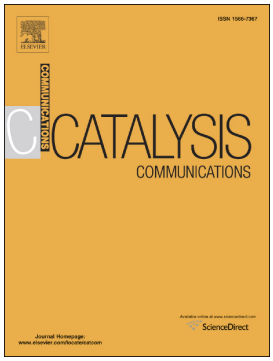

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Simple synthesis of oxygen functional layered carbon nitride with near-infrared light photocatalytic activity

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ABSTRACT: Oxygen functional carbon nitride (NOCN) was synthesized via a moderate ultrasonic-assisted method. With highly ordered layered structure and poriferous morphology simultaneously**,** NOCN was proven to be a new near-infrared light responsive photocatalyst. Electronic structure was tuned for the intervention of oxygen, which further changed its light response characters. Different from the previous reported NIR-driven photocatalyst, metal elements were not involved in this material.