

Article

Programmable Invisible Photonic Patterns with Rapid Response Based on Two-Dimensional Colloidal Crystals

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Supporting Informations

Table S1. The roughness vs. photocuring time in the masked and unmasked areas (Rq is referred to as the root-mean-square roughness).

Area	Roughness (nm)	Light Curing Time			
		4Min	6Min	10Min	15Min
Masked	Rq	41.1	38	34.7	24.6
Unmasked	Rq	31.3	30.3	23.3	25.8

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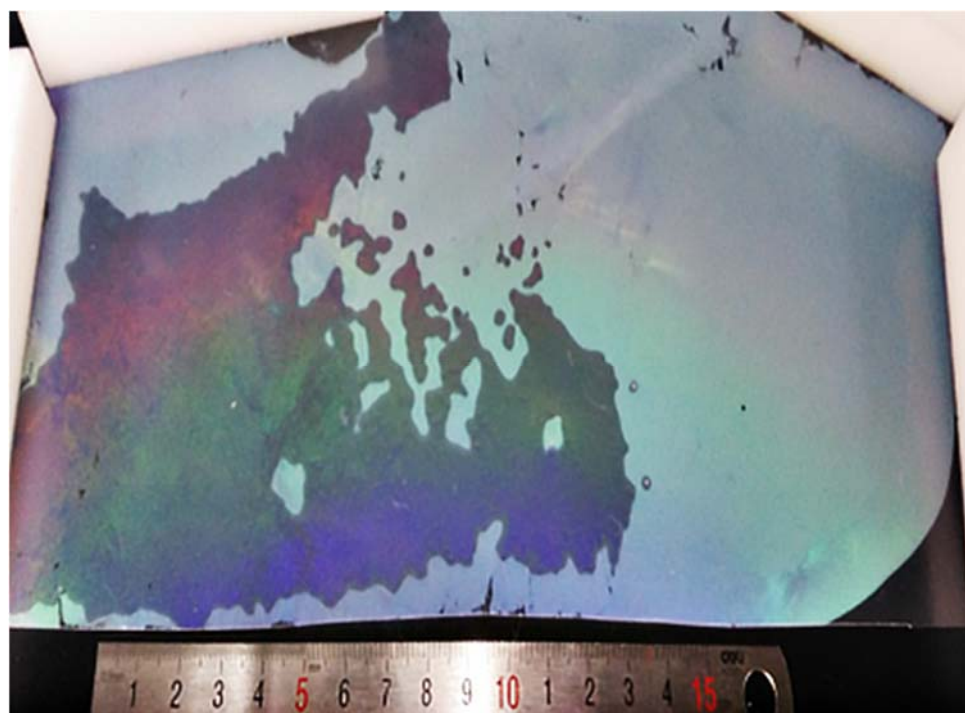


Figure S1. Ultra-fast fabrication of large-area 2D colloidal photonic crystals assembly at the air-water interface.

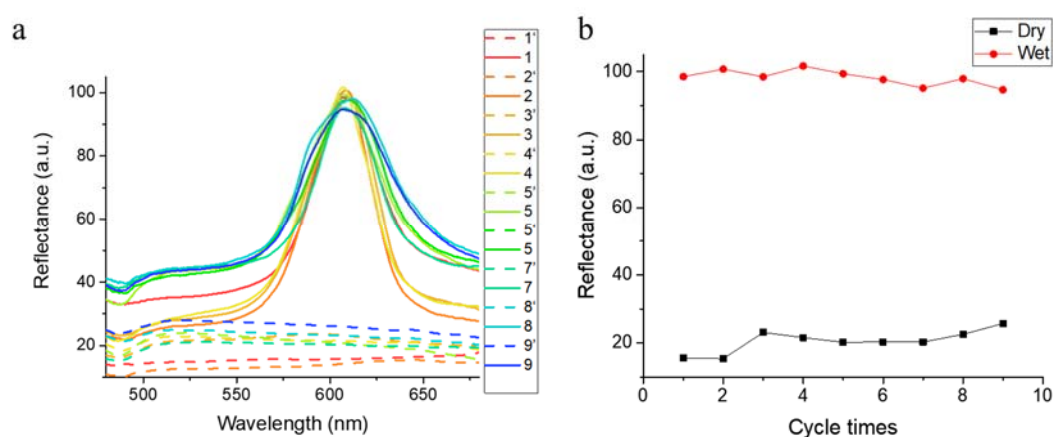


Figure S2. (a) Reflection spectra of the masked area of nine cycles of wetting and drying; (b) Reflectance versus cycle times for nine cycles of wetting and drying.

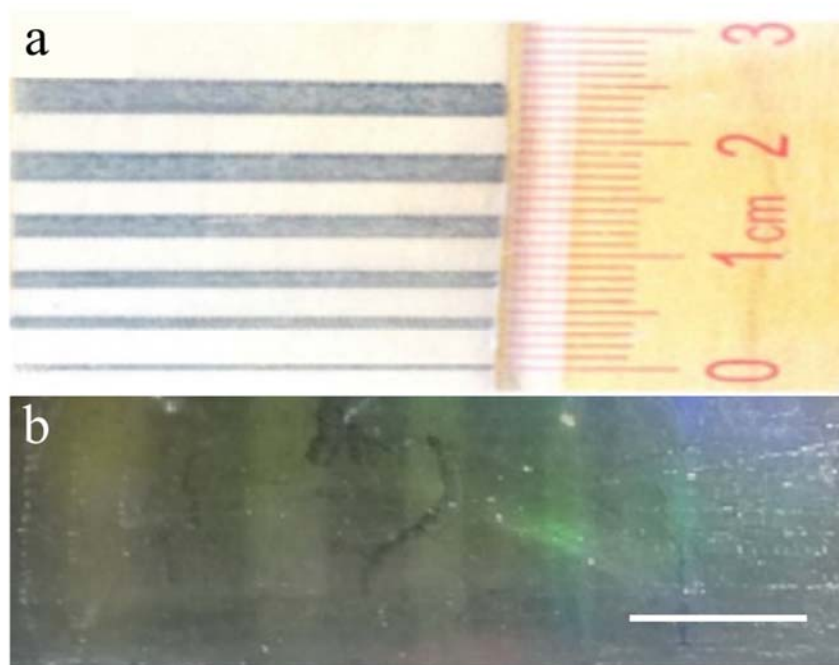


Figure S3. The optical precision vs. mask width in the masked area, Figure S4. AFM images of the surface topography in the masked area.

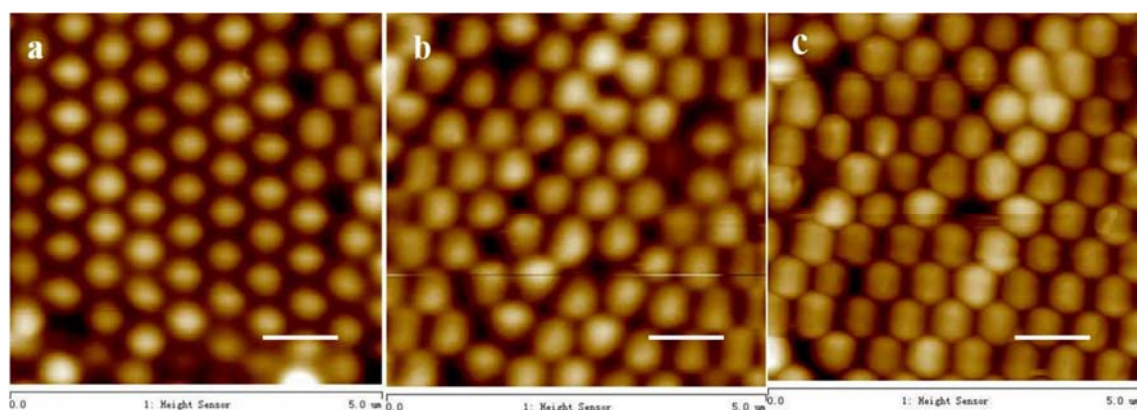


Figure S4. AFM images of the surface topography in the masked area. (a) in air; (b) immersed in water for 10 min; (c) immersed in water for 120 min (The scale bars are 1 μm).