(2)-Ag(1)	128.4(2)
N(2)-N(4)-Ag(1)#1	127.3(2)	N(4)-N(2)-Ag(1)	123.9(2)

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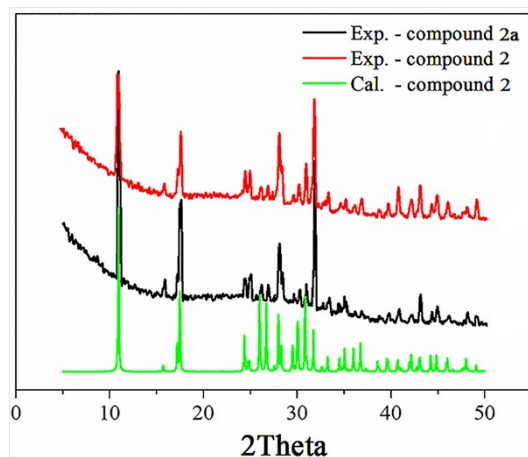
Symmetry transformations used to generate equivalent atoms:

#1  $-x+1, -y+2, -z+1$ ; #2  $x, -y+3/2, z+1/2$ ; #3  $x, -y+3/2, z-1/2$ .

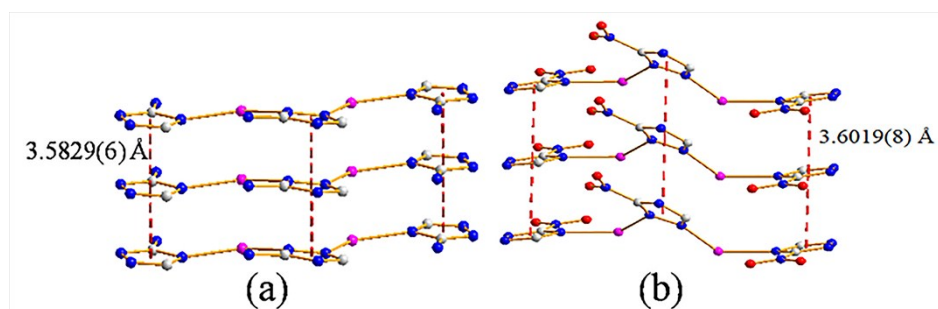
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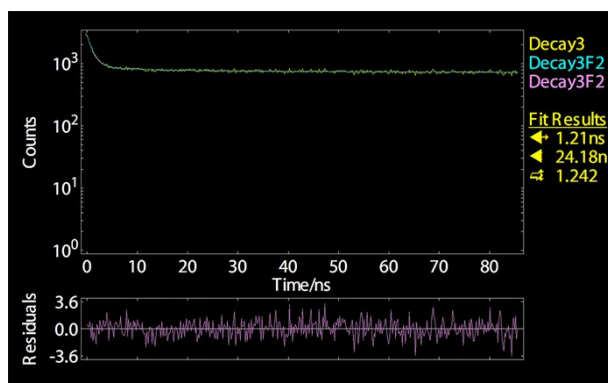
**Figure S1.** XRPD curves for compounds **1** and **1a**.



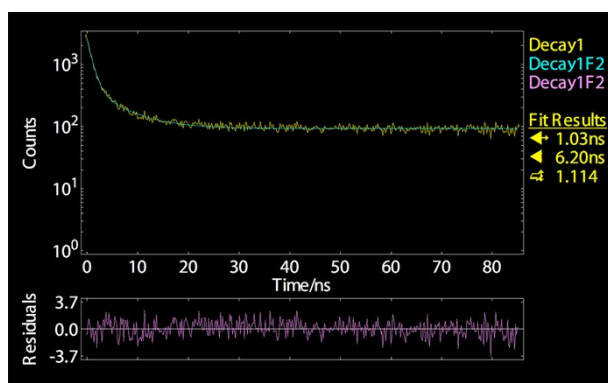
**Figure S2.** XRPD curves for compounds **2** and **2a**.



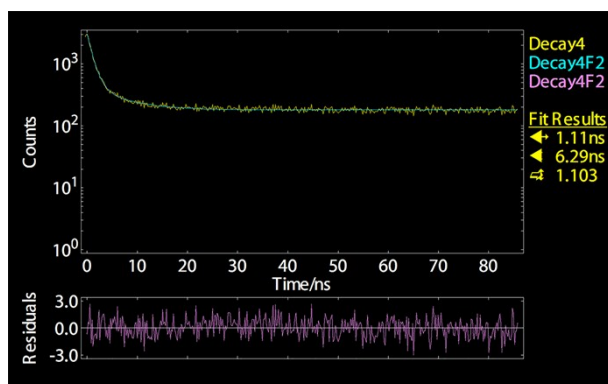
**Figure S3.** The  $\pi$ - $\pi$  overlap interactions between triazole rings in the adjacent layers in **1** (a) and **2** (b).



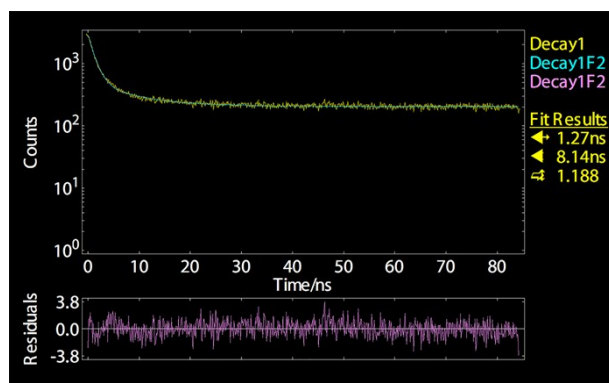
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**Figure S6.** The experimental luminescence decay of the free Hntz ligand monitored at excitation/emission 384/495 nm.



**Figure S7.** The experimental luminescence decay of the compound **2** monitored at excitation/emission 384/503 nm.