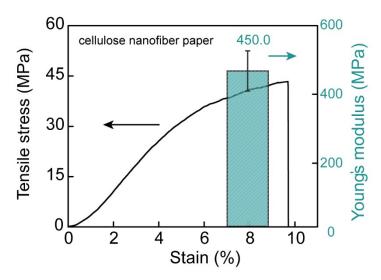
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## **Supporting information**

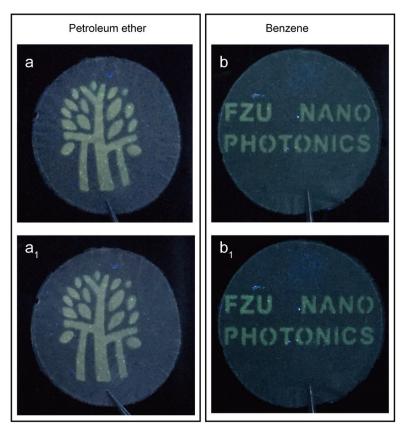
## Chemically stable fluorescent anti-counterfeiting labels achieved by UV-induced photolysis of nanocellulose

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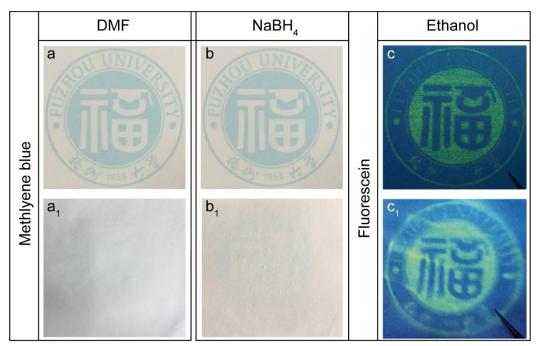
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**Fig. S1.** Tensile stress-strain curve and Young's modulus of the cellulose nanofiber paper.



**Fig. S2.** The photography of cellulose nanofiber papers immersed in different organic solvents, before (the first row), after (the second row).



**Fig. S3.** The logo of Fuzhou university printed by methylene blue before (a) and after (a1) immersed in DMF under natural light; before (b) and after (b1) dealt with NaBH<sub>4</sub> under natural light. The logo printed by fluorescein dye before (c) and after (c1) immersed in ethanol under 365 nm UV light.

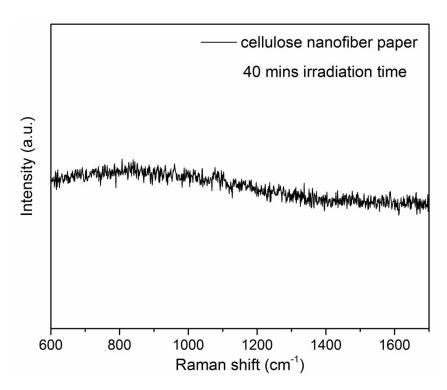


Fig. S4. The Raman spectrum of cellulose nanofiber paper after UV irradiation.