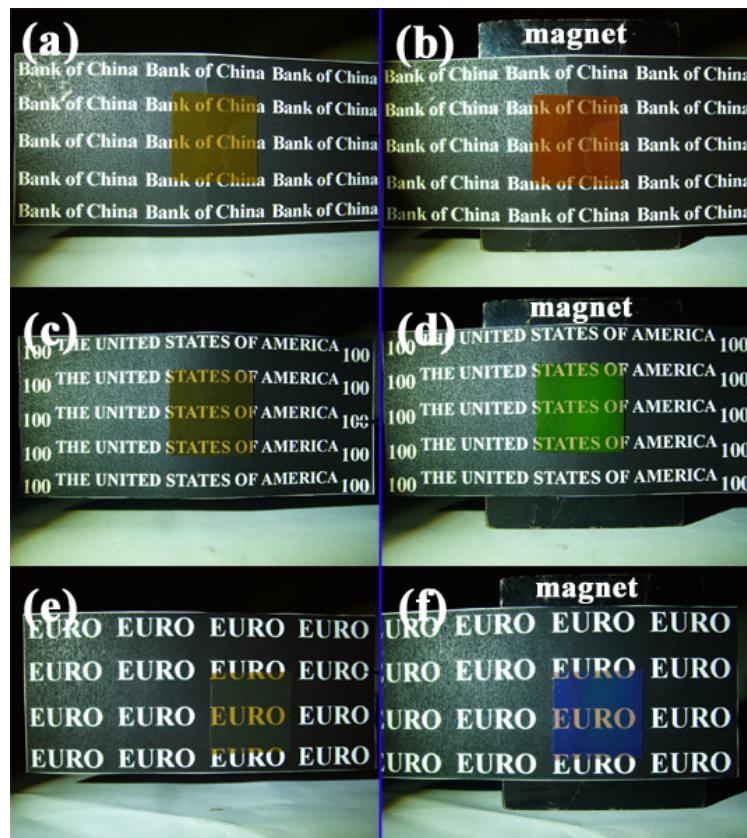


## Magnetically Responsive Photonic Watermark on Banknotes

Haibo Hu,<sup>a</sup> Hao Zhong,<sup>b</sup> Changle Chen,<sup>\*c</sup> Qianwang Chen,<sup>\*a</sup>

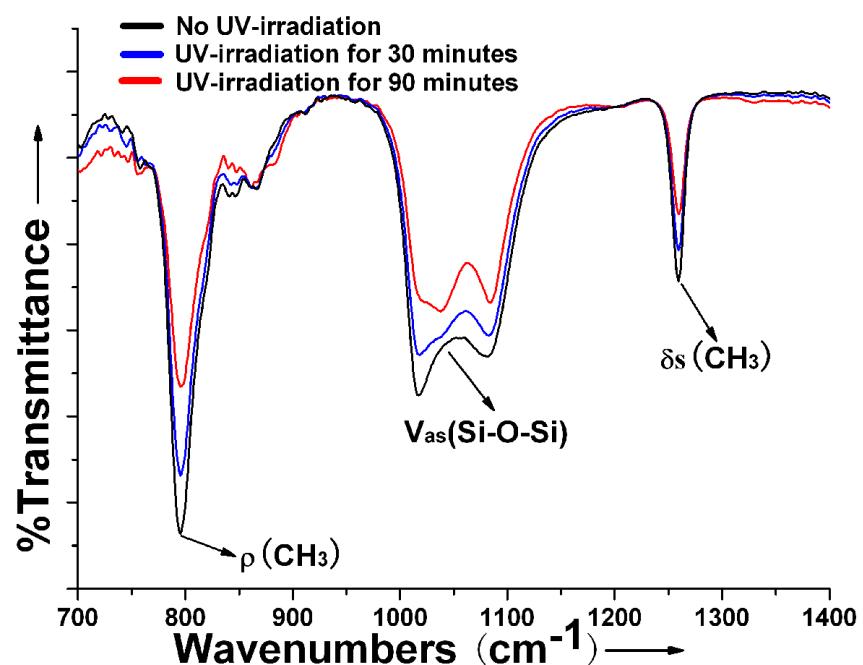


**Figure S1.** Digital photographs of the obtained double-layer flexible photonic display films containing carbon-capped superparamagnetic colloidal nanoparticles with different average particle size (a), (b) 190 nm, (c), (d) 135 nm and (e), (f) 115 nm.

<sup>a</sup> Hefei National Laboratory for Physical Sciences at Microscale and Department of Materials Science & Engineering, University of Science and Technology of China, Hefei, 230026, China. E-mail: cqw@ustc.edu.cn; Fax: +86-551-63603005; Tel: +86-551-63607251

<sup>b</sup> Department of Materials of Science and Engineering, University of Science and Technology of China, Hefei, 230026, China

<sup>c</sup> CAS Key Laboratory of Soft Matter Chemistry and Department of Polymer Science and Engineering, University of Science and Technology of China, Hefei, 230026, China. E-mail: changle@ustc.edu.cn



**Figure S2.** The FTIR spectra of the surface of second photonic-display-layer with different UV-irradiation time: Definitions:  $\delta\text{s}(\text{CH}_3)$ : symmetrical bending of  $\text{CH}_3$ ,  $\rho(\text{CH}_3)$ :  $\text{CH}_3$  rocking,  $\nu_{\text{as}}(\text{Si}-\text{O}-\text{Si})$ : stretching vibrations of  $\text{Si}-\text{O}-\text{Si}$  bond.