Electronic Supplementary Information to

Nitrogen- and sulfur-doped graphene quantum dots for chemiluminescence

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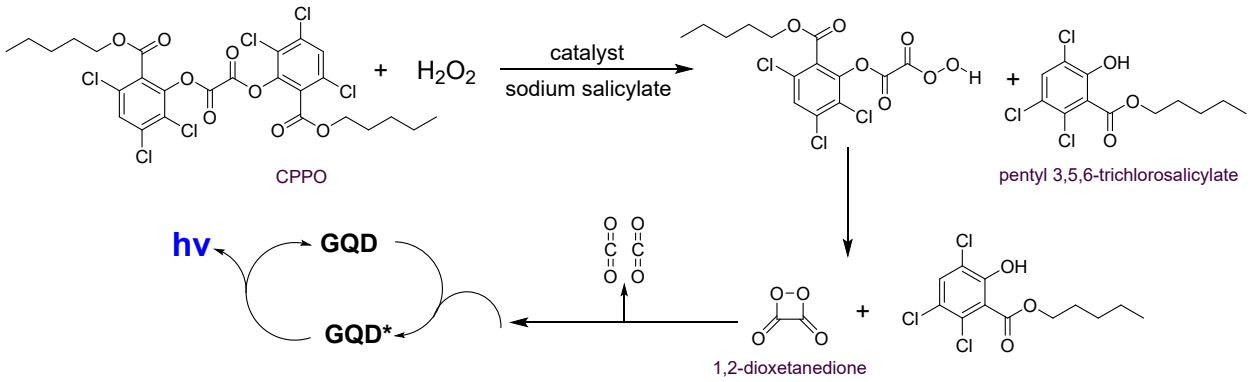

Fig. S1. Reaction mechanisms of the peroxyoxalate-based CL reaction with CPPO and H_2O_2 reagents.

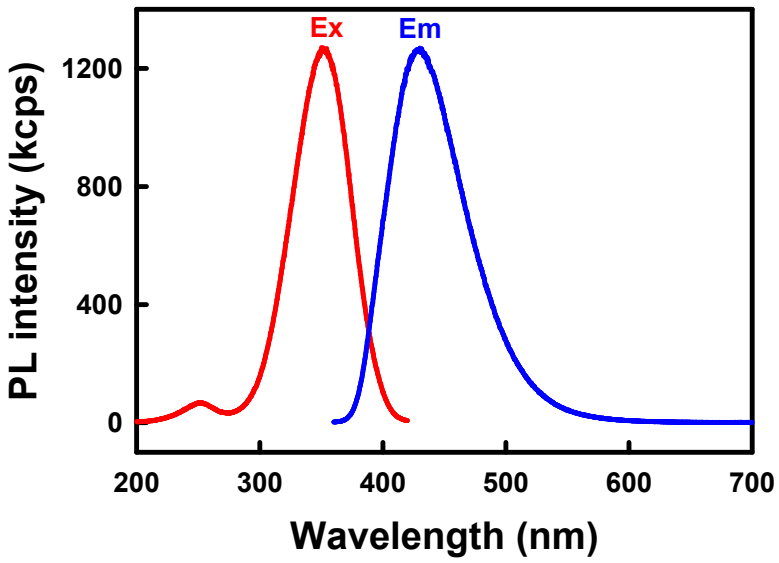

Fig. S2. PL excitation (red) and emission (blue) spectra of 0.02 mg mL^{-1} NS-GQDs in aqueous solution, λ_{em} = 430 nm for excitation detection and λ_{ex}= 350 nm for emission excitation.

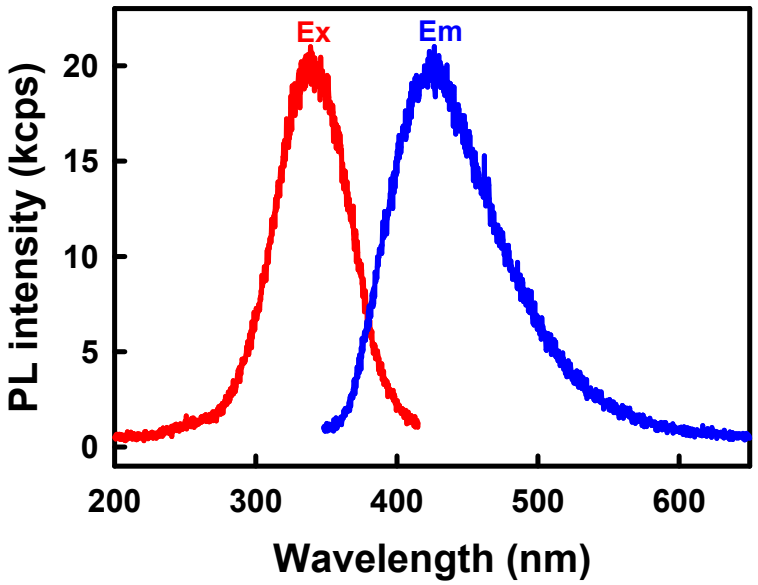

Fig. S3. PL excitation (red) and emission (blue) spectra of 0.02 mg mL^{-1} N-GQDs aqueous solution, λ_{em} = 425 nm for excitation detection and λ_{ex}= 338 nm for emission excitation.

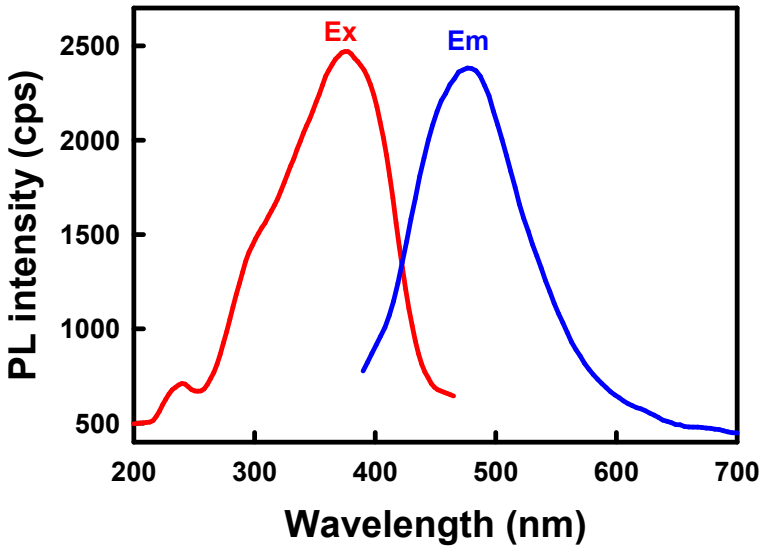

Fig. S4. PL excitation (red) and emission (blue) spectra of 0.02 mg mL^{-1} GQDs in aqueous solution, λ_{em} = 478 nm for excitation detection and λ_{ex}= 375 nm for emission excitation.

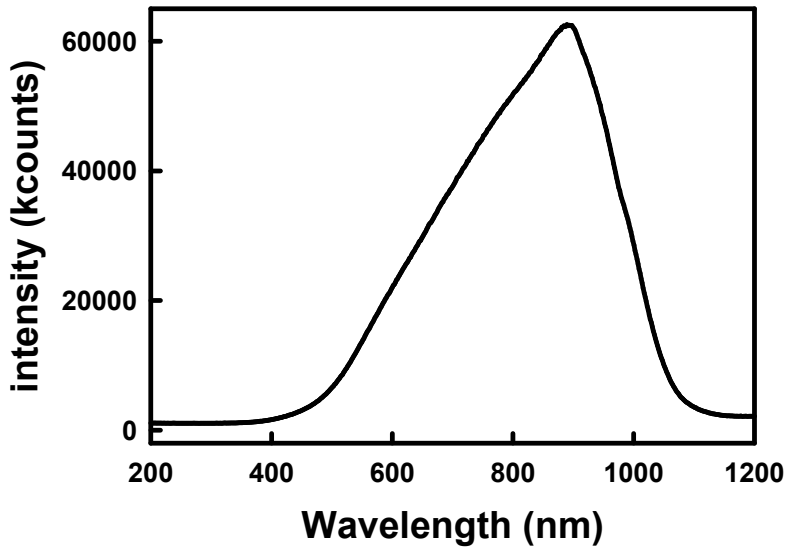

Fig. S5. Accumulated spectrum of the calibration lamp for 5 s, acquired on the spectrograph and CCD camera set.

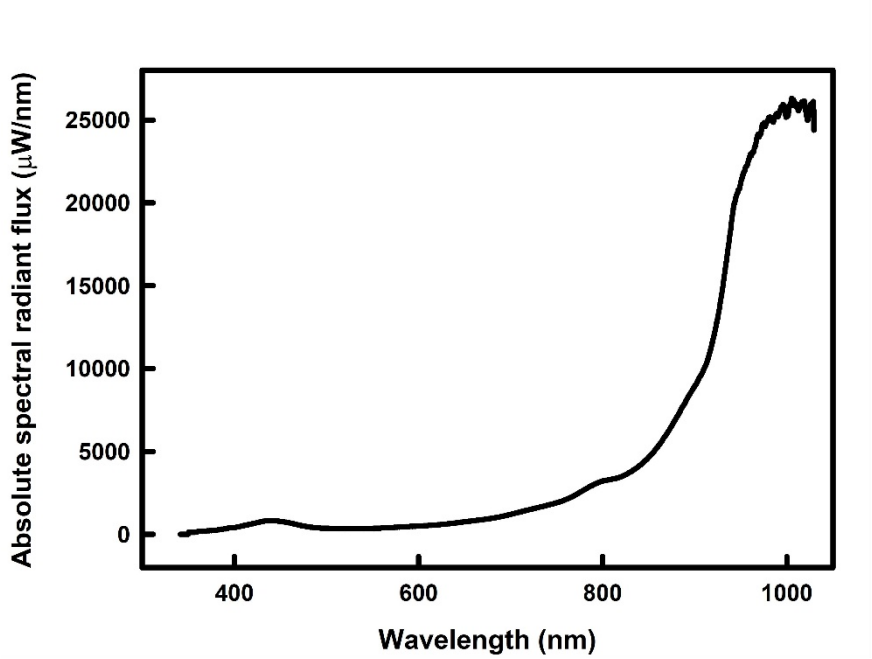

Fig. S6. Accumulated absolute irradiance flux spectrum of the calibration lamp for 5 s, taken on the calibrated Ocean Insight USB2000+ spectrometer.

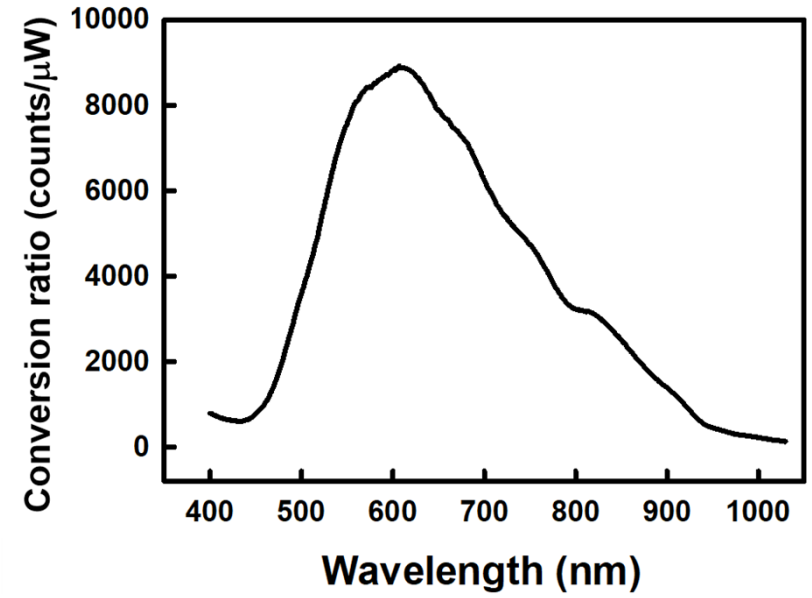

Fig. S7. The conversion curve of the counts per μW as a function of the wavelength, by taking the ratio of the standard lamp spectrum measured with the spectrograph and CCD camera set (Fig. S5) to the lamp irradiance spectrum taken on the calibrated Ocean Insight USB2000+ spectrometer.