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石墨烯量子点修饰的 BiOI/PAN 柔性纤维的制备及其增强的光催化活性

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Fabrication of Graphene Quantum Dots Modified BiOI/PAN Flexible Fiber with Enhanced Photocatalytic Activity

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To elucidate the function of PAN fiber support, the GQDs decorated BiOI powder (GQD-BiOI) was also prepared by the similar method as GQD-BiOI/PAN, except that the BiOI/PAN fibers were replaced by BiOI powder. The activity of GQD-BiOI was compared with other samples in Fig. S1. Obviously, the performance of GQD-BiOI is better than BiOI, however the activity improvement is lower than that of GQD-BiOI/PAN.

The cycling tests of GQD-BiOI/PAN were also carried out to evaluate the stability of it. The result demonstrated that the activity of GQD-BiOI/PAN almost the same after five cycles, see Fig. S2.

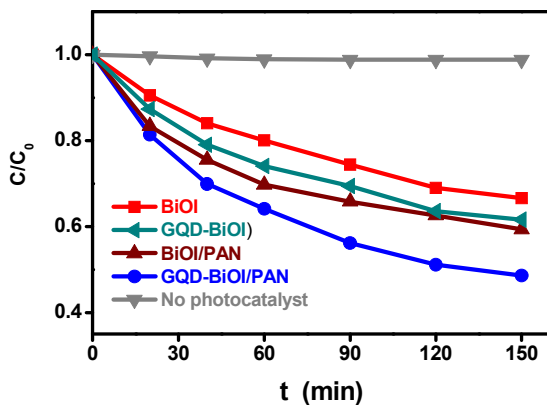


Fig. S1 Degradation curves for phenol on BiOI, GQD-BiOI, BiOI/PAN and GQD-BiOI/PAN under LED lamp irradiation ($\lambda > 400$ nm).

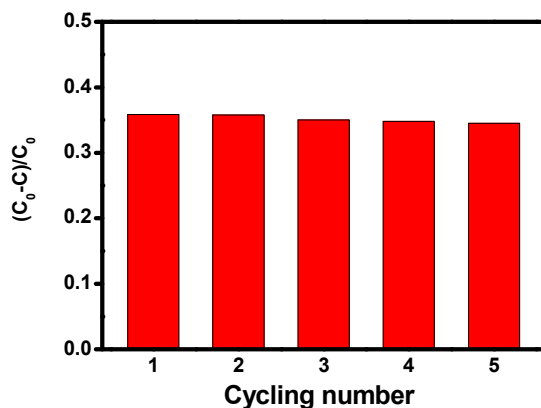


Fig. S2 The cycling test result of GQD-BiOI/PAN with irradiation time of 1 h.