Supporting Information

Nanocomposites of AgInZnS and Graphene nanosheets as Efficient Photocatalysts for Hydrogen Evolution

Xiaosheng Tang\textsuperscript{1*}, Weiwei Chen\textsuperscript{1}, Zhiqiang Zu\textsuperscript{1}, Zhigang Zang\textsuperscript{1*}, Ming Deng\textsuperscript{1}, Tao Zhu\textsuperscript{1}, Kuan Sun\textsuperscript{2}, Lidong Sun\textsuperscript{3}, Junmin Xue\textsuperscript{4}

\textsuperscript{1} Key Laboratory of Optoelectronic Technology and Systems of the Education Ministry of China, College of Optoelectronic Engineering, Chongqing University, Chongqing 400044, China
\textsuperscript{2} College of Power Engineering, Chongqing University, China
\textsuperscript{3} College of Materials Science and Engineering, Chongqing University, China
\textsuperscript{4} Department of Materials Science & Engineering, National University of Singapore, Singapore
S_Figure 1 TEM images of AgInZnS nanoparticles with different ratio (A. Ag$_{0.01}$In$_{0.23}$ZnS$_{1.35}$, B. Ag$_{0.02}$In$_{0.23}$ZnS$_{1.355}$, C. Ag$_{0.03}$In$_{0.23}$ZnS$_{1.37}$)
Figure 2. (A) high resolution TEM image of (Ag$_{0.04}$In$_{0.23}$ZnS$_{1.365}$) AgInZnS nanoparticles, (B) the magnified high resolution TEM image of AlZS-rGO nanocomposites.
S_Figure 3 Hydrogen evolution rates of AlZS nanoparticles with different ratio of Ag.