

Electronic supplementary information (ESI)

Two- and three-dimensional hybrid zinc phosphites: syntheses, structures and photoluminescence properties

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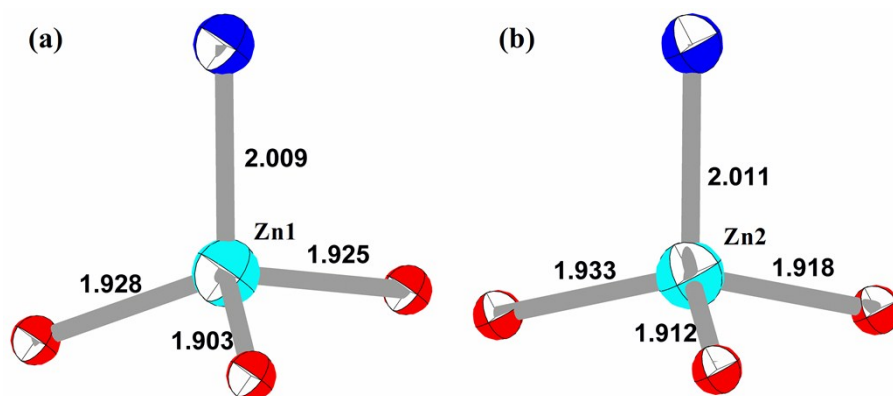


Fig. S1 The coordination geometry of Zn(II) in 1.

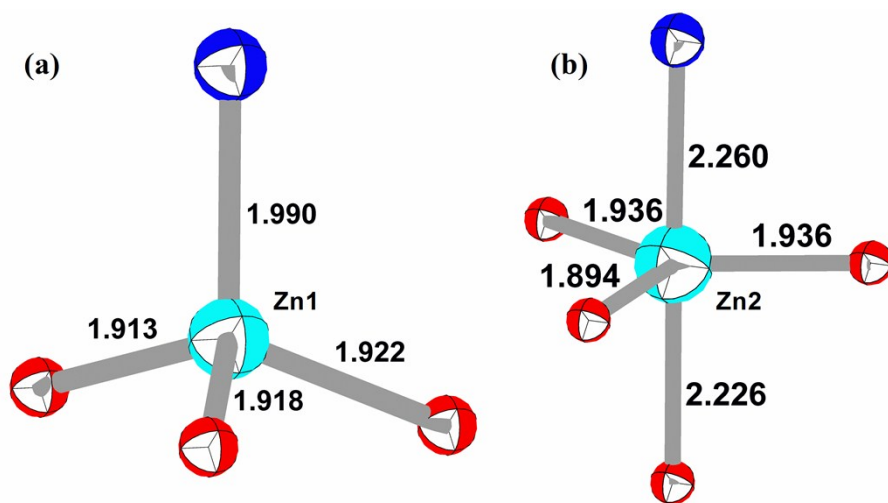


Fig. S2 The coordination geometry of Zn(II) in 2.

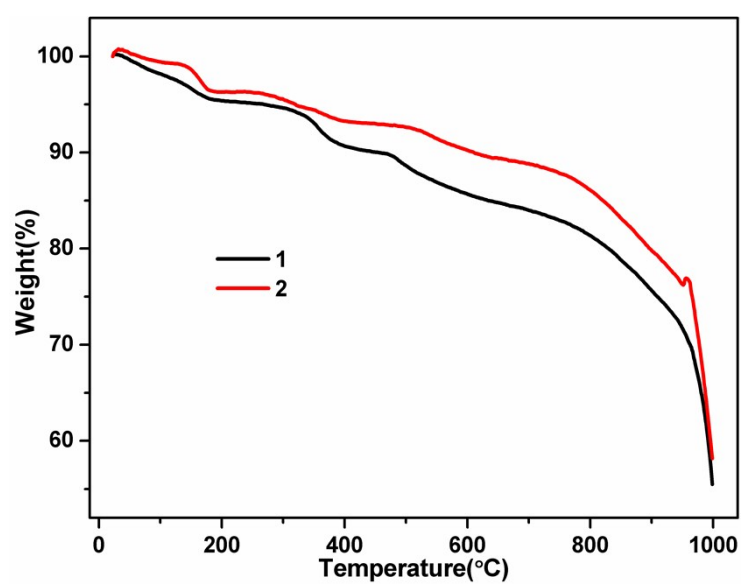


Fig. S3 The TG plots of **1** and **2**.

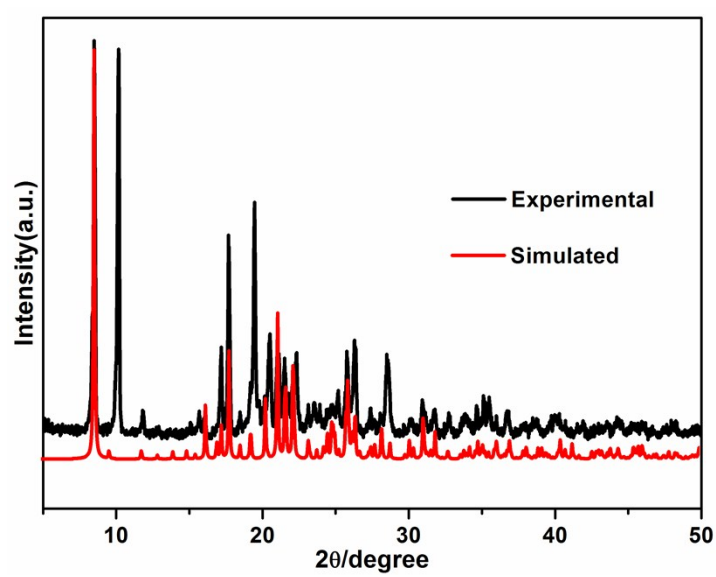


Fig. S4 PXRD patterns of **1**.

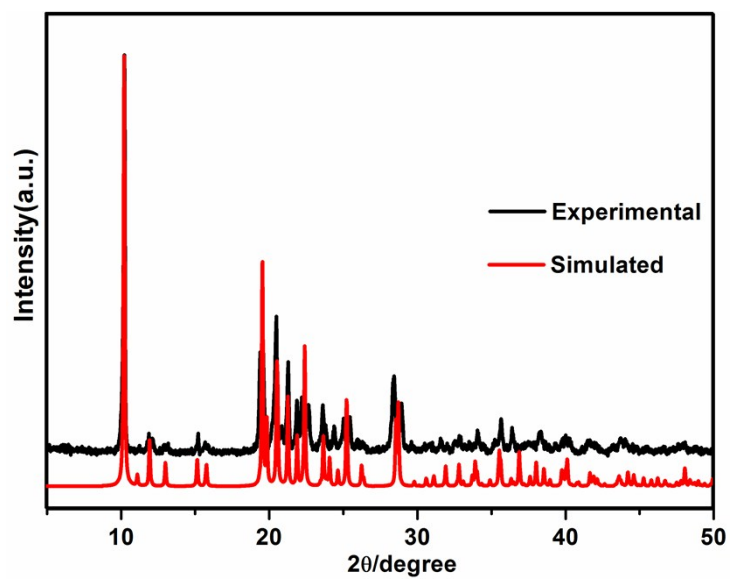


Fig. S5 PXRD patterns of **2**.

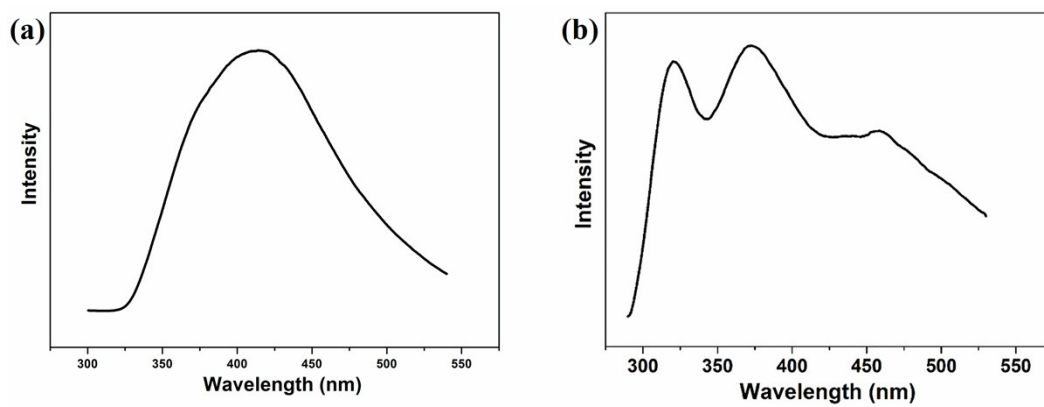


Fig. S6 Photoluminescent emission spectrum of solid BIP (a) and BIP solution (b) excited at 275 nm.

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

N(3)-Zn(1)#1	2.008(3)	O(2)-Zn(2)#2	1.918(3)
O(5)-Zn(1)	1.903(3)	O(1)-P(1)	1.505(3)
O(6)-Zn(1)#4	1.928(3)	O(2)-P(1)	1.485(3)
O(1)-Zn(1)	1.925(3)	O(3)-P(1)	1.498(3)
N(1)-Zn(2)	2.011(3)	O(4)-P(2)	1.514(3)
O(3)-Zn(2)#3	1.933(3)	O(5)-P(2)	1.500(3)
O(4)-Zn(2)	1.911(3)	O(6)-P(2)	1.491(3)
O(2)-P(1)-O(3)	114.67(19)	O(6)#5-Zn(1)-N(3)#1	113.23(14)
O(2)-P(1)-O(1)	111.92(17)	O(5)-Zn(1)-N(3)#1	97.82(13)
O(3)-P(1)-O(1)	113.17(18)	O(1)-Zn(1)-N(3)#1	109.49(12)
O(6)-P(2)-O(5)	113.25(19)	O(4)-Zn(2)-O(2)#2	106.95(15)
O(6)-P(2)-O(4)	111.9(2)	O(4)-Zn(2)-O(3)#6	116.72(13)
O(5)-P(2)-O(4)	110.51(19)	O(2)#2-Zn(2)-O(3)#6	116.81(15)
O(6)#5-Zn(1)-O(5)	110.97(15)	O(4)-Zn(2)-N(1)	115.04(13)
O(6)#5-Zn(1)-O(1)	107.79(16)	O(2)#2-Zn(2)-N(1)	98.99(13)
O(5)-Zn(1)-O(1)	117.43(12)	O(3)#6-Zn(2)-N(1)	101.09(13)

Symmetry codes: #1: -x, -y+1, -z+1; #2: -x, -y+1, -z+2; #3: x, y, z-1; #4: x, -y+1/2, z+1/2; #5: x, -y+1/2, z-1/2; #6: x, y, z+1.

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

N(1)-Zn(1)	1.987(6)	O(6)-Zn(2)	2.224(8)
O(1)-Zn(1)	1.919(6)	O(1)-P(1)	1.500(6)
O(3)-Zn(1)#3	1.920(6)	O(2)-P(1)	1.480(6)
O(5)-Zn(1)#4	1.917(7)	O(3)-P(1)	1.509(6)
N(3)-Zn(2)#2	2.264(8)	O(4)-P(2)	1.477(9)
O(2)-Zn(2)	1.936(6)	O(5)-P(2)	1.493(6)
O(4)-Zn(2)	1.899(10)		
O(2)-P(1)-O(1)	113.5(4)	O(3)#4-Zn(1)-N(1)	108.5(3)
O(2)-P(1)-O(3)	112.1(3)	O(4)-Zn(2)-O(2)#1	113.8(3)
O(1)-P(1)-O(3)	113.1(4)	O(4)-Zn(2)-O(2)	113.8(3)
O(4)-P(2)-O(5)	110.9(4)	O(2)#1-Zn(2)-O(2)	132.3(6)
O(4)-P(2)-O(5)#1	110.9(4)	O(4)-Zn(2)-O(6)	86.6(3)
O(5)-P(2)-O(5)#1	111.5(7)	O(2)#1-Zn(2)-O(6)	91.2(2)
O(5)#3-Zn(1)-O(1)	118.7(3)	O(2)-Zn(2)-O(6)	91.2(2)
O(5)#3-Zn(1)-O(3)#4	103.1(3)	O(4)-Zn(2)-N(3)#5	95.2(4)
O(1)-Zn(1)-O(3)#4	110.0(3)	O(2)#1-Zn(2)-N(3)#5	88.0(2)
O(5)#3-Zn(1)-N(1)	100.3(3)	O(2)-Zn(2)-N(3)#5	88.0(2)
O(1)-Zn(1)-N(1)	115.1(2)	O(6)-Zn(2)-N(3)#5	178.2(3)

Symmetry codes: #1: -x+1, y, z; #2: -x+1, -y+2, z+1/2; #3: -x+1/2, y-1/2, z; #4: -x+1/2, y+1/2, z; #5: -x+1, -y+2, z-1/2.