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## **Electronic Supplementary Information**

Condensing-enriched magnetic photonic barcodes on superhydrophobic surface for ultrasensitive multiple detection

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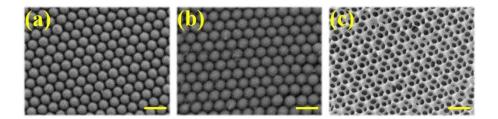


Fig. S1 (a–c) SEM images of the SCCB template surface (a), hydrogel filling the voids of SCCBs template

(b), and porous hydrogel shell surface (c). Scale baris 500 nm.

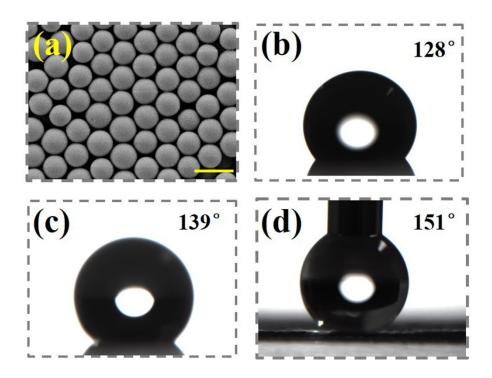


Fig. S2 (a) SEM images of the photonic crystal film. Scale bar is 15  $\mu$ m. (b-d) Measured water contact angle of the film fabricated from silica nanoparticles with a diameter of 250 nm (b), 4 $\mu$ m (c) and 10  $\mu$ m(d).

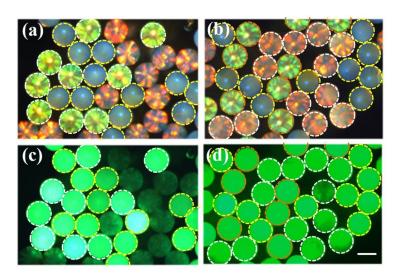


Fig. S3 (a-b)Optical microscopy images and (c-d) fluorescence images of three kinds of PEG-DA hydrogel

PhC barcodes after incubating with two and three kinds of target miRNA; Scale bar is 200  $\mu\text{m}.$ 

oligonucleotide	sequence (5' Uo 3')	modification	
		5' end	3' end
miRNA-21	UAGCUUAUCAGACUGAUGUUGA		
miRNA-205	UCCUUCAUUCCACCGGAGUCUG		
miRNA-115	ACUGAUUUCUUUUGGUGUUCAG		
probe-21	GAUAAGCUAGGGCCG	NH <sub>2</sub> C <sub>6</sub>	
probe-205	AAUGAAGGACCCCAA	NH <sub>2</sub> C <sub>6</sub>	
probe-115	GAAAUCAGUGCGCGC	NH <sub>2</sub> C <sub>6</sub>	
label-21	ACCUGGUCAACAUCA		6-FAM
label-115	AGGGCUCAGACUCCG		6-FAM
label-205	CCUGGGCUGAACACC		6-FAM

Tabel.S1 RNA sequences used in this study.

Comment [A]: To comment 1 of reviewer #1 and comment 4 of reviewer #2