

Supporting Information

In-situ construction of CNT/CuS hybrids and their promising photodegradation application for removing organic dyes

Yanping Wang ¹, Fuchuan Jiang ¹, Jiafu Chen ², Xiaofeng Sun ³, Tao Xian ³ and Hua Yang ^{1,*}

¹ School of Science, Lanzhou University of Technology, Lanzhou 730050, China; wangyanpinglut@163.com (Y.W.); jiangfc_sir88@163.com (F.J.)

² Ministry of Education Key Laboratory of Testing Technology for Manufacturing Process, Southwest University of Science and Technology, Mianyang 621010, China; flyingbanana@yeah.net

³ College of Physics and Electronic Information Engineering, Qinghai Normal University, Xining 810008, China; sunxf027@126.com (X.S.); 2016105@qhnu.edu.cn (T.X.)

* Correspondence: hyang@lut.cn; Tel.: +86-931-297-378-3

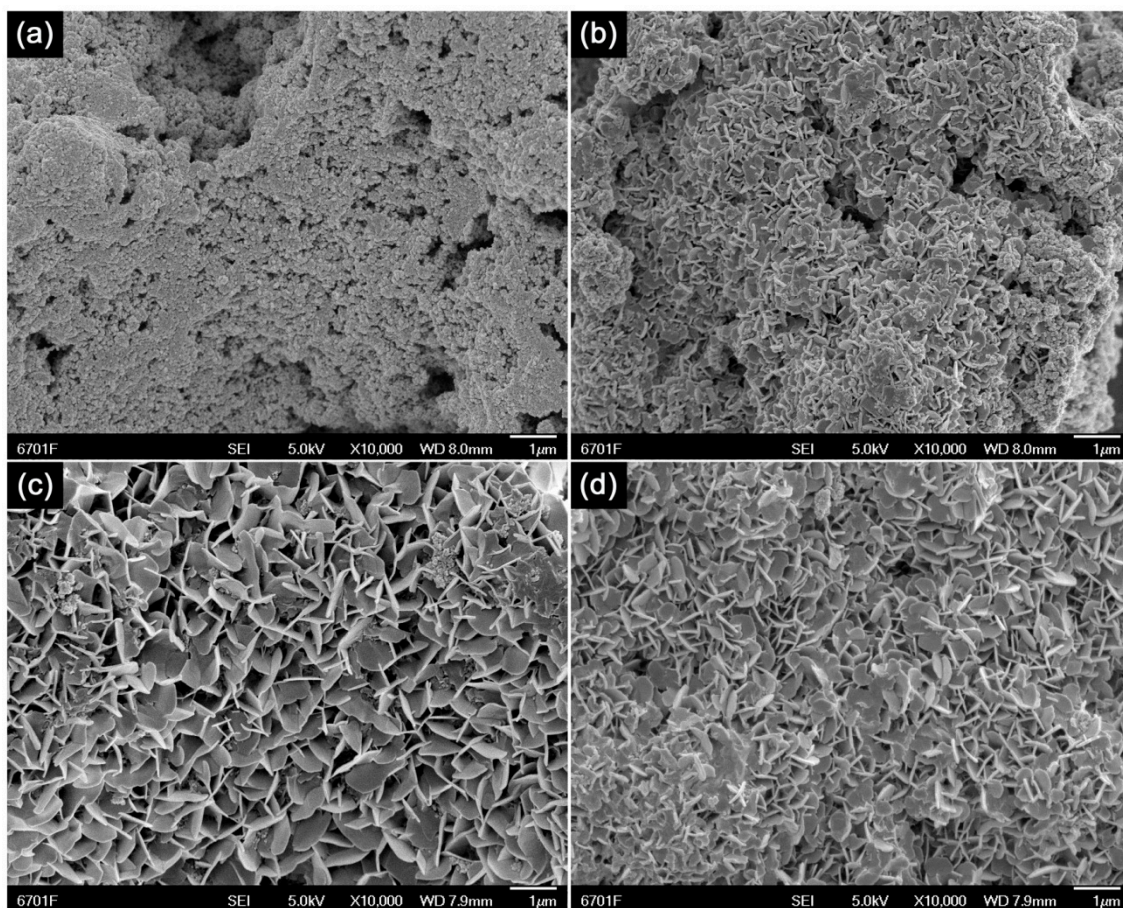


Figure S1. SEM images of CuS samples synthesized at 20 °C with different reaction times. (a) 0.5h-20°C, (b) 2h-20°C, (c) 10h-20°C, and (d) 12h-20°C.

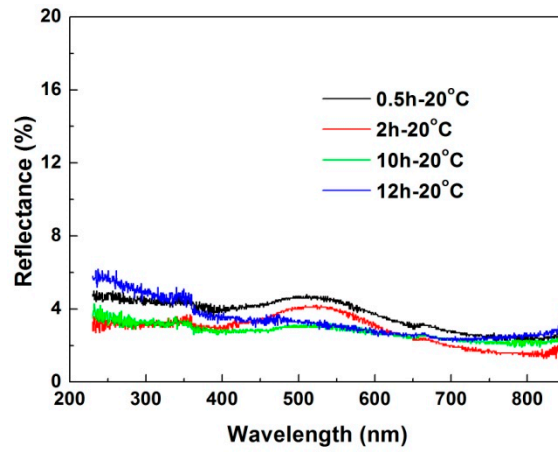


Figure S2. Ultraviolet-visible diffuse reflectance spectroscopy (UV-vis DRS) spectra of CuS samples synthesized at 20 °C with different reaction times.

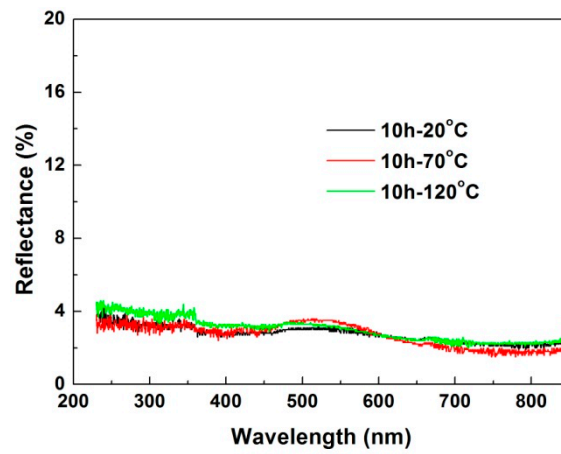


Figure S3. UV-vis DRS spectra of CuS samples synthesized at different reaction temperatures for 10 h.

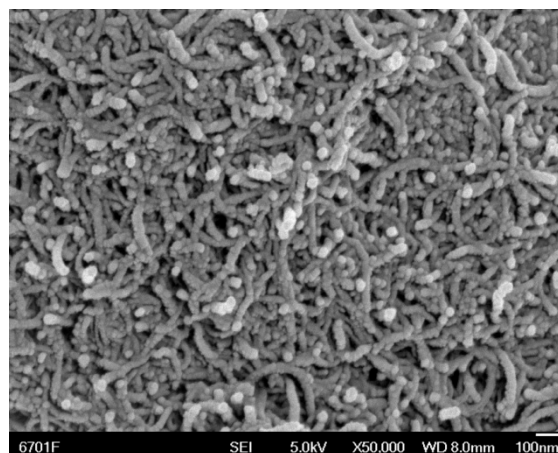


Figure S4. SEM image of pure CNTs.

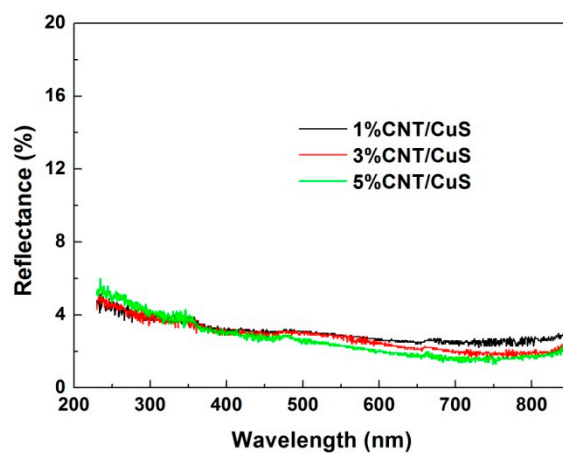


Figure S5. UV-vis DRS spectra of the CNT/CuS composites.

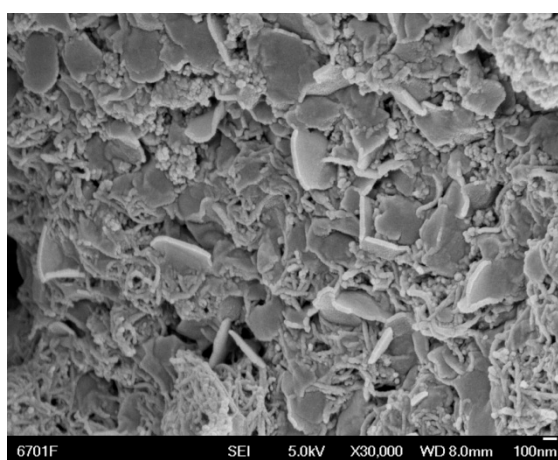


Figure S6. SEM image of the 3%CNT/CuS-MD composite obtained by mechanically mixing CuS nanoflakes and CNTs and then drying.