

## The Rapid Photoresponsive Bacteria-Killing of Cu doped MoS<sub>2</sub>

Chaofeng Wang<sup>a</sup>, Jun Li<sup>b</sup>, Xiangmei Liu<sup>a,\*</sup>, Zhenduo Cui<sup>b</sup>, Da-fu Chen<sup>c,\*</sup>, Zhaoyang Li<sup>b</sup>, Yanqin Liang<sup>b</sup>, Shengli Zhu<sup>b</sup>, Shuilin Wu<sup>b,\*</sup>

---

<sup>a</sup> *Hubei Collaborative Innovation Center for Advanced Organic Chemical Materials, Ministry-of-Education Key Laboratory for the Green Preparation and Application of Functional Materials, Hubei Key Laboratory of Polymer Materials, School of Materials Science & Engineering, Hubei University, Wuhan 430062, China. E-mail: [liuxiangmei1978@163.com](mailto:liuxiangmei1978@163.com) (X. M. Liu)*

<sup>b</sup> *The Key Laboratory of Advanced Ceramics and Machining Technology by the Ministry of Education of China, School of Materials Science & Engineering, Tianjin University, Tianjin 300072, China. E-mail: [shuilin.wu@gmail.com](mailto:shuilin.wu@gmail.com); [shuilinwu@tju.edu.cn](mailto:shuilinwu@tju.edu.cn) (S.L. Wu)*

<sup>c</sup> *Beijing JiShuiTan Hospital, Beijing Research Institute Orthopaedics & Traumatology, Lab Bone Tissue Engineering, Beijing 100035, Peoples R China. E-mail: [chendafu@jsthospital.org](mailto:chendafu@jsthospital.org) (D. F. Chen)*

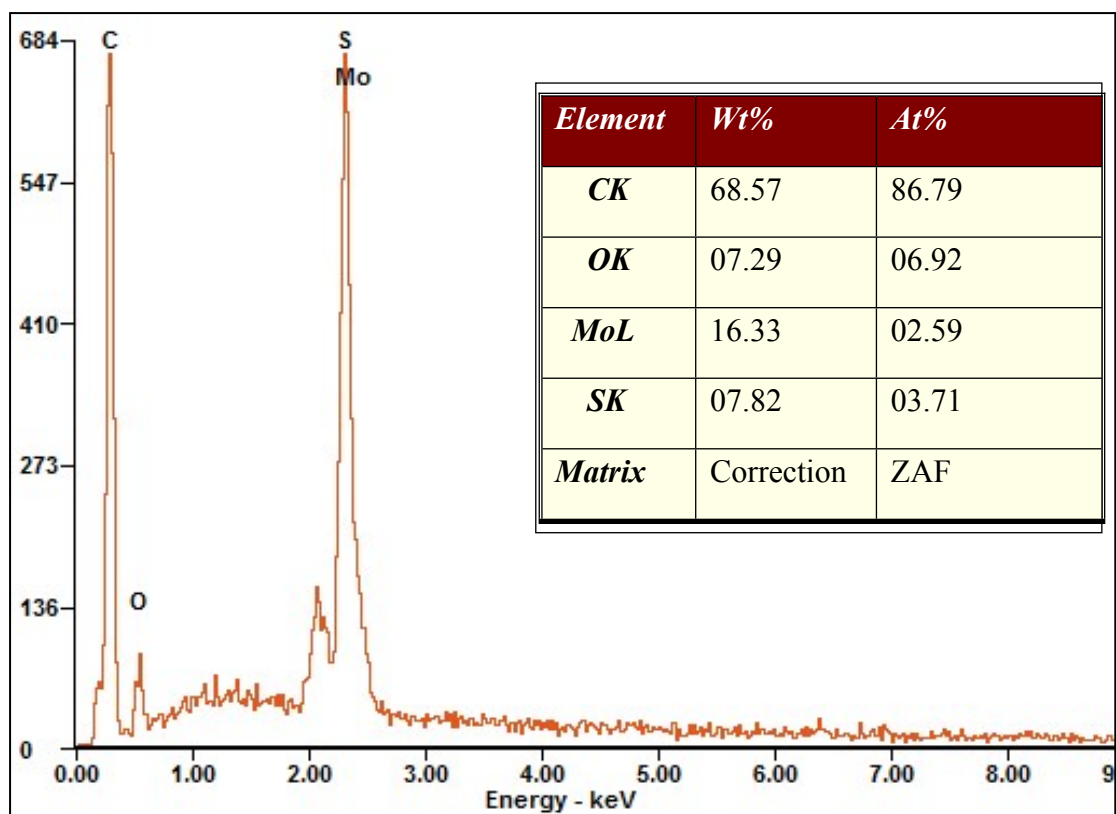


Figure S1. EDS Pattern obtained from the as-synthesized MoS<sub>2</sub>

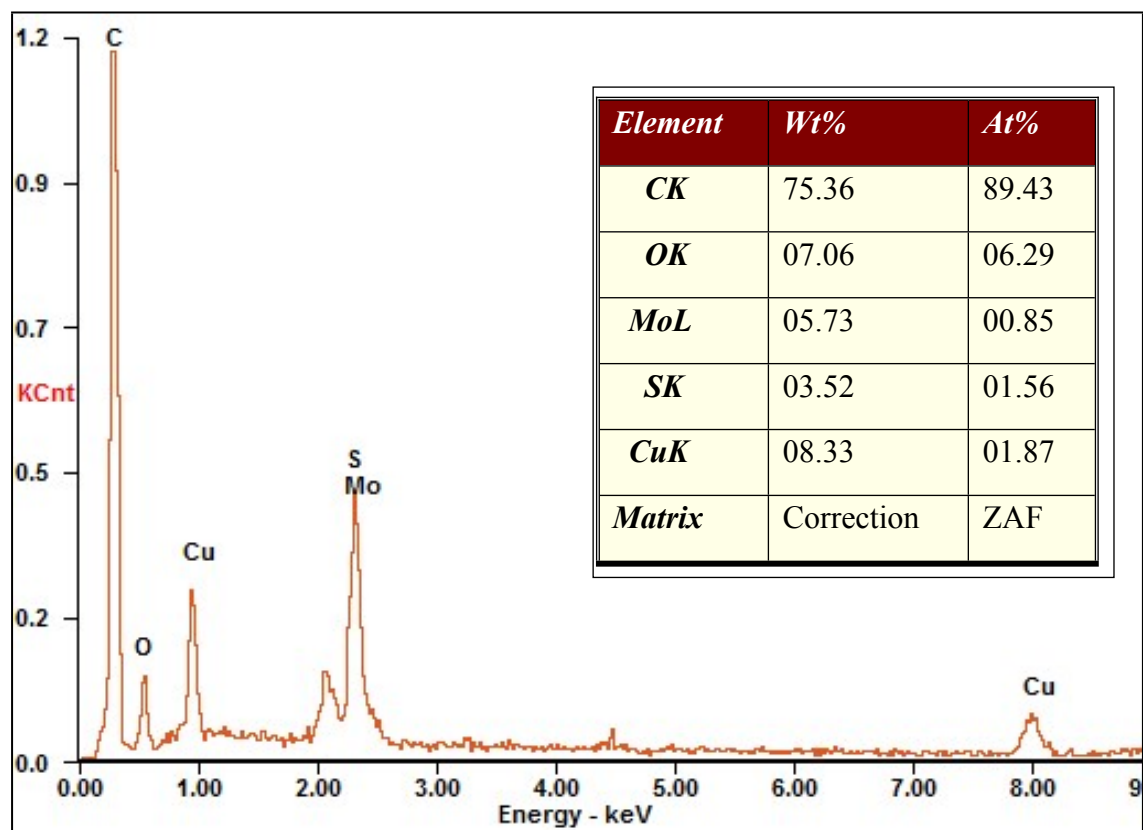


Figure S2. EDS Pattern obtained from the as-synthesized MoS<sub>2</sub>@Cu<sup>2+</sup>