

Supporting Information

Facile fabrication of paper-based analytical devices for rapid and highly selective colorimetric detection of cesium in environmental samples

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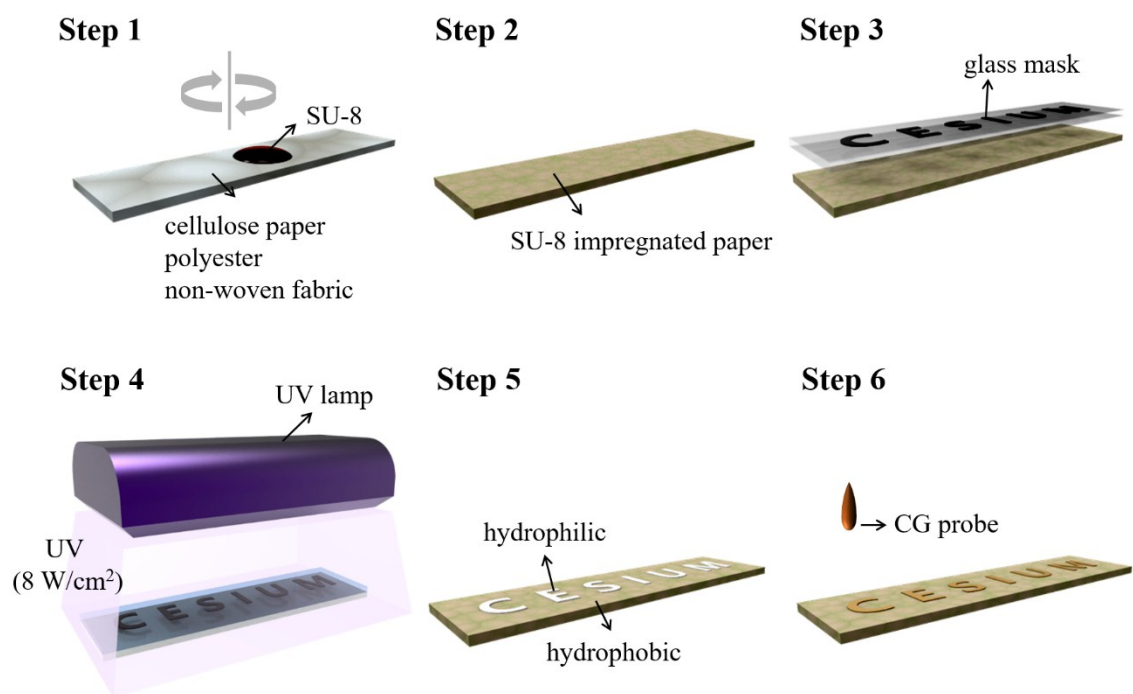


Fig. S1. Fabrication process for text-reporting colorimetric reusable sensor (CRS).







Samples	Cs (mg/L)	Image	Level		
			R	G	B
A	0		172.2 ± 4.7	178.6 ± 4.9	82.8 ± 3.4
	0.2		190.8 ± 2.6	157.6 ± 2.6	71.9 ± 1.7
	0.5		202.3 ± 8.9	130.6 ± 9.8	58.2 ± 6.5
B	0		178.8 ± 5.2	173.6 ± 4.8	82.2 ± 2.7
	0.2		185.4 ± 0.5	140.1 ± 0.4	64.4 ± 0.6
	0.5		191.1 ± 2.1	131.1 ± 2.5	60.3 ± 3.2

Fig. S2. Real sample detection for digital images and statistical properties of RGB color distributions at different Cs ion concentrations.

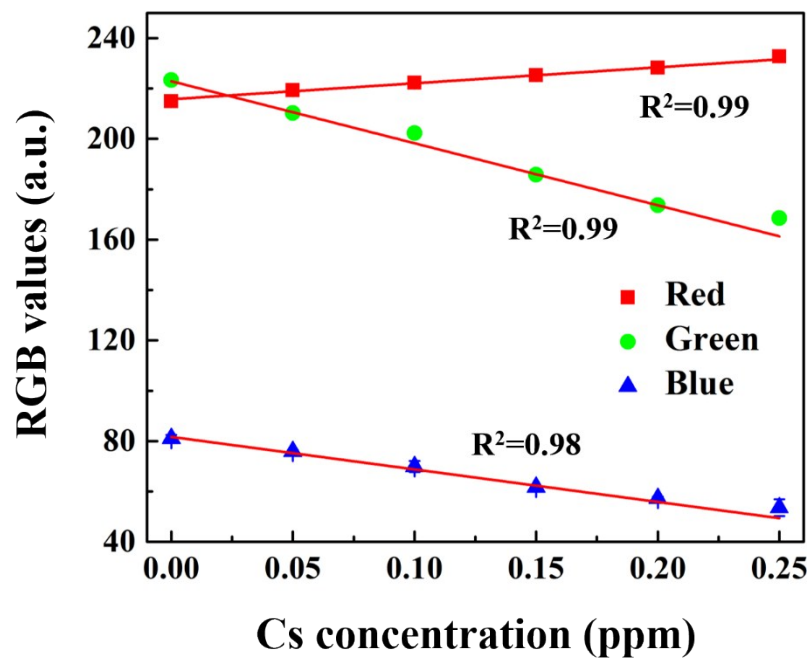


Fig. S3. Linear relationship between the RGB values and CRS in the presence of inactive cesium, covering the range from 0 to 0.25 mg/L. Each experiment was repeated five times.

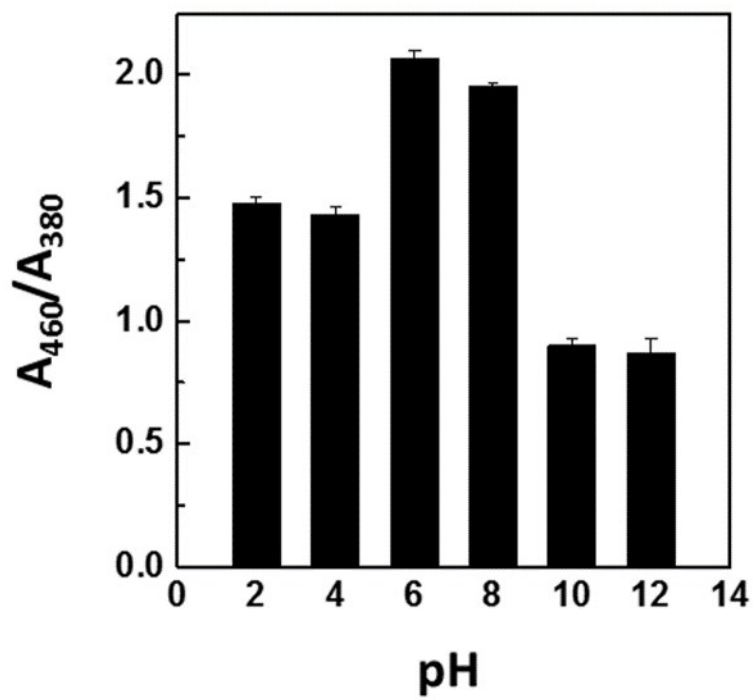


Fig. S4. Effect of pH in the presence of Cs.

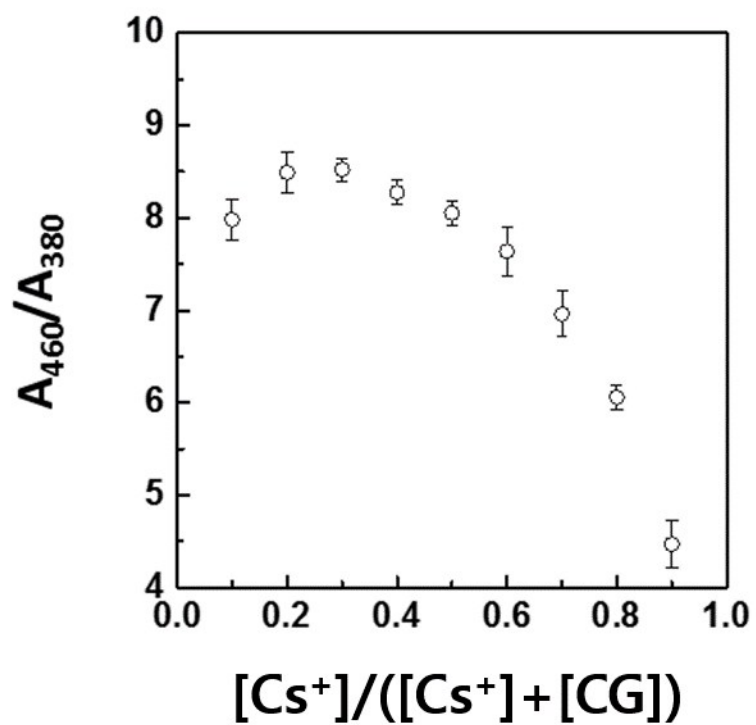


Fig. S5. Job's plot for the determination of the stoichiometry to CG chemo-indicator and Cs complex formation.