Supporting Information

Effect of anions on the self-assembly of two Cd-organic frameworks: syntheses, structural diversity and photoluminescent properties

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Table S1 Selected Bond Lengths [Å] and Angles [°] for Compound **1**[a].

Compound **1**[a]			
Cd(1)-N(1)#1	2.344(2)	Cd(1)-N(1)#2	2.344(2)
Cd(1)-N(5)#3	2.353(2)	Cd(1)-N(5)#4	2.353(2)
Cd(1)-N(3)	2.361(2)	Cd(1)-N(3)#5	2.3609(19)
N(1)-Cd(1)#6	2.344(2)	N(5)-Cd(1)#7	2.353(2)
N(1)#1-Cd(1)-N(1)#2	180	N(1)#1-Cd(1)-N(5)#3	91.50(8)
N(1)#2-Cd(1)-N(5)#3	88.50(8)	N(1)#1-Cd(1)-N(5)#4	88.50(8)
N(1)#2-Cd(1)-N(5)#4	91.50(8)	N(5)#3-Cd(1)-N(5)#4	180
N(1)#1-Cd(1)-N(3)	91.73(7)	N(1)#2-Cd(1)-N(3)	88.27(7)
N(5)#3-Cd(1)-N(3)	92.92(7)	N(5)#4-Cd(1)-N(3)	87.08(7)
N(1)#1-Cd(1)-N(3)#5	88.27(7)	N(1)#2-Cd(1)-N(3)#5	91.73(7)
N(5)#3-Cd(1)-N(3)#5	87.08(7)	N(5)#4-Cd(1)-N(3)#5	92.92(7)
N(3)-Cd(1)-N(3)#5	180	C(7)-N(1)-Cd(1)#6	127.57(17)
C(8)-N(1)-Cd(1)#6	125.65(16)	C(10)-N(3)-Cd(1)	123.15(16)
C(11)-N(3)-Cd(1)	130.88(15)	C(13)-N(5)-Cd(1)#7	132.36(18)
C(14)-N(5)-Cd(1)#7	120.51(17)		

[a] Symmetry codes: (#1) x+1/2,-y+1/2,z-1/2; (#2) -x+3/2,y-1/2,-z+5/2; (#3) x+1,y,z; (#4) -x+1,-y,-z+2; (#5) -x+2,-y,-z+2; (#6) -x+3/2,y+1/2,-z+5/2; (#7) x-1,y,z.

Table S2 Selected Bond Lengths [Å] and Angles [°] for Compound **2**[a].

Compound **2**[a]			
Cd(1)-N(3)#1	2.328(5)	Cd(1)-N(3)#2	2.328(5)
Cd(1)-N(1)#3	2.366(5)	Cd(1)-N(1)	2.366(5)
Cd(1)-N(5)#4	2.400(5)	Cd(1)-N(5)#5	2.400(5)
N(5)-Cd(1)#6	2.400(5)	N(3)-Cd(1)#7	2.328(5)
N(3)#1-Cd(1)-N(3)#2	180	N(3)#1-Cd(1)-N(1)	93.09(18)
N(3)#2-Cd(1)-N(1)	86.91(18)	N(3)#1-Cd(1)-N(1)#3	86.91(18)
N(3)#2-Cd(1)-N(1)#3	93.09(18)	N(1)-Cd(1)-N(1)#3	180
N(3)#1-Cd(1)-N(5)#4	90.62(18)	N(3)#2-Cd(1)-N(5)#4	89.38(17)
N(1)-Cd(1)-N(5)#4	88.77(18)	N(1)#3-Cd(1)-N(5)#4	91.23(18)
N(3)#1-Cd(1)-N(5)#5	89.38(18)	N(3)#2-Cd(1)-N(5)#5	90.62(18)
N(1)-Cd(1)-N(5)#5	91.23(18)	N(1)#3-Cd(1)-N(5)#5	88.77(18)
N(5)#4-Cd(1)-N(5)#5	180	C(7)-N(1)-Cd(1)	131.1(4)
C(8)-N(1)-Cd(1)	123.4(4)	C(13)-N(5)-Cd(1)#6	128.6(4)
C(14)-N(5)-Cd(1)#6	126.6(4)	C(10)-N(3)-Cd(1)#7	124.7(4)
C(11)-N(3)-Cd(1)#7	129.5(4)		

[a] Symmetry codes: (#1) x-1/2,-y+3/2,-z+1; (#2) -x+1/2,y+1/2,z; (#3) -x,-y+2,-z+1; (#4) -x,y+1/2,-z+1/2; (#5) x,-y+3/2,z+1/2; (#6) -x,y-1/2,-z+1/2; (#7) x+1/2,-y+3/2,-z+1.

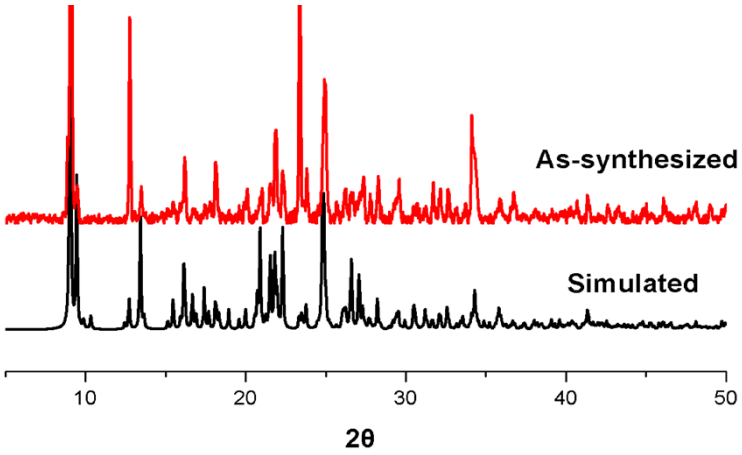

Figure S1 PXRD patterns of simulated from the single-crystal data of compound **1** (black); as-synthesized (red).

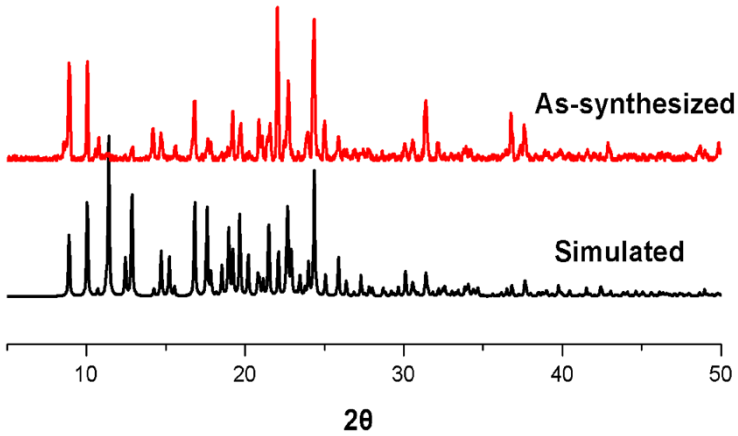

Figure S2 PXRD patterns of simulated from the single-crystal data of compound **2** (black); as-synthesized (red).