

**A multifunctional smart window: detecting the ultraviolet radiation and
regulating the spectrum automatically**

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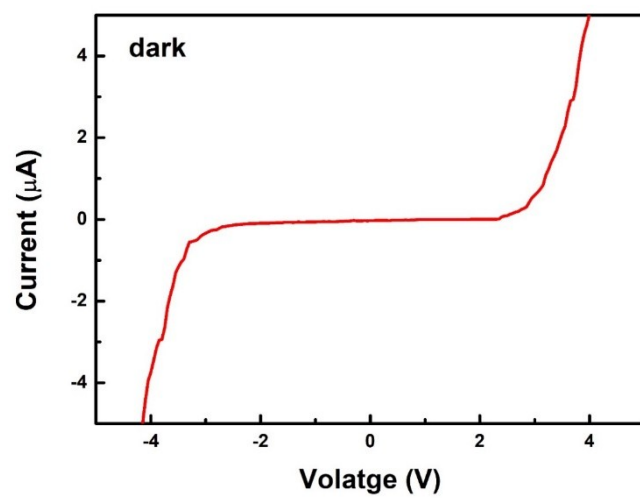


Fig. S1 The current-voltage curve of the TiO_2 photodetector under the dark.

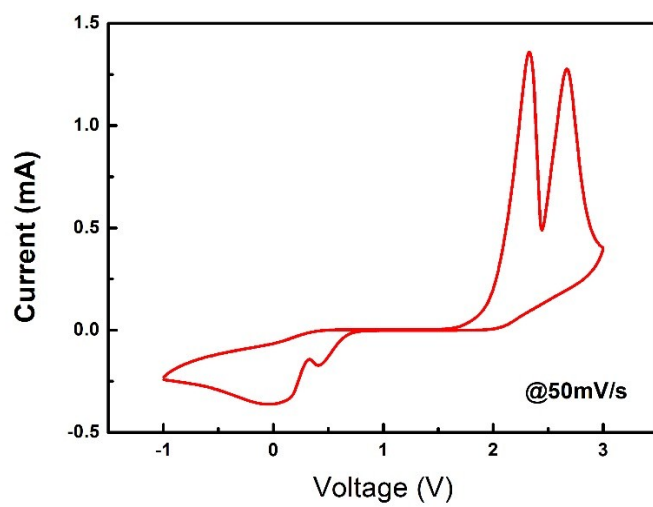


Fig. S2 The cyclic voltammogram curve of the viologen hydrogel electrochromic device.

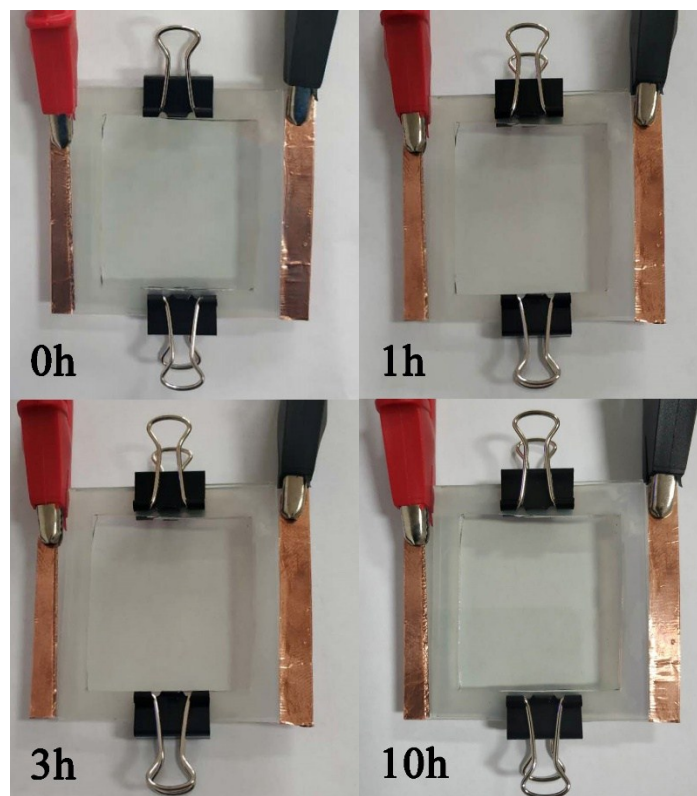


Fig. S3 The photos of the aqueous hydrogel device with a bias of 2V for different time.

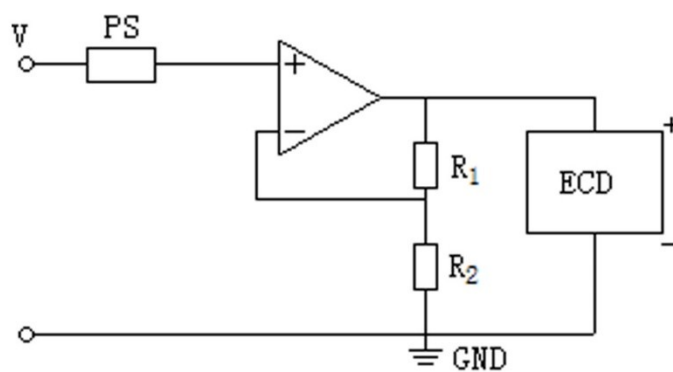


Fig. S4 The external amplifier circuit of the integrated smart window.

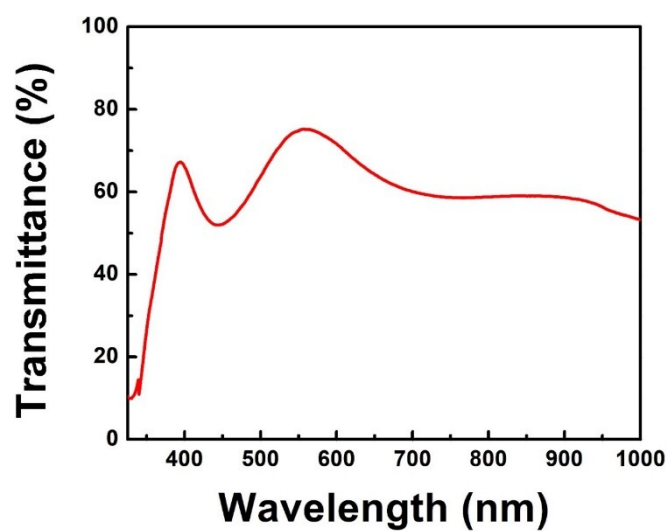


Fig. S5 The transmittance of the integrated smart window.

Video S1. The integrated smart window changes color when it is exposed and blocked to the sun.