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Construction of hybrid Z-scheme graphitic C_3N_4/reduced TiO_2 microsphere with visible-light-driven photocatalytic activity

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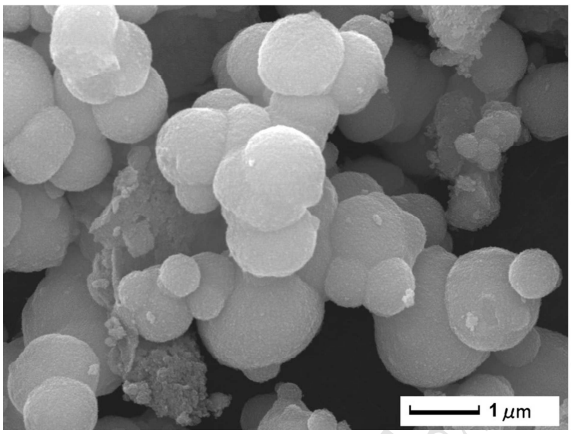

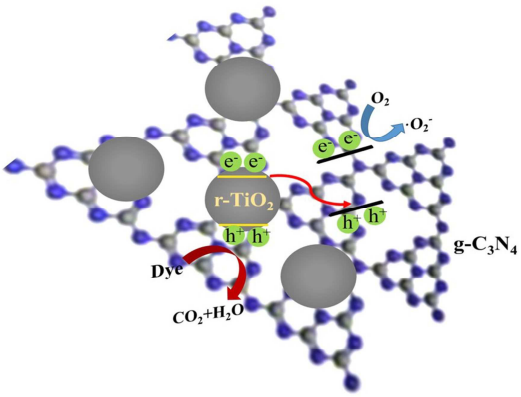

The g-C_3N_4/r-TiO_2 Z-scheme composite was successfully prepared by a facile hydrothermal method. Materials with unique structure have been attracted wide attention and could be applied for removing environmental pollutants. When it was used to degrade the rhodamine B under visible light irradiation, it shown excellent photocatalytic activity and stability, which could be attributed to the synergic effect of g-C_3N_4 and r-TiO_2 catalyst, large specific surface area and the stable oxygen vacancy in composite.

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