

Supporting Information

Heterostructures of CuS nanoparticle/ZnO nanorod arrays on carbon fibers with improved visible and solar light photocatalysis

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The MB degradation process was further confirmed by liquid chromatography mass spectrometry (LC-MS) method for samples after 0, 40, 80 and 120 min of visible light illumination, respectively (Figs. S1 and S2). Specifically, aliquots (1 mL) of the photodegraded MB solution were quickly withdrawn after exposure to visible light for 0, 40, 80 and 120 min, respectively, and analyzed by a Liquid Chromatography (LC) system from Agilent technology (Model 1200) equipped with an Agilent 6130A Mass Spectrometer (MS).

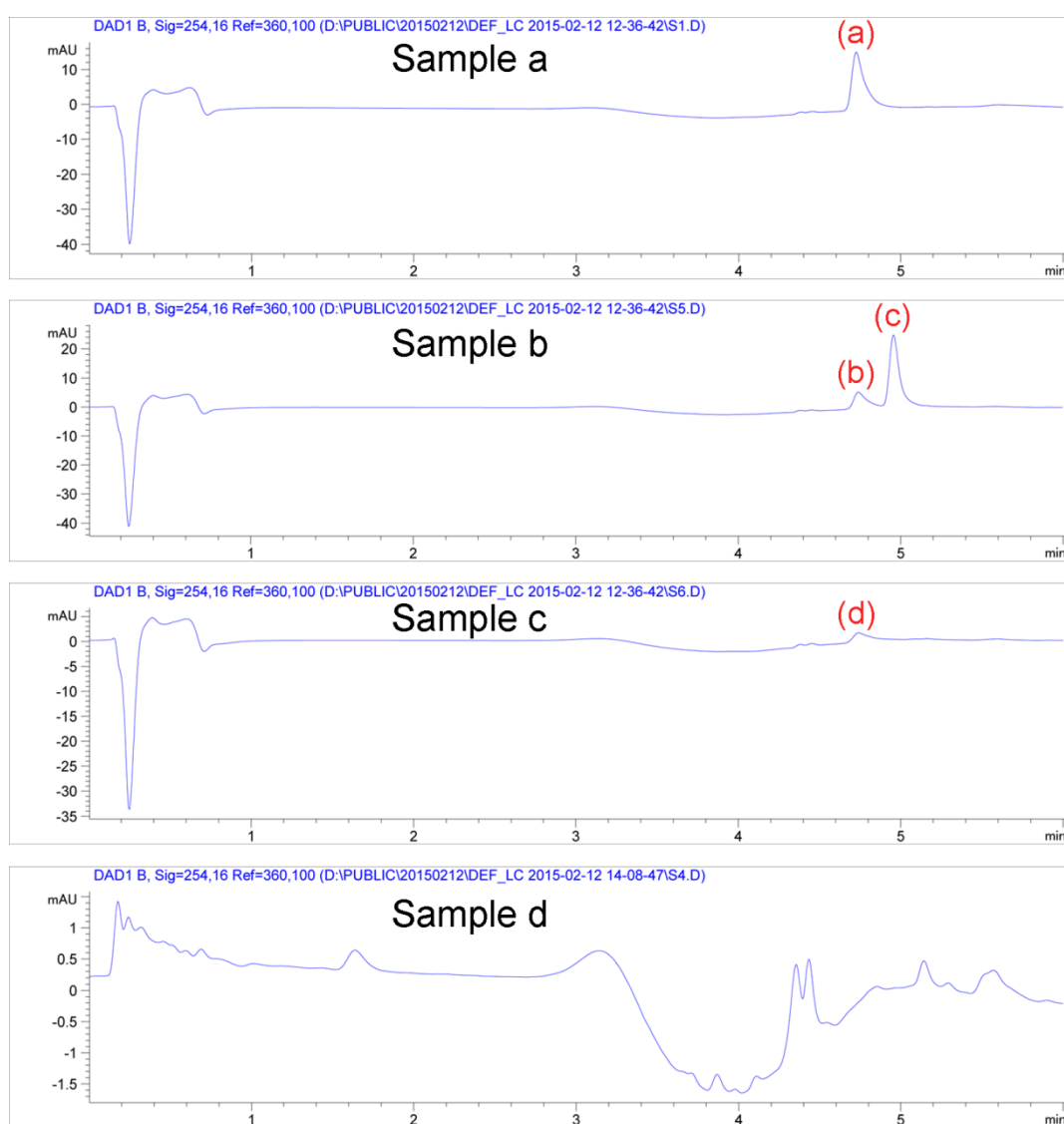


Fig. S1 LC chromatograms of MB photodegradation catalyzed by CuS/ZnO/CFs after different visible light irradiation times. Sample a: 0 min, Sample b: 40 min, Sample c: 80 min and Sample d: 120 min.

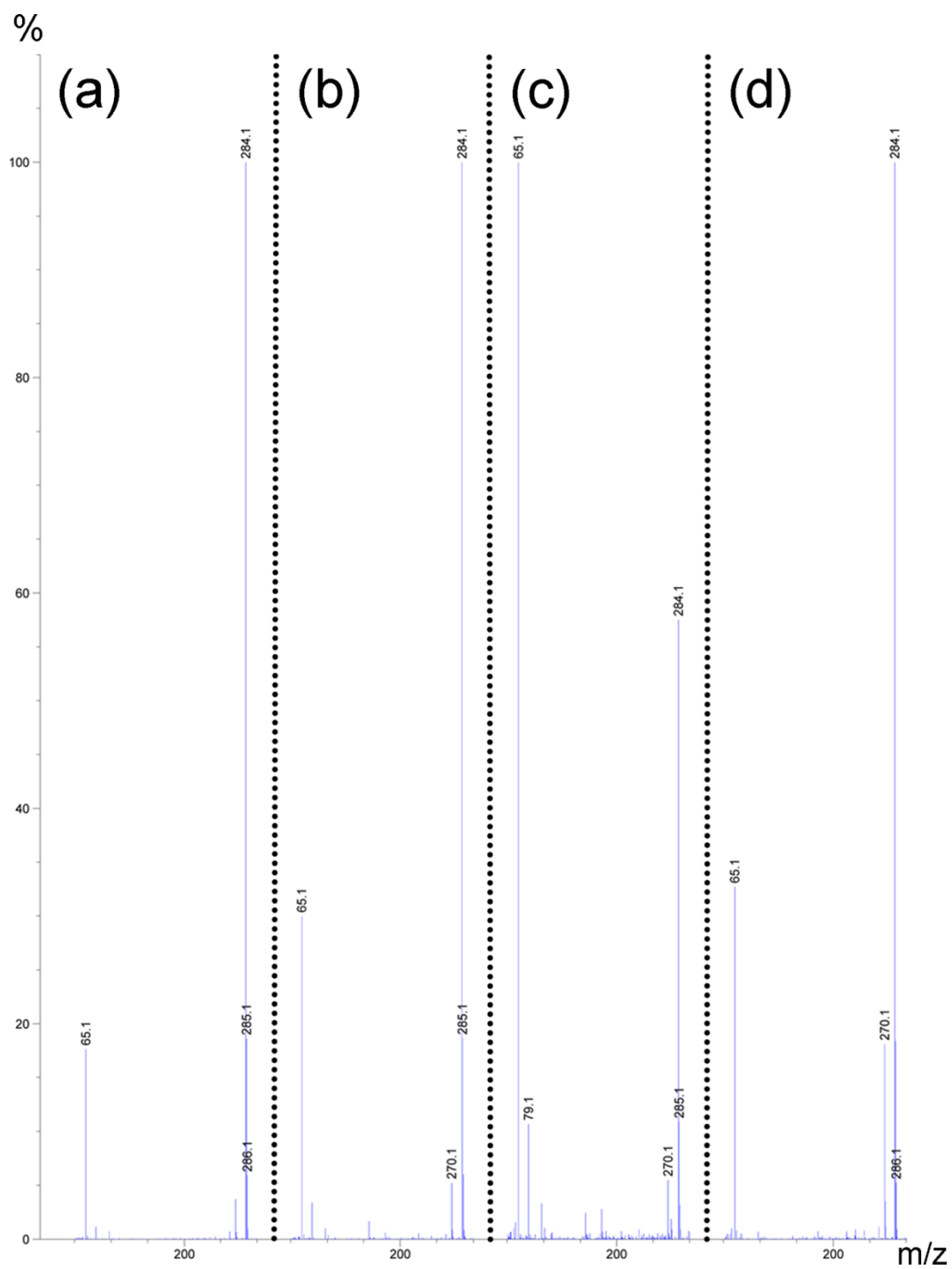


Fig. S2 MS spectra of MB and intermediate degradation products, from corresponding peaks ((a), (b), (c) and (d)) of LC chromatograms (Fig. S1), respectively.