

Electronic Supplementary Information

Graphitic carbon nitride nanosheets with tunable optical properties and their superoxide dismutase mimetic ability

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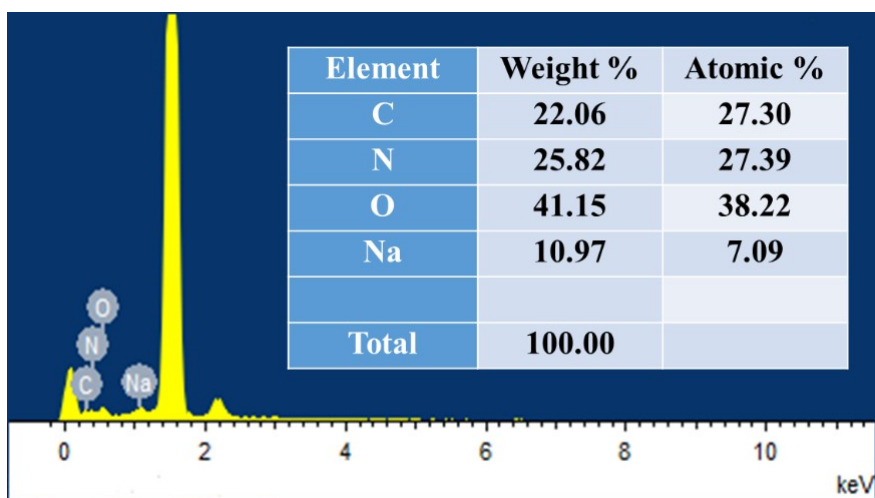


Fig. S1 EDS of the g-CNNSs.

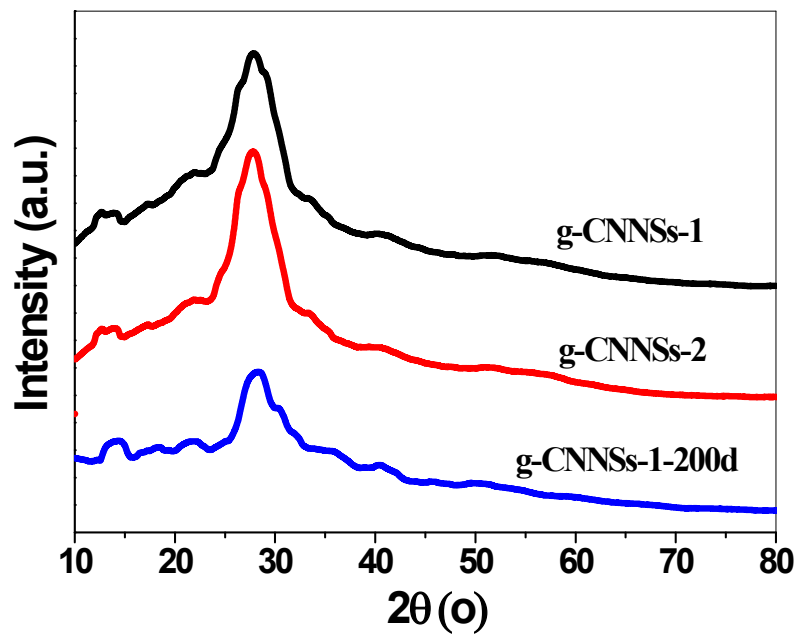


Fig. S2 XRD pattern of the g-CNNSs.

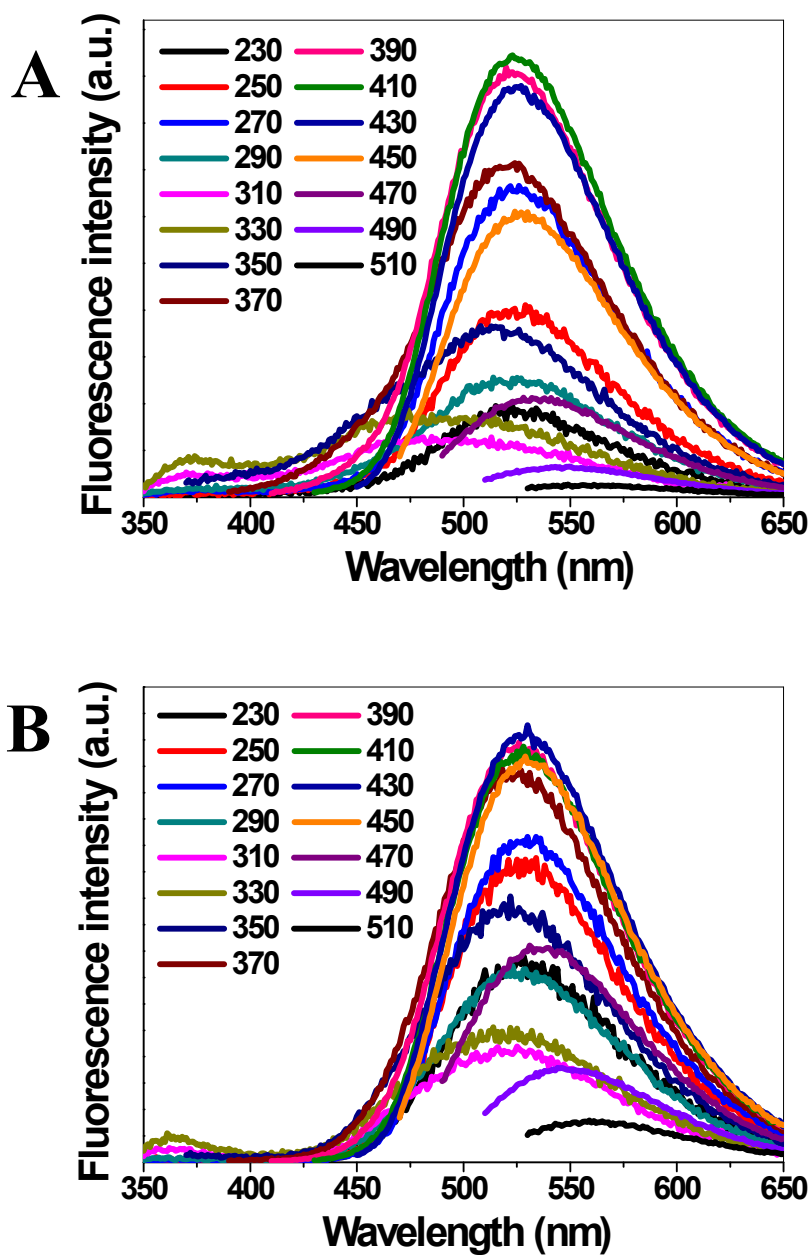


Fig. S3 Emission spectra of the g-CNNs-1 (A) and g-CNNs-2 (B) recorded progressively longer excitation wavelength of 20 nm increments.

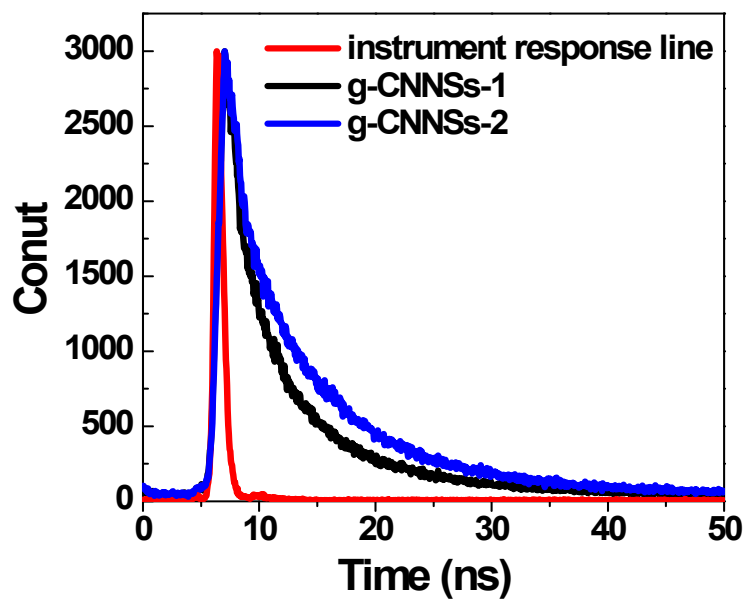


Fig. S4 PL life time of g-CNNs dispersed aqueous solution.

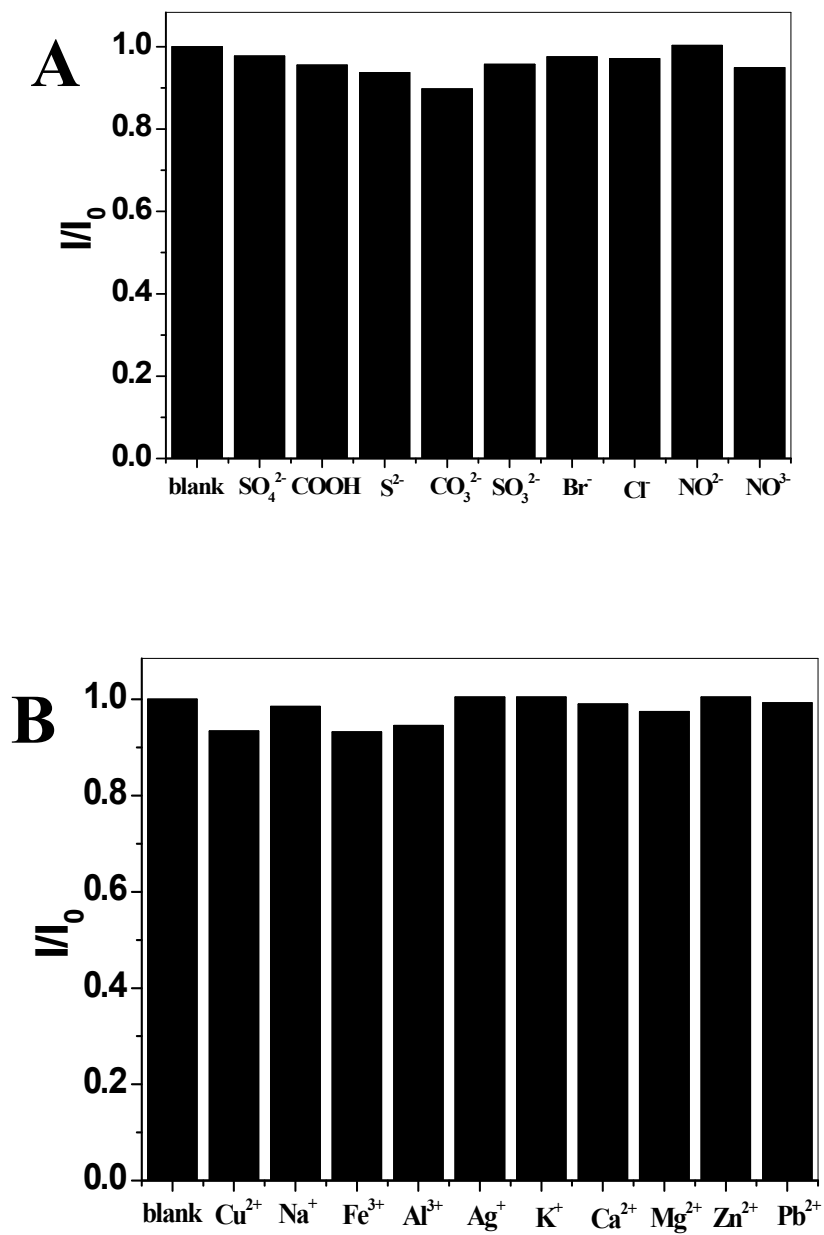


Fig. S5 (A) Fluorescence changes of g-CNNs with different anions. The concentration of all anions is 500 μM . (B) Fluorescence changes of g-CNNs with different metal ions. The concentrations of all metal ions are 50 μM . I_0 and I correspond to the fluorescence intensity of g-CNNs in the absence and presence of anions or metal ions.

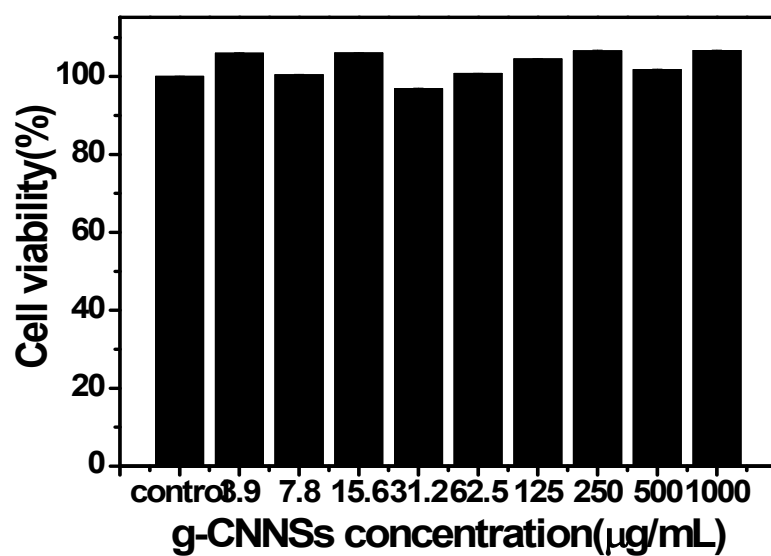


Fig. S6 The viability of Hep G2 cells with different concentrations of g-CNNs.

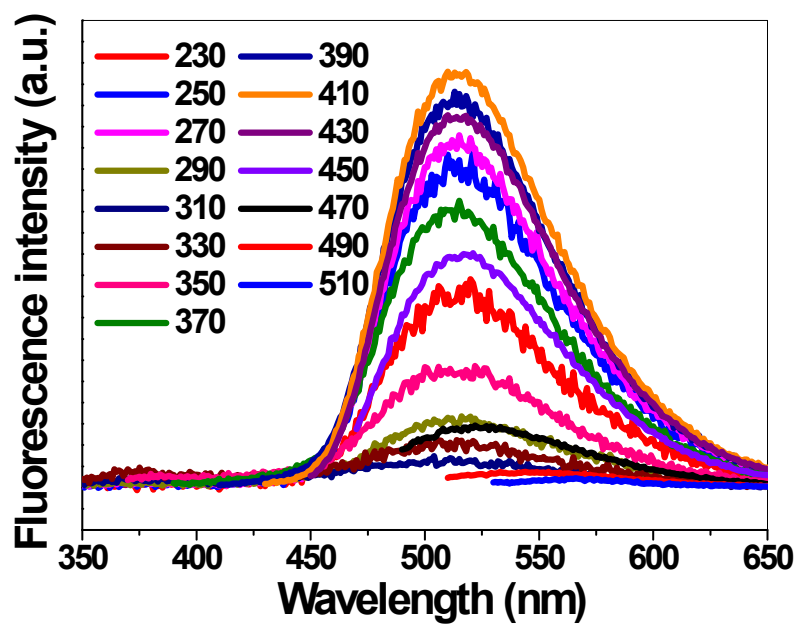


Fig. S7 Emission spectra of the g-CNNSs-2 in ethanol recorded progressively longer excitation wavelength of 20 nm increments.

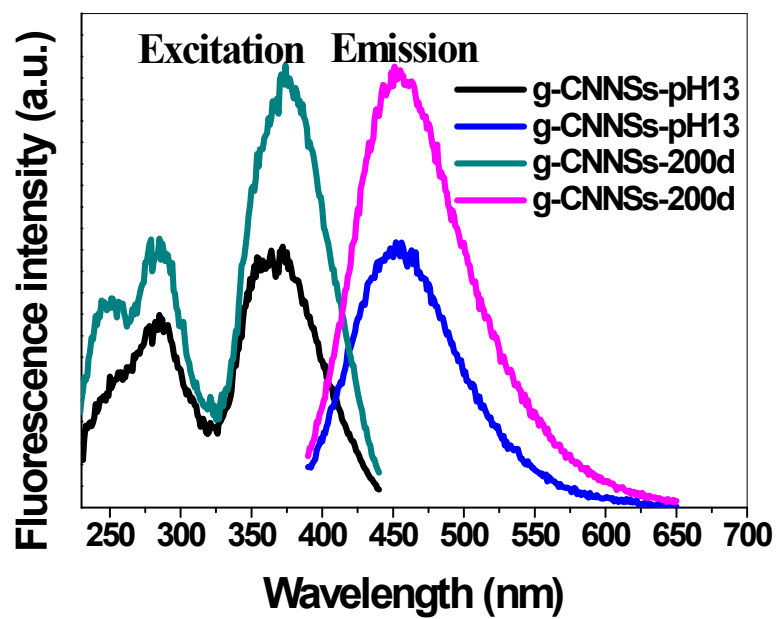


Fig. S8 Excitation and emission spectra of the g-CNNSs-1 in alkaline solution (pH=13) and storage (200d).

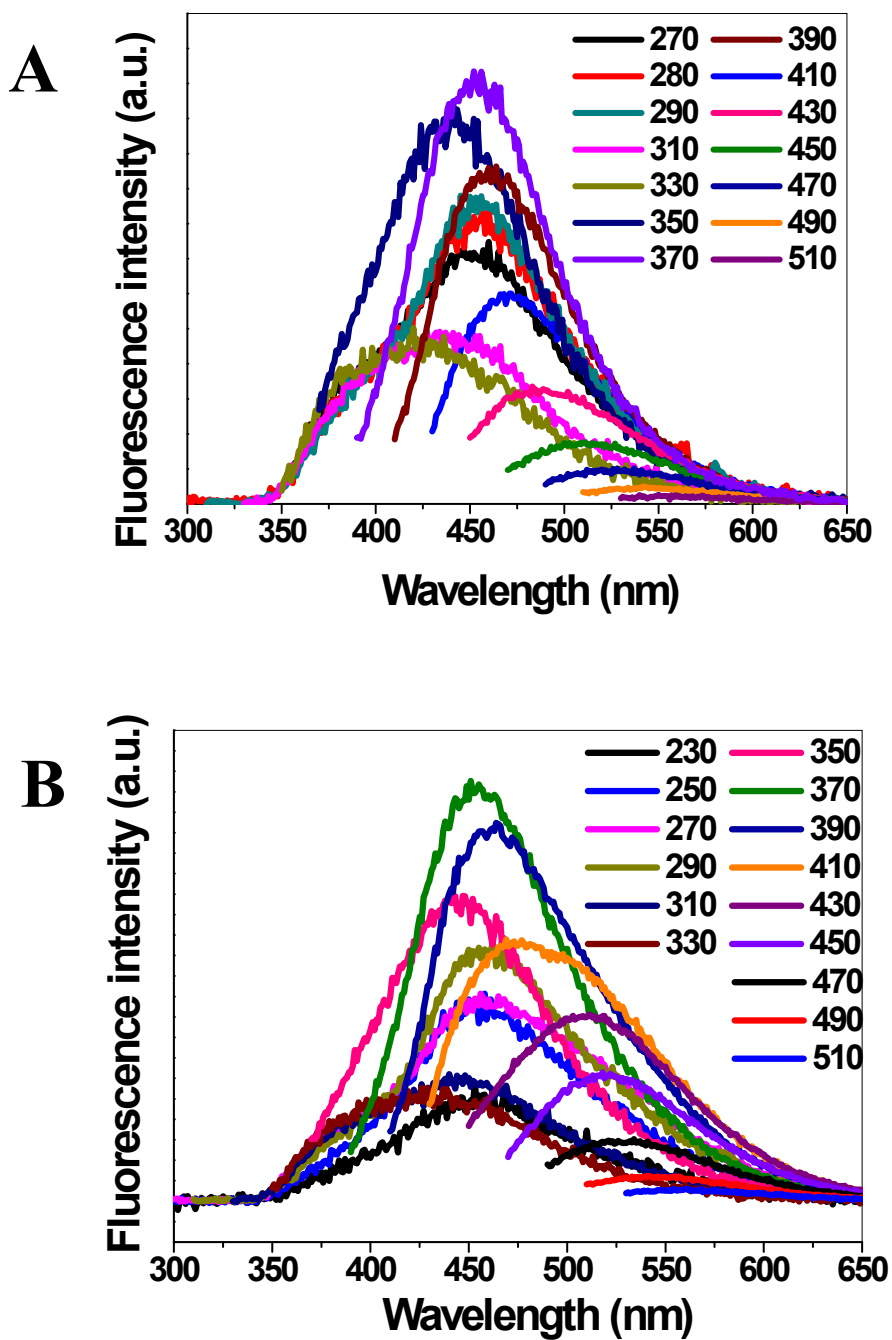


Fig. S9 Emission spectra of the g-CNNSs-1 in alkaline solution (A, pH=13) and storage (B, 200d) recorded progressively longer excitation wavelength of 20 nm increments.

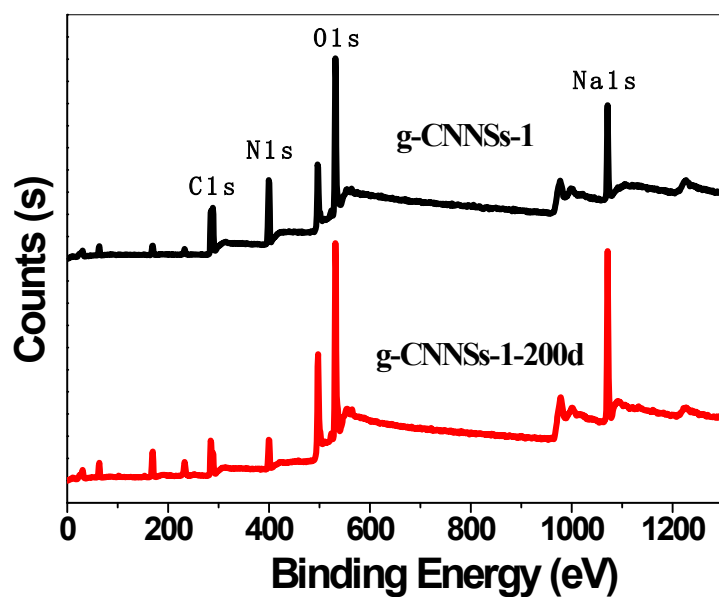


Fig. S10 XPS analysis of g-CNNSs-1 and g-CNNSs-1-200d in full spectra.

Table S1 XPS analysis of different atomic content in materials.

| Materials | Atomic % | | |
|--------------|----------|-------|-------|
| | C1s | N1s | O1s |
| g-CNNSs-1 | 42.14 | 26.26 | 31.6 |
| g-CNNSs-200d | 33.59 | 14.12 | 52.29 |