Supporting Information

Fabrication of tough photonic crystal patterns with vivid structural colors by direct handwriting

Xin Su, Yu Jiang, Xiaoqian Sun, Suli Wu*, Bingtao Tang, Wenbin Niu and Shufen Zhang

State Key Laboratory of Fine Chemicals, Dalian University of Technology, 2 Linggong Road, Dalian 116024, P.R. China.

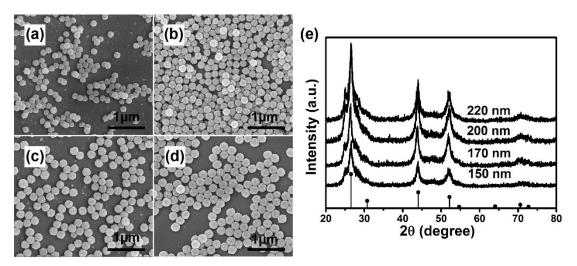


Figure S1. SEM images of monodisperse CdS spheres with different diameters as building blocks. (a) 150 nm; (b) 170 nm; (c) 200 nm; (d) 220 nm; (e) XRD patterns of corresponding CdS spheres

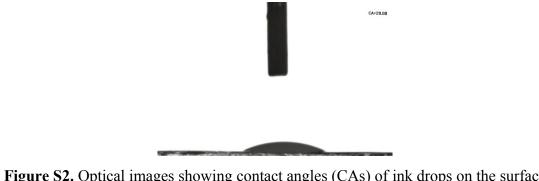


Figure S2. Optical images showing contact angles (CAs) of ink drops on the surface of nitrocellulose varnish film

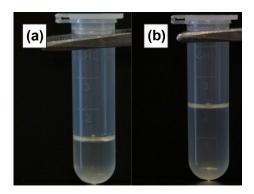


Figure S3. Digital images of (a) 1 mL of the nitrocellulose varnish solution; (b) solution obtained with 1 mL of ethanol added into (a) and fully mixed

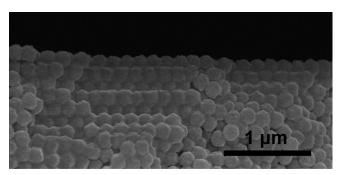


Figure S4. Cross-section SEM images of CdS/nitrocellulose varnish composite photonic crystal film obtained with 170 nm CdS spheres as building blocks

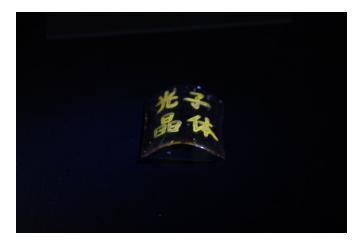


Figure S5. Digital photograph of a reshaped free-standing composite photonic crystal pattern