

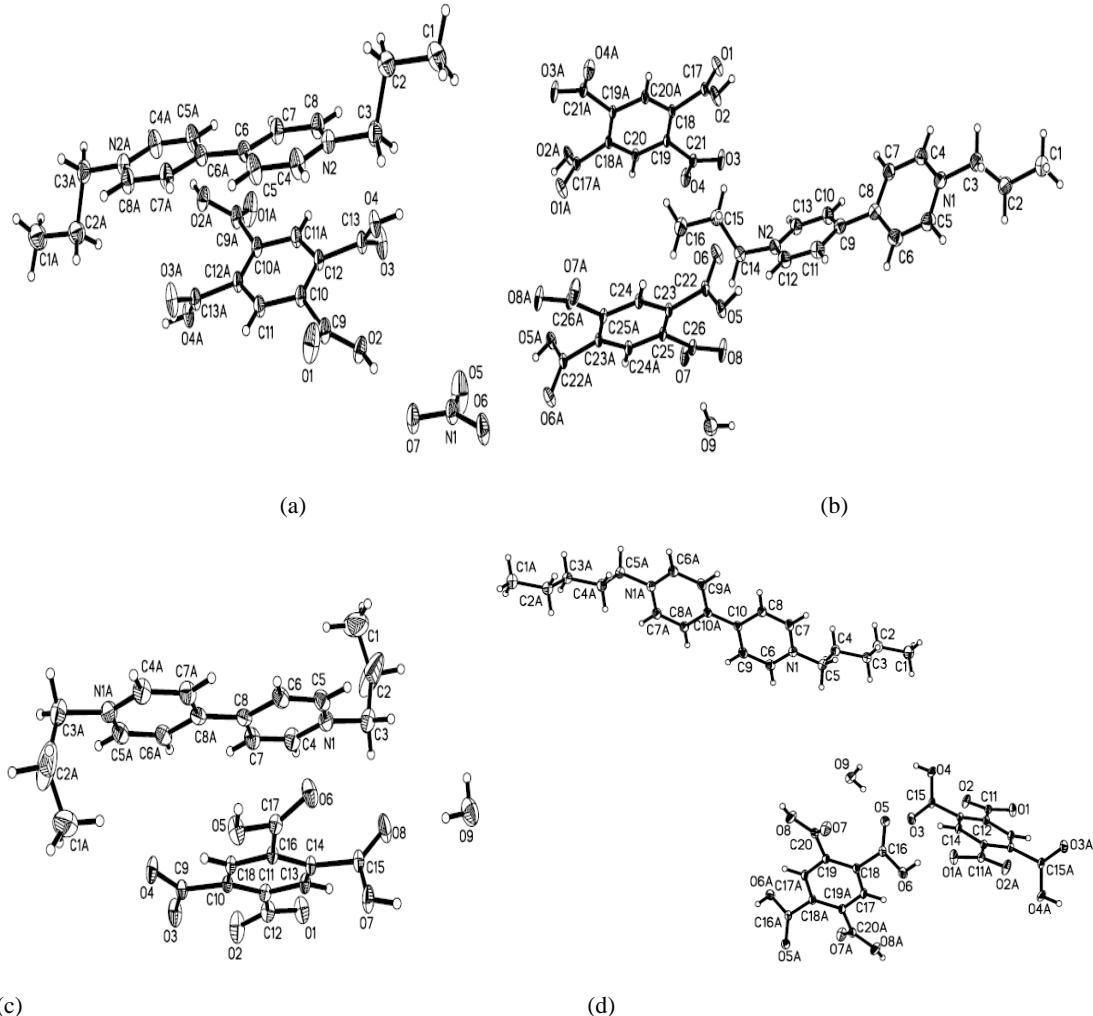
# Photochromism of supramolecular assemblies based on benzenecarboxylate donors and viologen acceptors

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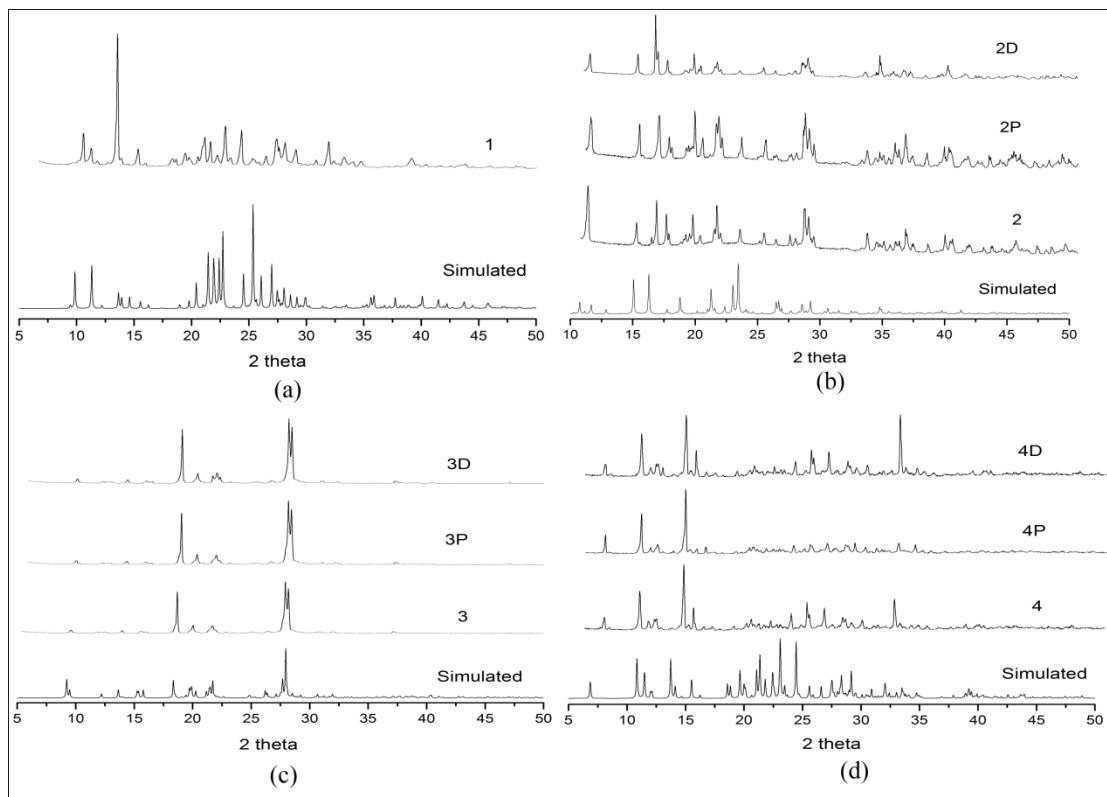
**Table S1.** The hydrogen bond lengths ( $\text{\AA}$ ) in **1–4**

Compound <b>1</b>			
C(4)–H $\cdots$ O(5)	2.635	C(3)–H $\cdots$ O(5)	2.606
O(4)–H $\cdots$ O(6)	1.835	C(8)–H $\cdots$ O(6)	2.580
C(7)–H $\cdots$ O(6)	2.622	C(7)–H $\cdots$ O(7)	2.502
C(5)–H $\cdots$ O(7)	2.613	C(1)–H $\cdots$ O(7)	2.671
O(2)–H $\cdots$ O(7)	1.884	O(2)–H $\cdots$ N(1)	2.654
O(4)–H $\cdots$ N(1)	2.661	C(2)–H $\cdots$ O(3)	2.590
C(8)–H $\cdots$ O(3)	2.531		
Compound <b>2</b>			
C(14)–H $\cdots$ O(1)	2.612	C(2)–H $\cdots$ O(1)	2.510
C(3)–H $\cdots$ O(6)	2.679	C(4)–H $\cdots$ O(9)	2.690
O(5)–H $\cdots$ O(3)	1.694	O(9)–H $\cdots$ O(3)	2.141
C(6)–H $\cdots$ O(4)	2.436	C(11)–H $\cdots$ O(4)	2.232
C(2)–H $\cdots$ O(5)	2.695	C(13)–H $\cdots$ O(5)	2.535
C(7)–H $\cdots$ O(9)	2.637	C(15)–H $\cdots$ O(6)	2.494
C(12)–H $\cdots$ O(6)	2.564	C(13)–H $\cdots$ O(9)	2.589
C(4)–H $\cdots$ O(6)	2.655	C(10)–H $\cdots$ O(7)	2.395
C(7)–H $\cdots$ O(7)	2.595	O(2)–H $\cdots$ O(8)	1.683
C(5)–H $\cdots$ O(8)	2.541	O(9)–H $\cdots$ O(7)	1.920
Compound <b>3</b>			
O(5)–H $\cdots$ O(1)	1.797	O(5)–H $\cdots$ O(2)	2.703
O(9)–H $\cdots$ O(1)	2.115	C(7)–H $\cdots$ O(9)	2.451
C(4)–H $\cdots$ O(9)	2.462	O(9)–H $\cdots$ O(8)	2.013
C(5)–H $\cdots$ O(6)	2.560	C(3)–H $\cdots$ O(6)	2.382
O(7)–H $\cdots$ O(4)	1.761	C(2)–H $\cdots$ O(3)	2.643
Compound <b>4</b>			
O(6)–H $\cdots$ O(1)	1.705	O(9)–H $\cdots$ O(1)	2.497
C(5)–H $\cdots$ O(1)	2.606	O(4)–H $\cdots$ O(2)	1.840

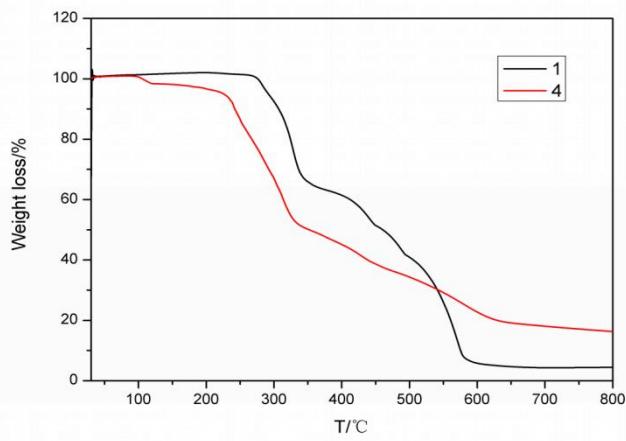
O(9)–H .. O(2)	2.107	C(5)–H .. O(3)	2.594
C(7)–H .. O(3)	2.312	O(9)–H .. O(5)	1.996
C(14)–H .. O(5)	2.478	C(14)–H .. O(6)	2.682
C(9)–H .. O(7)	2.571	O(8)–H .. O(9)	1.798
C(6)–H .. O(5)	2.452		



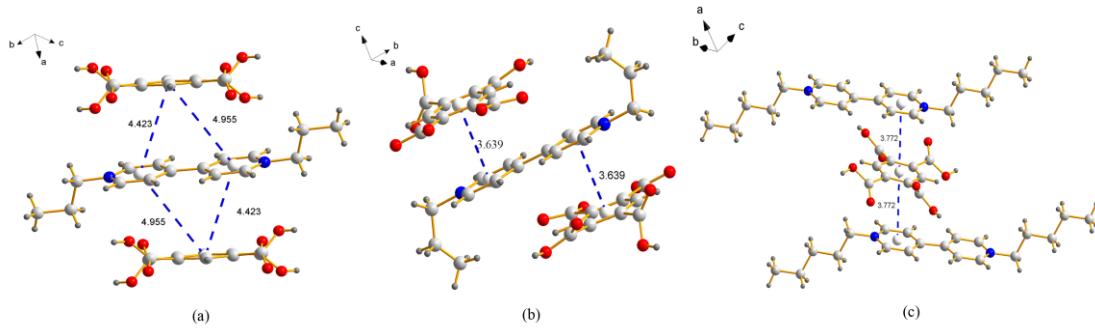
**Fig. S1.**The asymmetric units of the structures (thermal ellipsoids) for **1** (a), **2** (b), **3** (c) and **4** (d).



**Fig. S2.**The PXRD spectra before and after irradiation for **1** (a), **2** (b), **3** (c) and **4** (d).



**Fig.S3.**The TG tests of compounds **1** and **4**.



**Fig. S4.** $\pi\cdots\pi$ interactions of compounds **1** (a), **3** (b) and **4** (c).