

# Supplementary Information

## Solid-State Photopolymerization of a Photochromic Hybrid Based on Keggin Tungstophosphates

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**Figure S1.** Photographs of (a) **1** and (b) **2**.

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

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



**(a)**



**(b)**

**Figure S1.** Photographs of (a) **1** and (b) **2**.

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

Gd(1)-O(25)	2.212(15)	O(23)-C(1)	1.20(3)
Gd(1)-O(23)	2.243(17)	O(24)-C(6)	1.22(3)
Gd(1)-O(24)	2.273(15)	O(25)-C(11)	1.20(3)
Gd(1)-O(27)	2.304(19)	O(26)-C(16)	1.17(3)
Gd(1)-O(28)	2.317(18)	O(27)-C(21)	1.13(3)
Gd(1)-O(26)	2.347(19)	O(28)-C(26')	1.238(10)
Gd(1)-O(18)	2.514(16)	O(28)-C(26)	1.244(10)
O(25)-Gd(1)-O(23)	171.9(8)	O(24)-Gd(1)-O(18)	143.9(6)
O(25)-Gd(1)-O(24)	91.9(8)	O(27)-Gd(1)-O(18)	70.3(6)
O(23)-Gd(1)-O(24)	95.9(8)	O(28)-Gd(1)-O(18)	141.3(6)
O(25)-Gd(1)-O(27)	92.1(7)	O(26)-Gd(1)-O(18)	68.8(6)
O(23)-Gd(1)-O(27)	88.0(7)		
O(24)-Gd(1)-O(27)	74.5(7)		
O(25)-Gd(1)-O(28)	94.0(8)		
O(23)-Gd(1)-O(28)	90.1(8)		
O(24)-Gd(1)-O(28)	74.3(7)		
O(27)-Gd(1)-O(28)	148.4(7)		
O(25)-Gd(1)-O(26)	88.4(7)		
O(23)-Gd(1)-O(26)	86.2(7)		
O(24)-Gd(1)-O(26)	146.8(7)		
O(27)-Gd(1)-O(26)	138.6(7)		
O(28)-Gd(1)-O(26)	72.6(7)		
O(25)-Gd(1)-O(18)	81.5(7)		
O(23)-Gd(1)-O(18)	90.9(7)		

Symmetry transformations used to generate equivalent atoms: #1 -x+1, -y+2, -z+1 #2 -x, -y+1, -z.

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

Gd(1)-O(25)	2.255(13)	Gd(1)-O(6)#1	2.526(11)
Gd(1)-O(25)#1	2.255(13)	O(23)-C(1')	1.308(10)
Gd(1)-O(23)#1	2.299(12)	O(23)-C(1)	1.314(10)
Gd(1)-O(23)	2.299(12)	O(24)-C(6)	1.308(10)
Gd(1)-O(24)	2.357(13)	O(24)-C(6')	1.310(10)
Gd(1)-O(24)#1	2.357(13)	O(25)-C(11')	1.309(10)
Gd(1)-O(6)	2.526(11)	O(25)-C(11)	1.311(9)
O(25)-Gd(1)-O(25)#1	102.7(9)	O(23)#1-Gd(1)-O(6)	73.8(5)
O(25)-Gd(1)-O(23)#1	95.2(6)	O(23)-Gd(1)-O(6)	69.7(5)
O(25)#1-Gd(1)-O(23)#1	145.4(5)	O(24)-Gd(1)-O(6)	134.4(6)
O(25)-Gd(1)-O(23)	145.4(5)	O(24)#1-Gd(1)-O(6)	70.2(5)
O(25)#1-Gd(1)-O(23)	95.2(6)	O(25)-Gd(1)-O(6)#1	74.3(5)
O(23)#1-Gd(1)-O(23)	86.1(9)	O(25)#1-Gd(1)-O(6)#1	143.7(5)
O(25)-Gd(1)-O(24)	75.5(8)	O(23)#1-Gd(1)-O(6)#1	69.7(5)
O(25)#1-Gd(1)-O(24)	74.0(6)	O(23)-Gd(1)-O(6)#1	73.8(5)
O(23)#1-Gd(1)-O(24)	139.8(5)	O(24)-Gd(1)-O(6)#1	70.2(5)
O(23)-Gd(1)-O(24)	81.5(7)	O(24)#1-Gd(1)-O(6)#1	134.4(6)
O(25)-Gd(1)-O(24)#1	74.0(6)	O(6)-Gd(1)-O(6)#1	129.2(6)
O(25)#1-Gd(1)-O(24)#1	75.5(8)		
O(23)#1-Gd(1)-O(24)#1	81.5(7)		
O(23)-Gd(1)-O(24)#1	139.8(5)		
O(24)-Gd(1)-O(24)#1	130.2(9)		
O(25)-Gd(1)-O(6)	143.7(5)		
O(25)#1-Gd(1)-O(6)	74.3(5)		

Symmetry transformations used to generate equivalent atoms: #1 -x+2, y, -z+1/2 #2 -x+3/2, -y+1/2, -z.