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LiangLiang Zhang, Aolan Wang, Nan Zhu, BaoChang Sun, Yan Liang, Wei Wu

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**Materials and product engineering**

# Synthesis of butterfly-like $BiVO_4$/RGO nanocomposites and their photocatalytic activities☆

LiangLiang Zhang,[1,2] Aolan Wang,[1] Nan Zhu,[1] BaoChang Sun,[1,2,*] Yan Liang,[3] Wei Wu[1,2]

[1] *State Key Laboratory of Organic-Inorganic Composites, Beijing University of Chemical Technology, Beijing 100029, China*

[2] *Research Center of the Ministry of Education for High Gravity Engineering and Technology, Beijing University of Chemical Technology, Beijing 100029, China*

[3] *Beijing Urban Drainage Monitoring Center Co., Ltd., Beijing 100061, China*

**Corresponding Author**

E-mail: sunbc@mail.buct.edu.cn. (B.C. Sun).

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**Abstract**

A simple and high efficient method was proposed for the synthesis of uniform three dimensional (3D) $BiVO_4$/reduced graphene oxide (RGO) nanocomposite photocatalyst by adopting the microwave assistant and using $Bi(NO_3)_3{\cdot}5H_2O$, graphene oxide (GO) and $NH_4VO_3$ as precursor. The as-obtained composites were well characterized with the aid of various techniques to study the morphology, structure, composition, optimal and electrical property. In the as-obtained composites,