

Supplementary information

Synthesis of Sulfonic Acid-Functionalized g-C₃N₄/BiOI Bifunctional Heterojunction for Enhanced Photocatalytic Removal of Tartrazine and PEC Oxygen Evolution Reaction

Sridharan Balu ^{1,2,†}, Harikrishnan Venkatesvaran ^{1,†}, Chien-Chih Wang ¹, Joon Ching Juan ³ and Thomas Chung-Kuang Yang ^{1,2,*}

¹ Department of Chemical Engineering and Biotechnology, National Taipei University of Technology, No. 1, Section 3, Zhongxiao East Road, Da'an District, Taipei City 10608, Taiwan; sridharanbsc.12@gmail.com (S.B.); harikrishnan.osv@gmail.com (H.V.); bobobo456123@gmail.com (C.-C.W.)

² Precision Analysis and Materials Research Center, National Taipei University of Technology, No. 46, Section 3, Zhongxiao E. Road, Da'an District, Taipei City 106083, Taiwan

³ Nanotechnology and Catalysis Research Center (NANOCAT), Institute for Advanced Studies, University of Malaya, Kuala Lumpur 50603, Malaysia; jajuan@um.edu.my

* Correspondence: ckyang@mail.ntut.edu.tw; Tel.: +886-02-2771-2171 (ext. 2533)

† These authors contributed equally to this work.

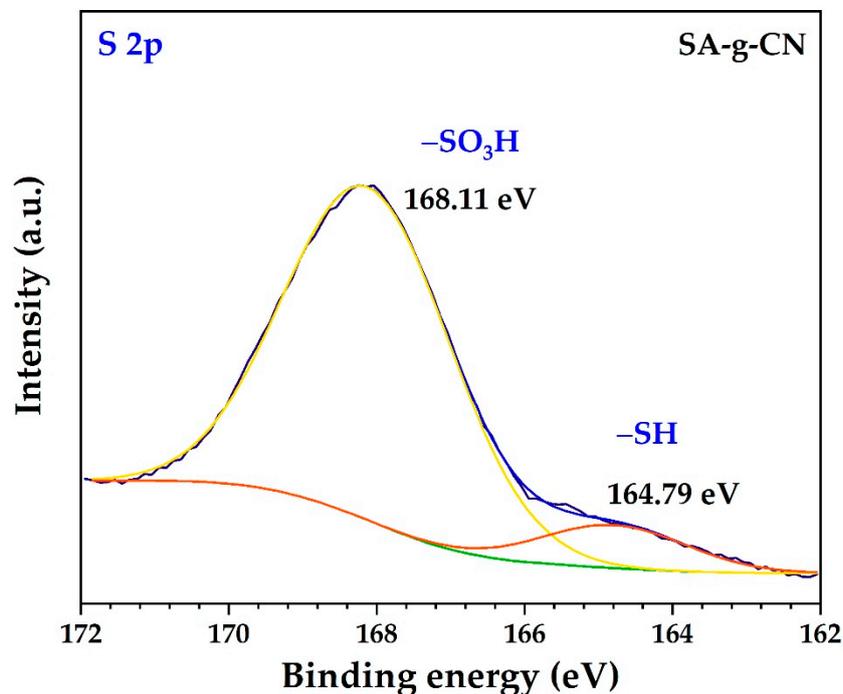


Figure S1. XPS core-level spectra of S 2p of SA-g-CN.

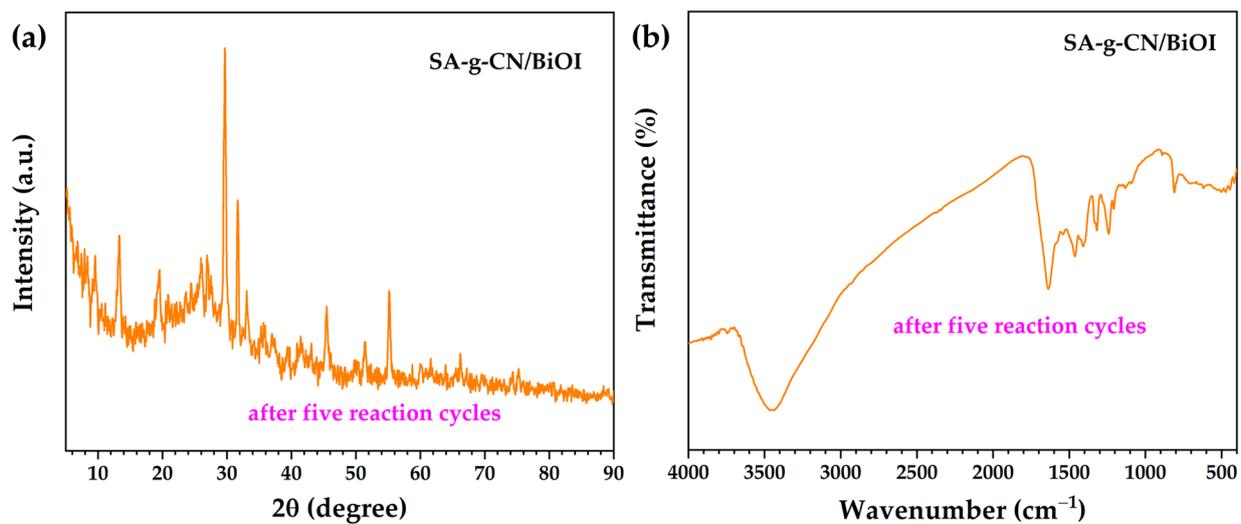


Figure S2. XRD diffraction pattern (a) and FTIR spectrum of recycled SA-g-CN/BiOI heterojunction nanocomposite after five successive reaction cycles (b).

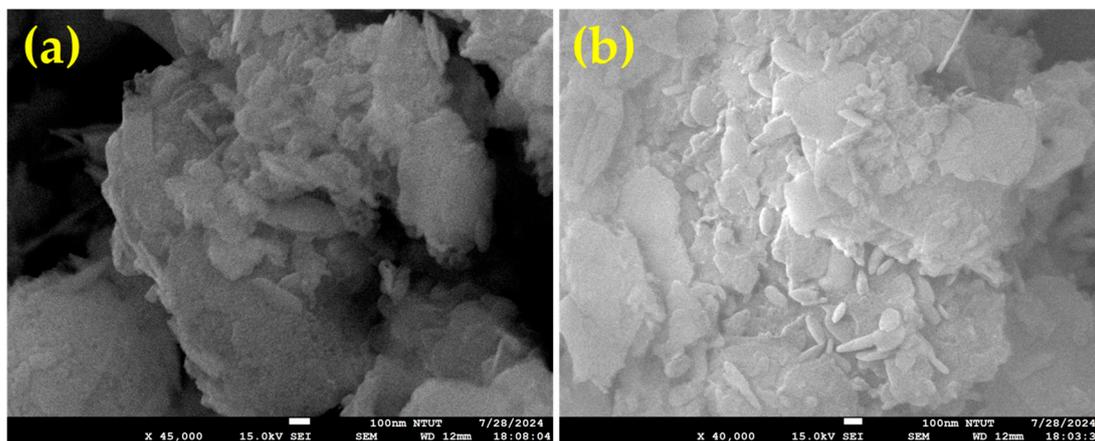


Figure S3. FESEM images of the recycled SA-g-CN/BiOI composite (a,b).