

Supporting Information for

**Simultaneous Imaging of Intracellular pH and O<sub>2</sub> using Functionalized  
Semiconducting Polymer Dots**

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**Fig. S1.** Dye leaching behaviors in different buffers/solvent and photostability of the three materials in nanosensor.

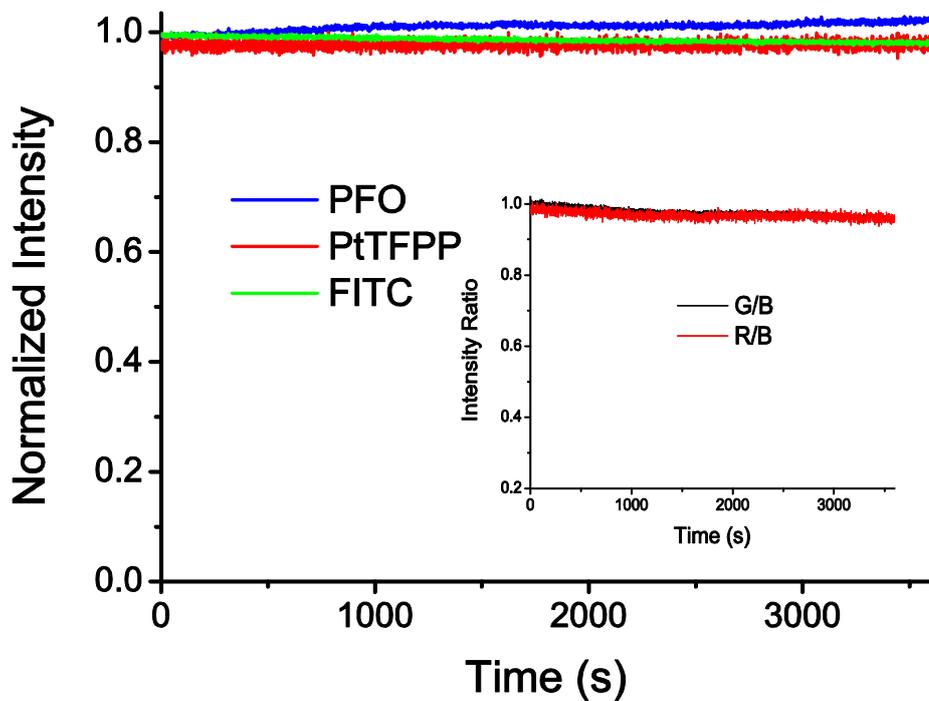
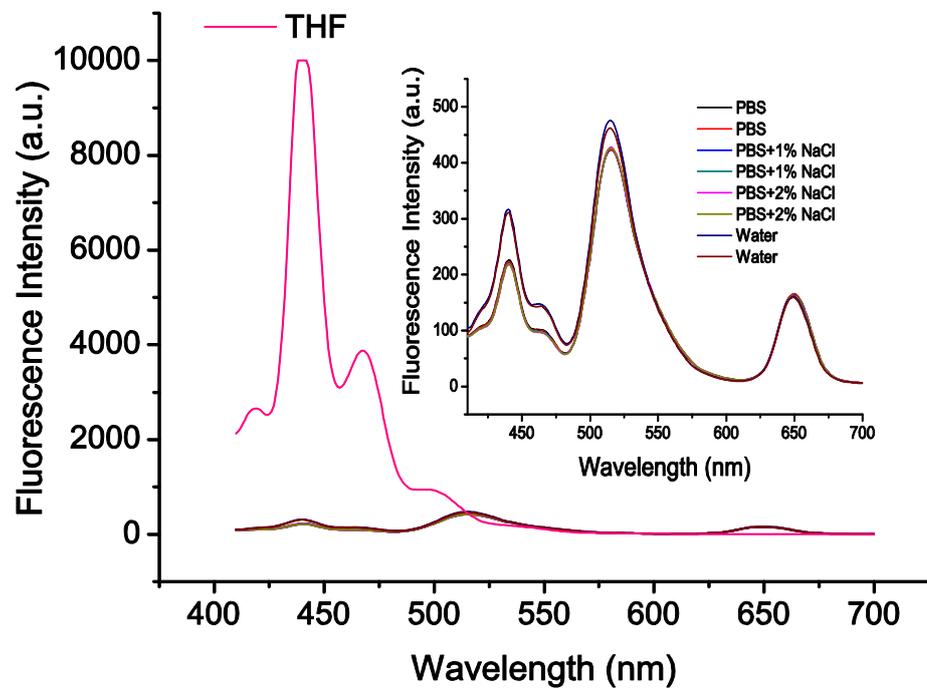


Fig. S2. Colloid stability of the Pdots. The fluorescence intensity was measured under 800nm excitation.

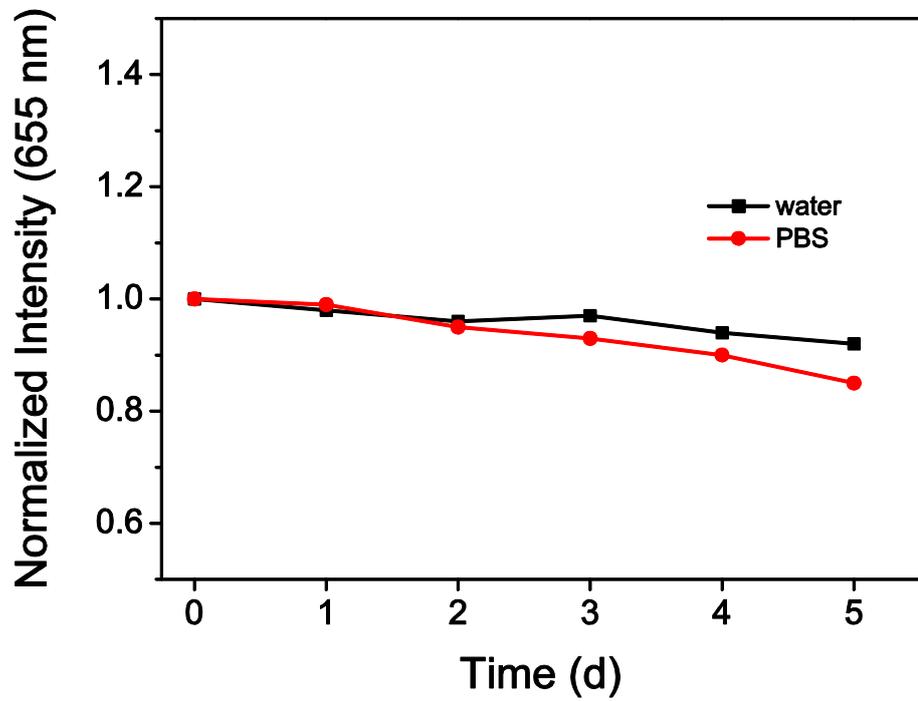


Fig. S3. Fluorescence emission of the Pdots under 800 nm excitation.

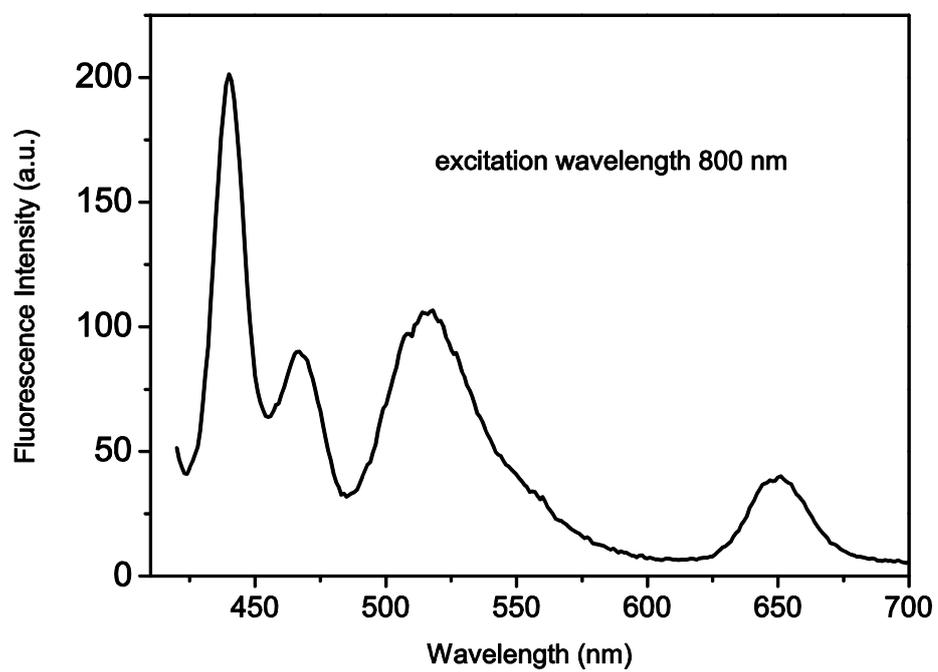
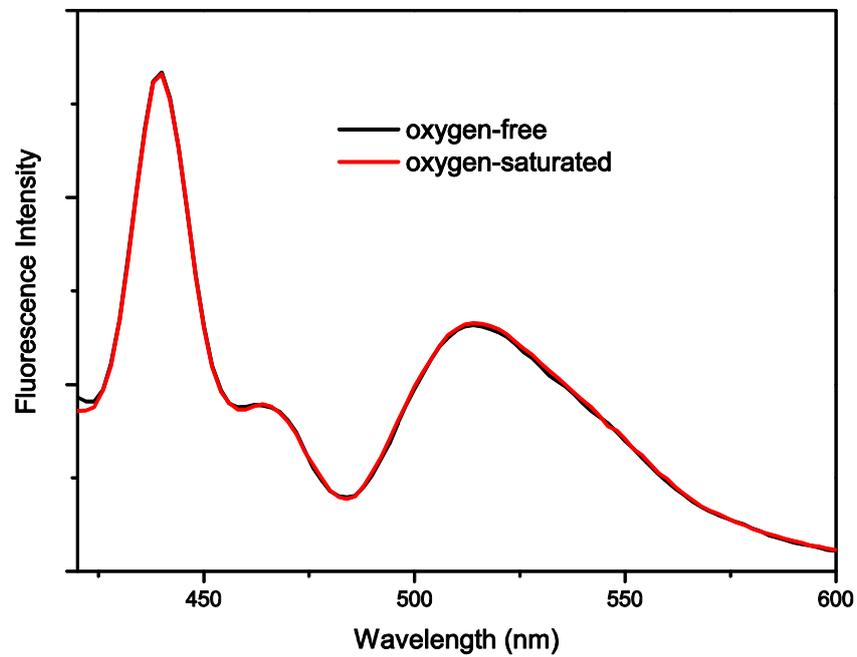


Fig. S4. The fluorescence spectra of PFO-FITC dots under different oxygen concentration (a) and PFO-PtTFPP dots under different pH conditions(b).

**a**



**b**

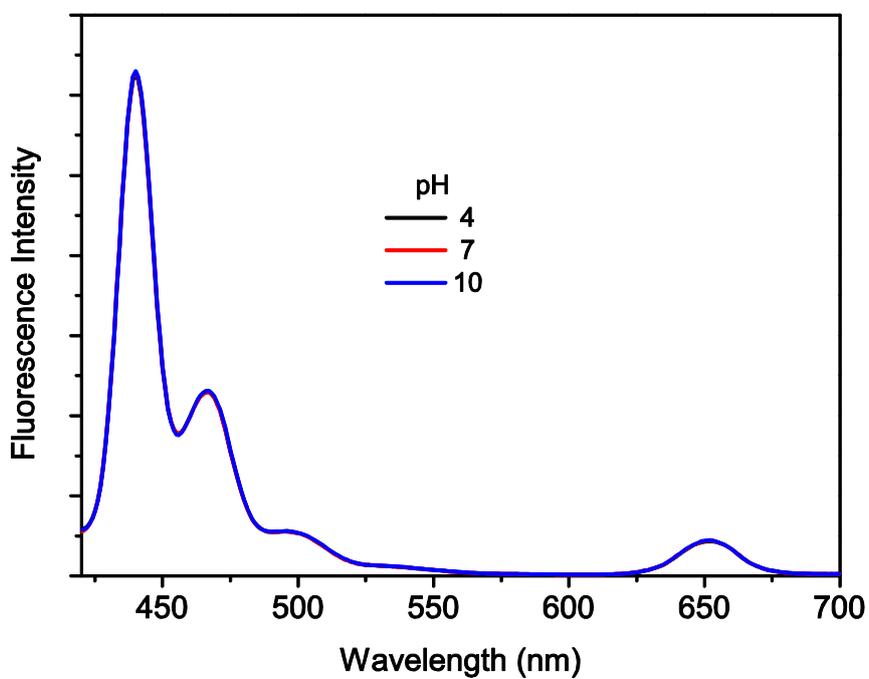


Fig. S8. Photostability assessments by measuring the fluorescence intensity decrease of the Pdots in different illumination conditions for 3 hr. (a) Pdots (9 mg/L) was illuminated in 10, 20 and 30 mW LED (365 nm); (b) Pdots (9 mg/L) was illuminated using 300, 365 and 465 nm LED (10 mW); (c) different concentration of Pdots: 9, 4.5, 2.75 mg/L in 365 nm LED (10 mW).

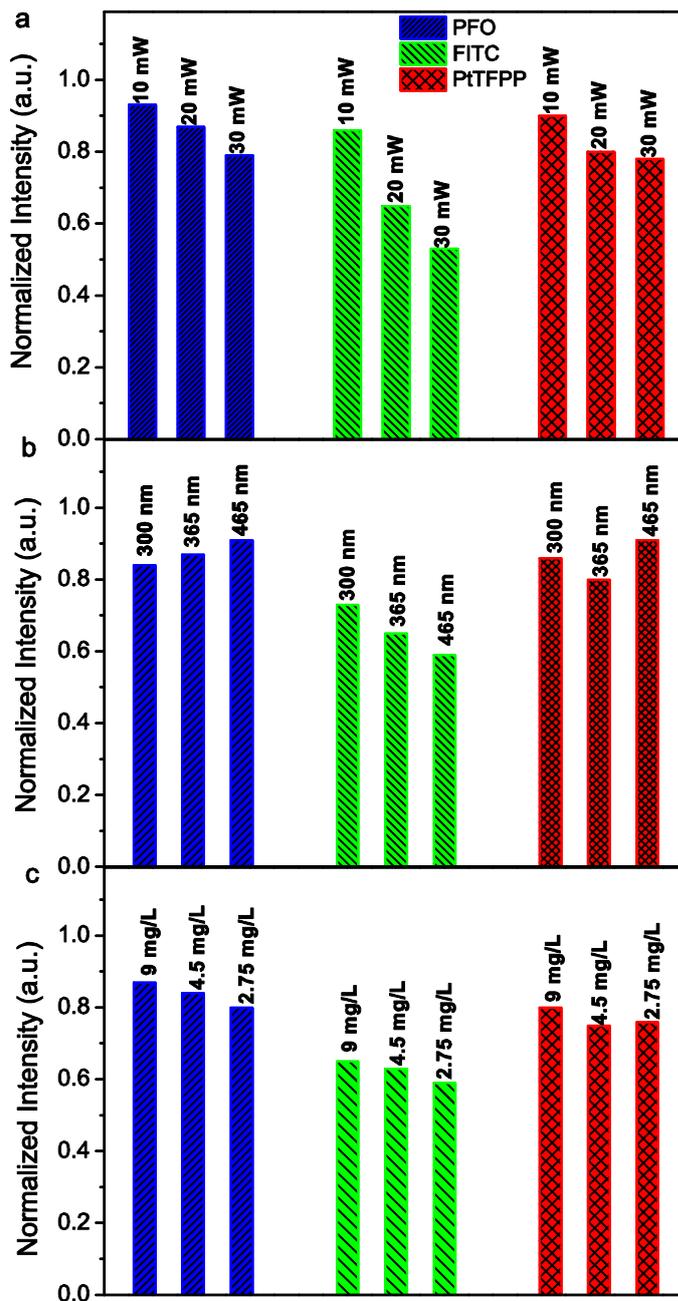


Fig. S6. The spectra response of the RGB chip.

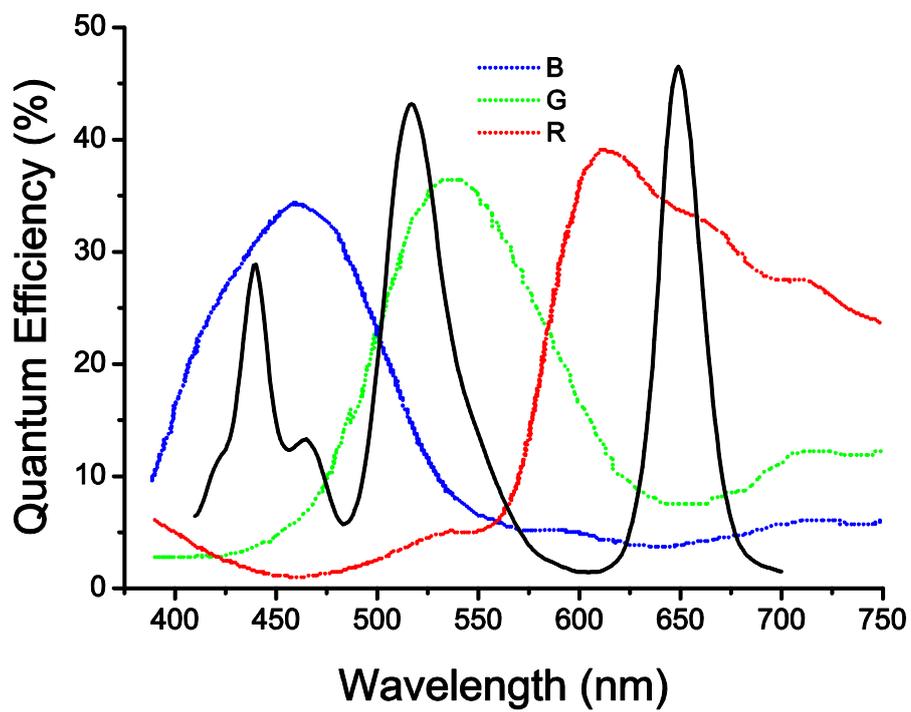


Fig. S7. The emission spectra of the dual blending Pdots with the doping ratio of PtTFPP and FITC ranging from (0% to 60%), the excitation wavelength is 385 nm.

