

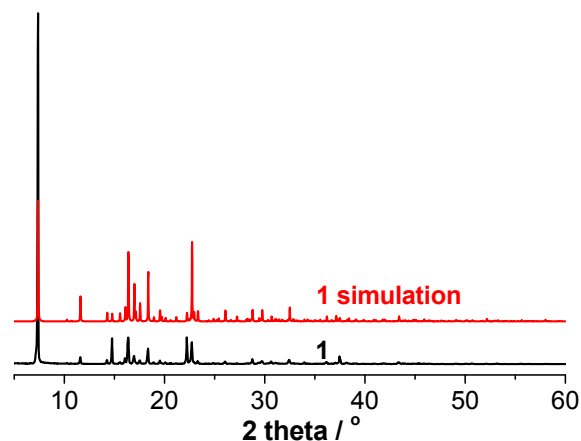
## Supporting Information

**Table S1** Selected bond lengths (Å) for **1-3**.

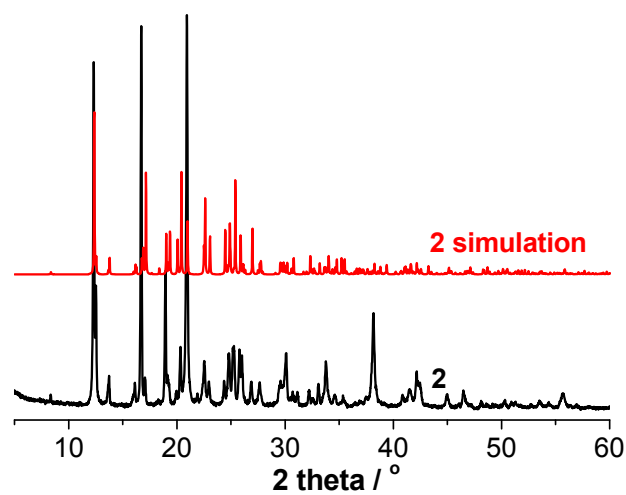
	<b>1</b>	<b>2</b>	<b>3</b>
P1-O1	1.574(1)	1.578(2)	1.561(4)
P1-O2	1.558(1)	1.566(3)	1.546(4)
P1-O3	1.457(1)	1.456(3)	1.502(4)
C1-P1	1.829(2)	1.806(3)	1.770(6)
C1-C2	1.521(3)	1.517(4)	1.557(7)
O2-C18	1.455(3)	1.440(5)	1.466(7)
O1-C16	1.446(3)	1.447(4)	
Br1-C9		1.902(3)	1.908(6)
Br2-C18			1.930(6)
C1-O4	1.400(3)		

**Table S2** Fluorescence lifetimes of **1-3** in CH<sub>2</sub>Cl<sub>2</sub> solution and in solid state.

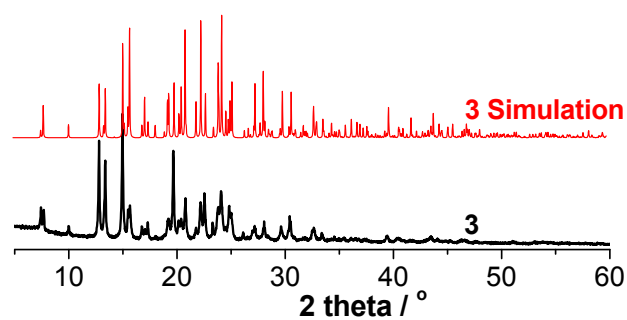
In solution	<b>1</b>			<b>2</b>			<b>3</b>		
	Emission (nm)	399	420	445	412	434	458	413	436
Lifetime (ns)	2.4	2.2	2.2	0.78	0.68	0.72	0.72	0.71	0.71
In solid state	<b>1</b>			<b>2</b>		<b>3</b>			
	Emission (nm)	438	456	476	496	449	475	483	
	Lifetime (ns, $\tau_1$ )	1.7	1.4	0.86	0.94	0.53	0.65	0.73	
Lifetime (ns, $\tau_2$ )	4.6	4.6	2.4	3.2	3.3	3.8	3.8		



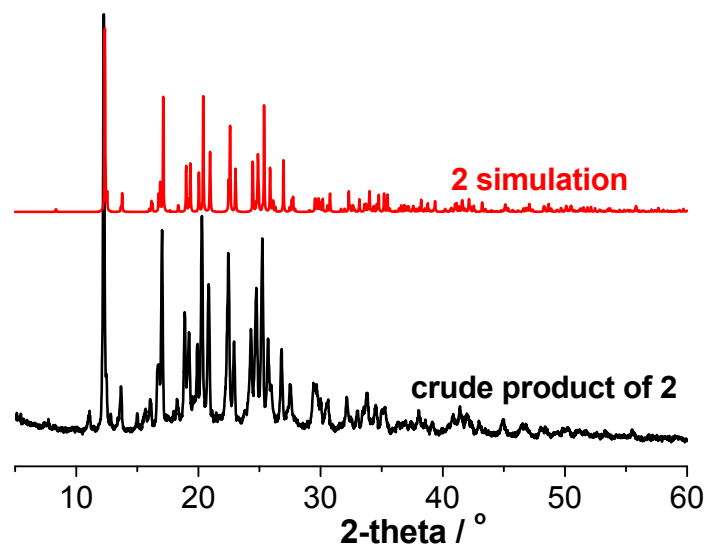
**Fig. S1** Experimental and simulated XRD patterns of **1**.



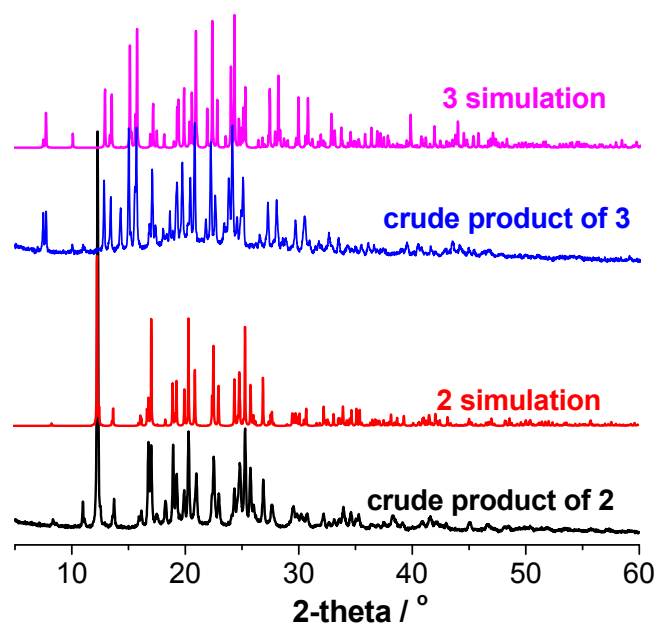
**Fig. S2** Experimental and simulated XRD patterns of **2**.



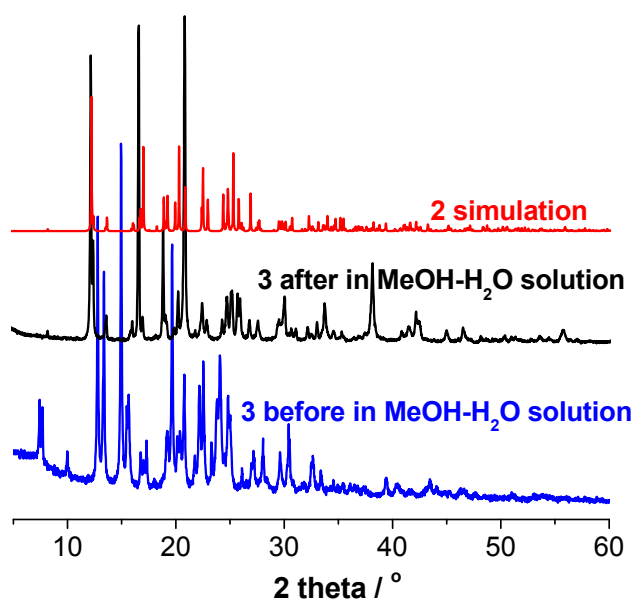
**Fig. S3** Experimental and simulated XRD patterns of **3**.



**Fig. S4** The XRD pattern for the crude product of **2** obtained from the dry  $\text{CH}_3\text{CN}$  solution, and the simulated XRD pattern.



**Fig. S5** The XRD patterns for the crude products of **2** and **3** obtained from the isolation with High-Preparative Liquid Chromatography, and their simulated XRD patterns.



**Fig. S6** The XRD patterns of **3** before and after staying in CH<sub>3</sub>OH-H<sub>2</sub>O solution, and the simulated XRD pattern of **2**.

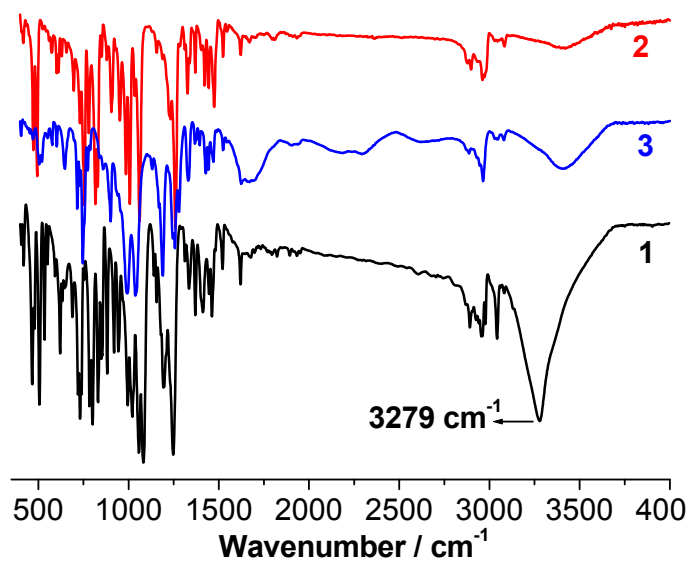


Fig. S7 IR spectra of 1 - 3.

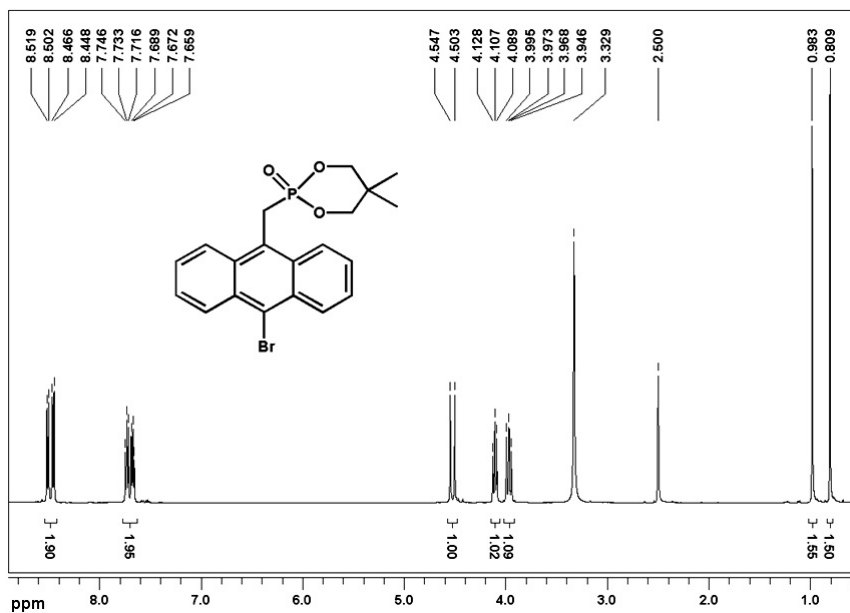
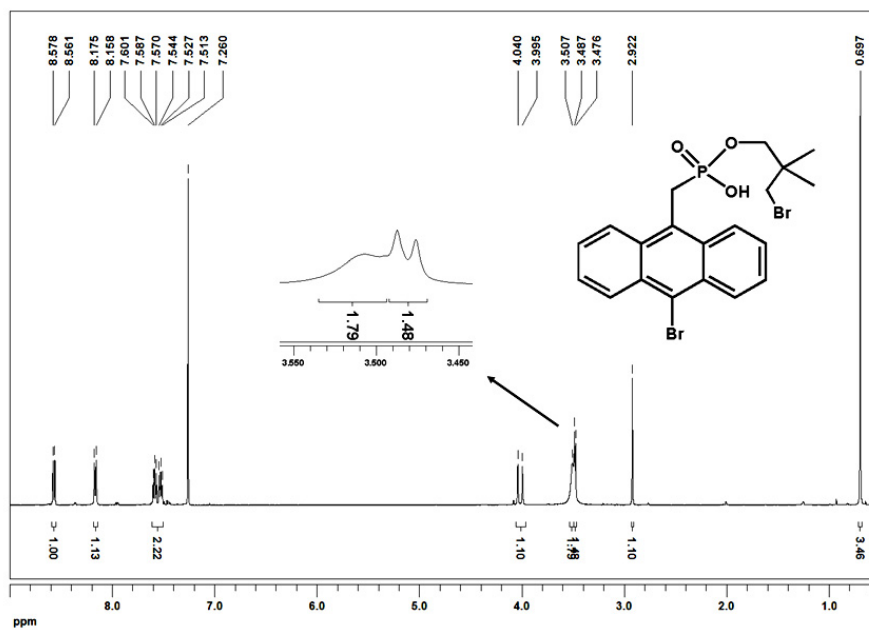


Fig. S8  $^1\text{H}$  NMR spectrum of 2 (500 MHz,  $\text{DMSO}-d_6$ ).



**Fig. S9**  $^1\text{H}$  NMR spectrum of **3** (500 MHz,  $\text{CDCl}_3$ ).