Supporting information

Recrystalization of single crystal $CsCu_2I_3$ perovskite by I_2 treating for

enhanced UV detecting abilities

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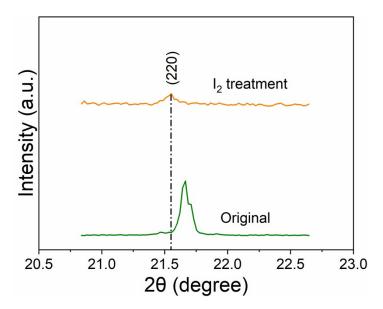


Figure S1 Enlarged (220) xrd peaks of CCI123 before and after I₂ treatment.

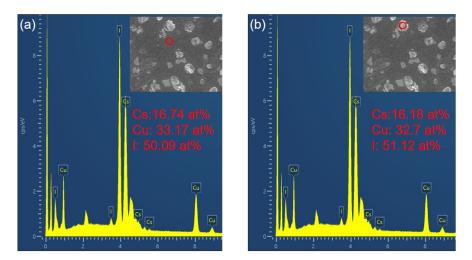
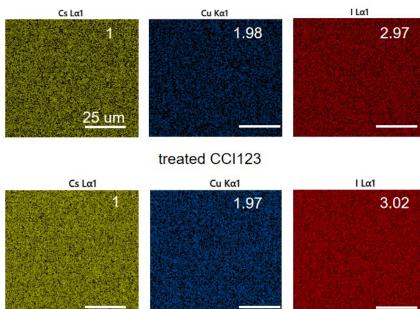


Figure S2 a) and b) point EDS analysis of the surface on and beside the nanoparticles, respectively.



original CCI123

Figure S3 EDS mapping of original and I2 treated CCI123 microwires.

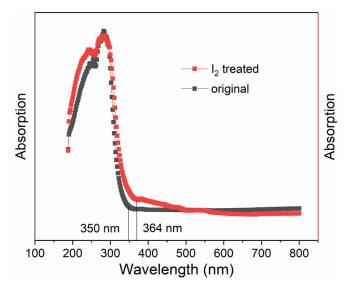


Figure S4 UV-vis spectra of CCI123 before and after I_2 treatment.

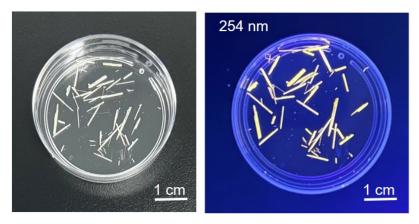


Figure S5 Optical image of CCI123 microwires under day light and 254 nm UV light

excitation.

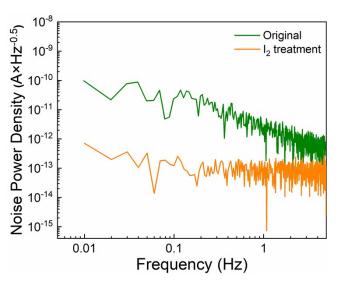


Figure S6 Noise power spectrum of original CCI123 and I₂ treated CCI123 microwires.

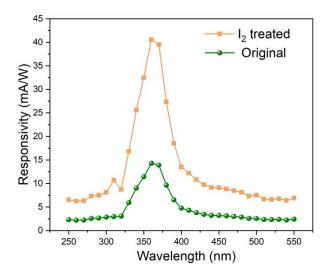


Figure S7 The responsivity spectrum of original and I_2 treated CCI123, respectively.

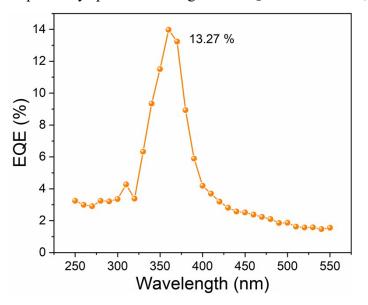


Figure S8 EQE spectrum of the I_2 treated CCI123.