

## A facile strategy for the fabrication of noble metal/ZnS composites with enhanced photocatalytic activities

Xuekun Jin<sup>a,‡</sup>, Fengjuan Chen<sup>a, b,\*,‡</sup>, Dianzeng Jia<sup>a,\*</sup>, Yali Cao<sup>a</sup>, Haiming Duan<sup>b</sup>,

Mengqiu Long<sup>c</sup>

<sup>a</sup>Key Laboratory of Energy Materials Chemistry, Ministry of Education, Key Laboratory of Advanced Functional Materials, Autonomous Region, Institute of Applied Chemistry, Xinjiang University, Urumqi, Xinjiang 830046, China.

<sup>b</sup>School of Physics Science and Technology, Xinjiang University, Urumqi 830046, Xinjiang, PR China.

<sup>c</sup>Hunan Key laboratory of Super Micro-structure and Ultrafast Process, Central South University, Changsha 410083, China.

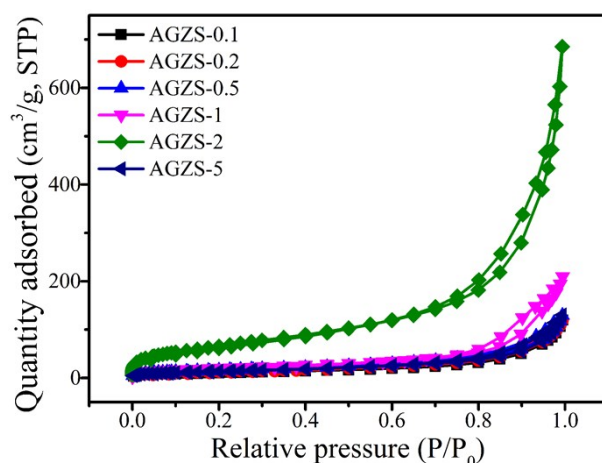


Fig. S1. N<sub>2</sub> adsorption-desorption isotherms for Ag/ZnS composites.

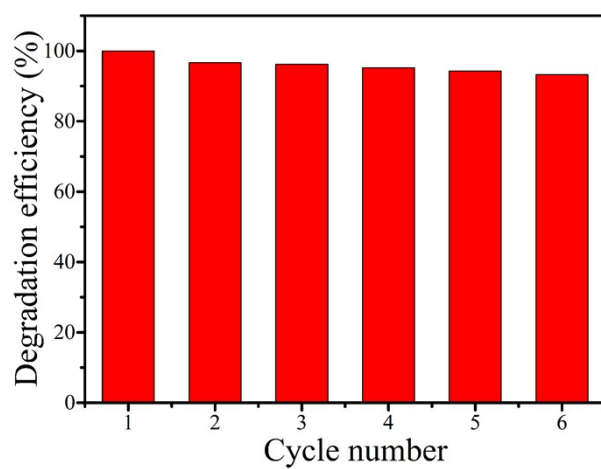


Fig. S2. The recycling activity of Ag/ZnS composites AGZS-2.

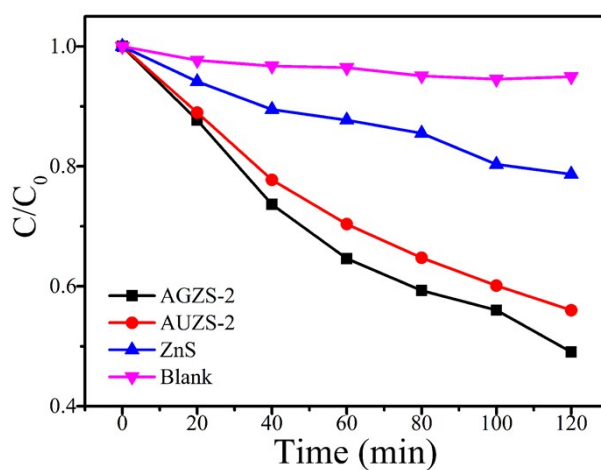


Fig. S3. Comparison photocatalytic activities between Ag/ZnS composites and Au/ZnS composites.

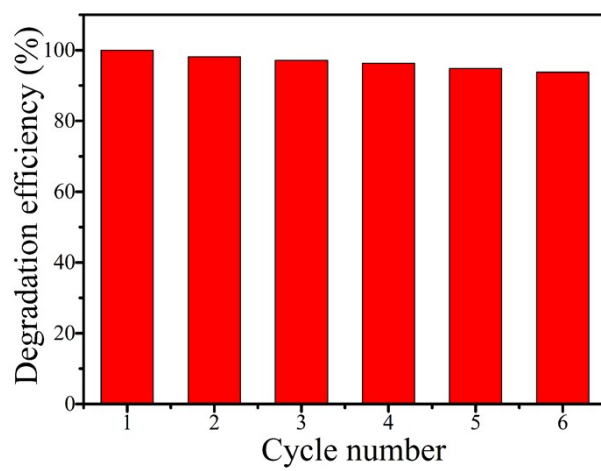


Fig. S4. The recycling activity of Au/ZnS composites AUZS-2.