

PAPER-BASED PORTABLE SENSOR AND NANO-SENSOR FOR SULFUR DIOXIDE DETECTION

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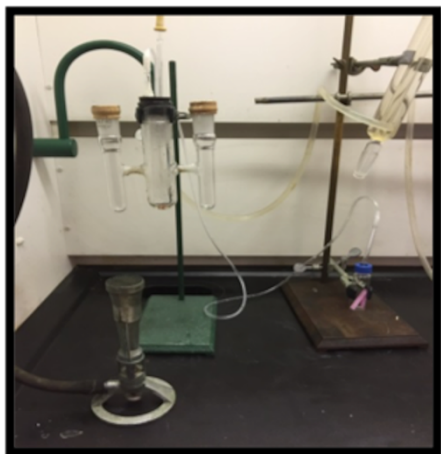


Figure S1. Apparatus set up for generation of SO₂ gas

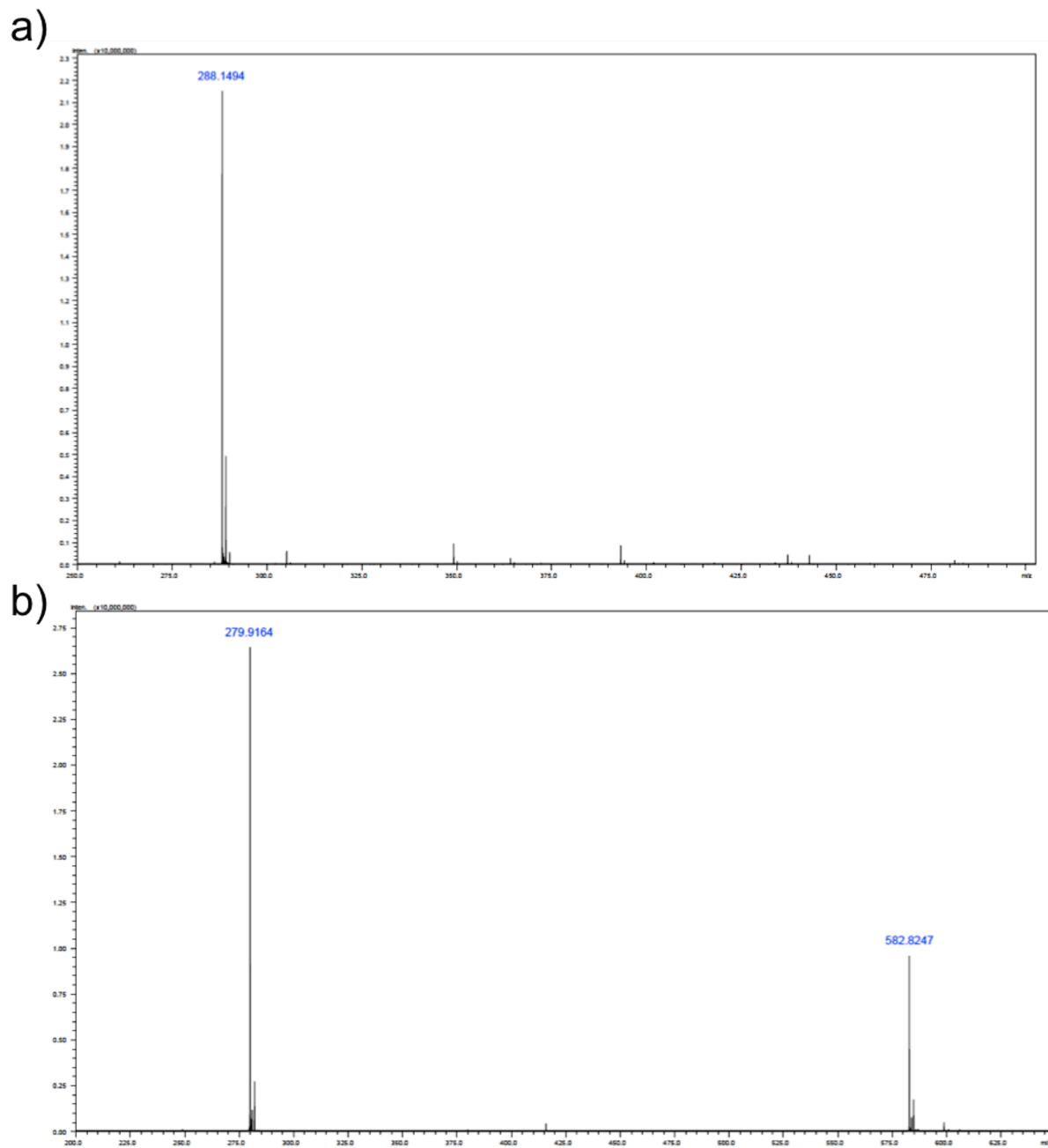


Figure S2. Mass spectrum of pR-NTF₂ in the (a) positive and (b) negative ion

Thermogravimetric analysis (TGA)

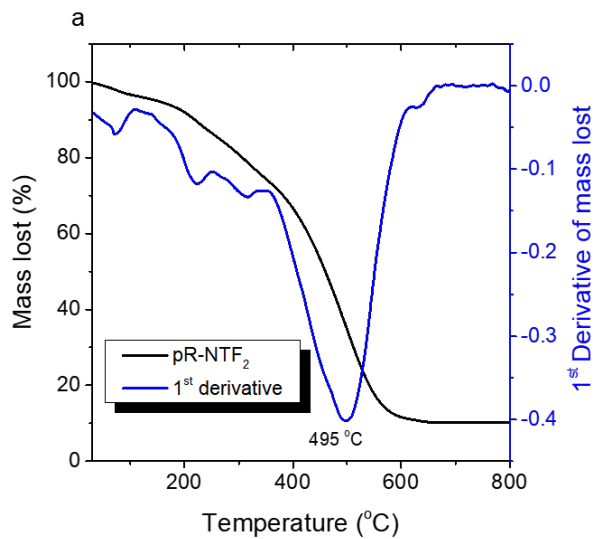


Figure S3. TGA thermal stability curves of a) pR-NTF₂.

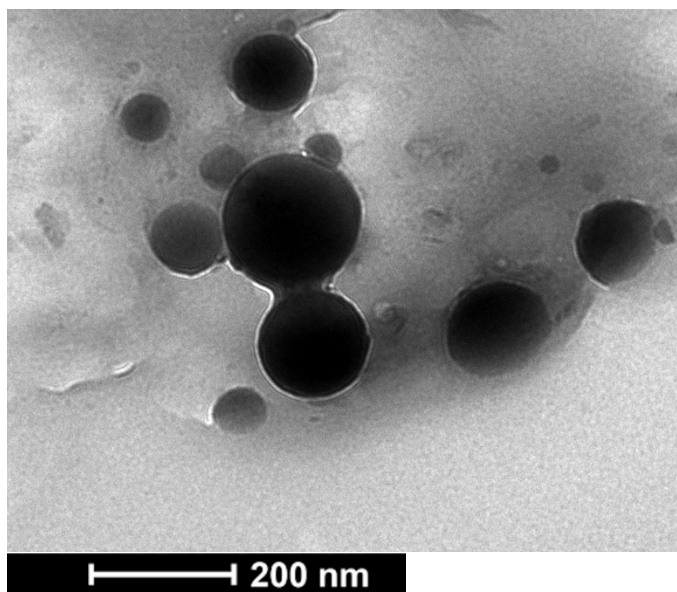


Figure S4. TEM image of pR-NTF₂ INMs

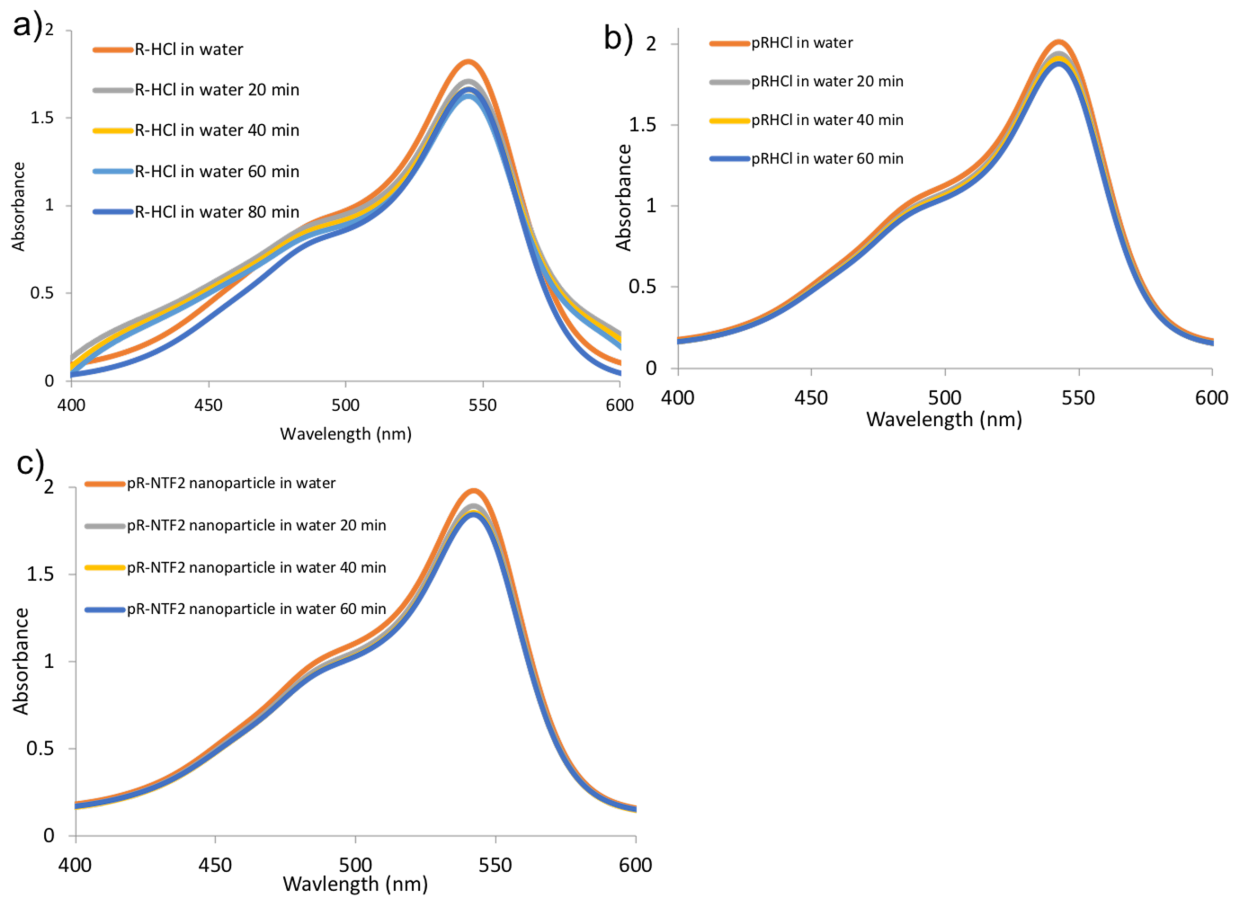


Figure S5—Stability for (a) R-HCl, (b) pR-HCl, (c) pR-NTF₂ nanoparticle in water.

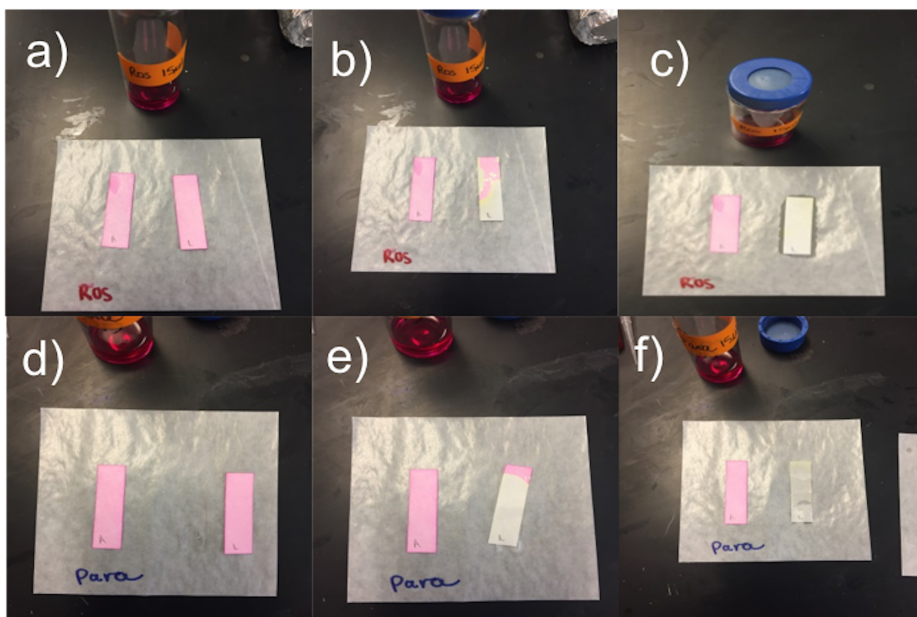


Figure S6. Exposure of parent compounds' sensor (in EtOH) to SO_2 . (a) 10 seconds, (b) 20 seconds, and (c) 30 seconds of R-HCl; (d) 10 seconds, (e) 20 seconds, and (f) 30 seconds of pR-HCl.

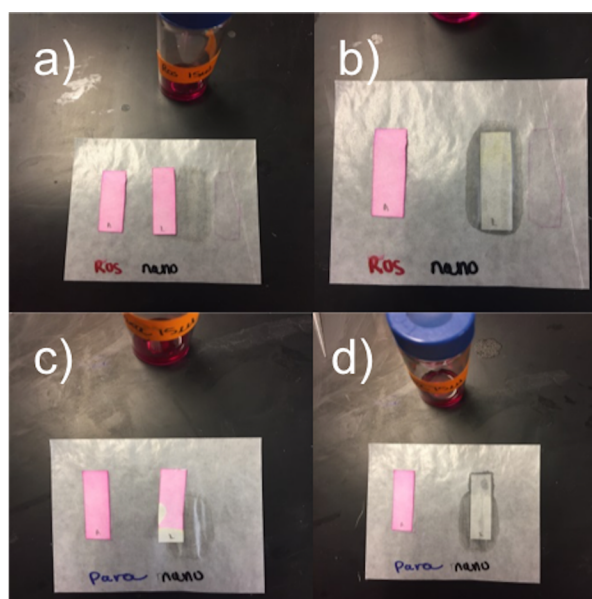


Figure S7. Exposure of parent compounds' sensor (in water) to SO_2 . (a) 10 seconds, and (b) 20 seconds of R-HCl (c) 10 seconds, and (d) 20 seconds of pR-HCl