

## Supporting Information

### A viologen-based coordination polymer exhibiting high sensitivity towards various light sources

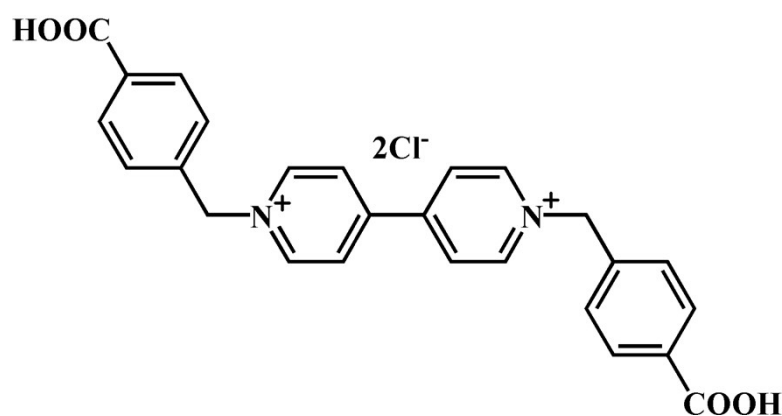
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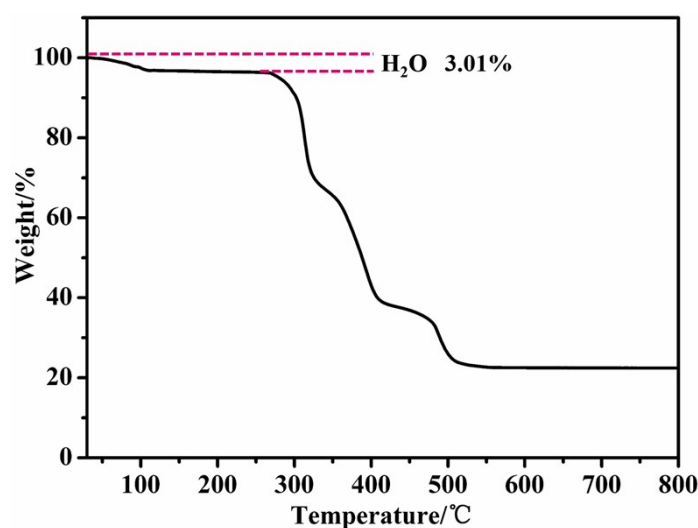
<sup>b</sup>School of Chemistry and Chemical Engineering, and Shandong Provincial Key Laboratory of Chemical Energy Storage and Novel Cell Technology, Liaocheng University, Liaocheng 252000, PR China. Email: [yaoqxlcu@126.com](mailto:yaoqxlcu@126.com)

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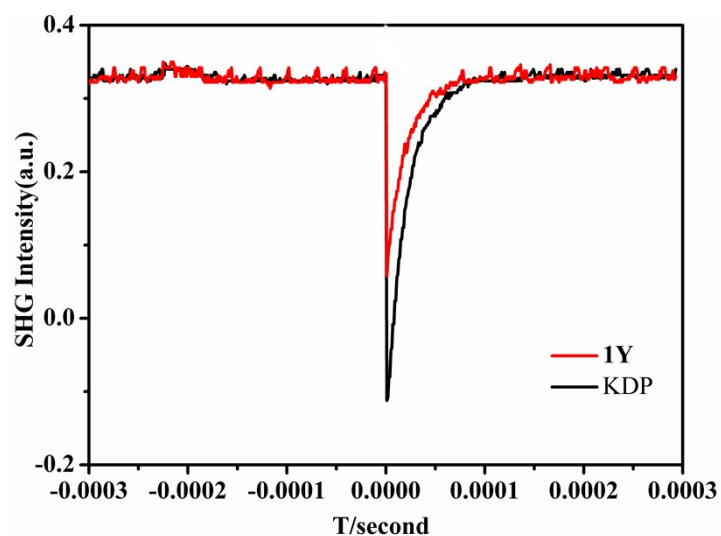
#### Additional Data and Figures



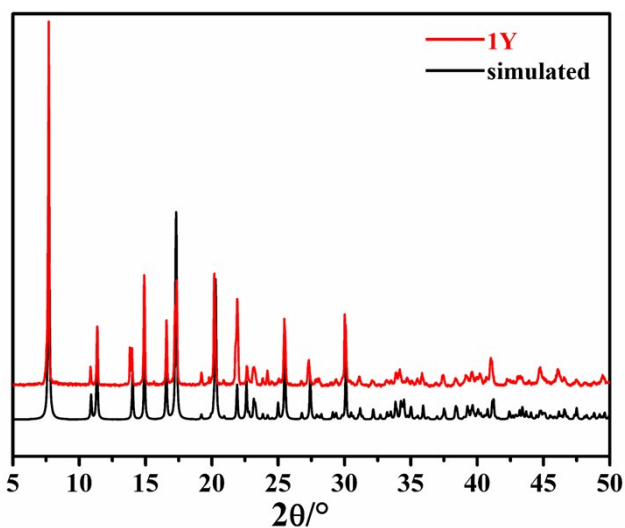
Scheme S1 H<sub>2</sub>bpybcCl<sub>2</sub>



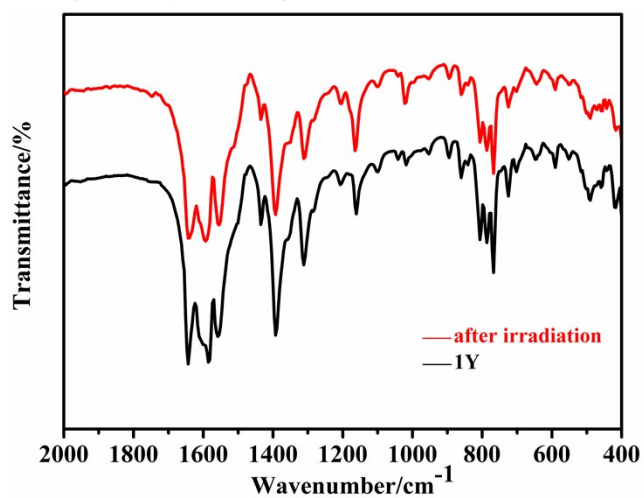
**Fig. S1** The TGA curves of **1Y**. The weight loss of 3.01% (calcd 2.8%) up to 120 °C corresponds to the loss of one free water molecule.



**Fig. S2** Oscilloscope traces of SHG signals for the powder of **1Y** and KDP in the same particle size distribution of 100–140 mesh.

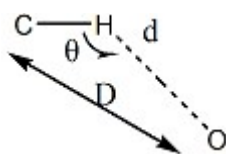


**Fig. S3** Experimental and simulated powder *X*-ray diffraction (PXRD) patterns of **1Y**. After measurement, a color change from yellow to green can be observed.



**Fig. S4** The IR spectra of **1Y** before and after irradiation.

Table S1 C-H<sub>py</sub>...O<sub>ox</sub> hydrogen bonds between oxalate anions and bipyridinium rings.



C-H <sub>py</sub> ...O <sub>ox</sub>	d <sub>H...O</sub> (Å)	D <sub>C...O</sub> (Å)	θ <sub>C-H...O</sub> (°)
C16-H16...O8	2.751	3.467	132.75
C17-H17...O8'	2.487	3.366	153.99
C11-H11...O6	2.631	3.428	141.82
C10-H10...O6'	2.671	3.557	155.49