

마이크로파를 이용한 환원된 산화그래핀과
구형 산화아연 복합체의 제조 및
가시광 광촉매에의 응용

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We present a synthesis of highly active hybrid photocatalysts composed of reduced graphene oxide (RGO) and zinc oxide sphere (ZnO SP) by the facile and fast microwave assisted solvothermal reaction, where the reduction of graphene oxide (GO) and growth of ZnO SP occur in one pot. The fabricated RGO-ZnO SP nanocomposite exhibited 10-fold higher photocatalytic activity than those of pure ZnO and RGO alone under the visible light illumination, which can be attributed to the increased absorption of visible light, the decreased band gap, and effective charge transfer among methylene blue (MB), RGO and ZnO.