Supporting information for

Origin of efficient catalytic thermal decomposition of ammonium perchlorate over (2-1-10) facets of ZnO nanosheets: surface lattice oxygen

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Catalyst characterizations:

**Figure S1.** XRD pattern of precursor ZnS(en)$_{0.5}$. 
Figure S2. (a) Low- and (b) high-magnification SEM images, (c) TEM and (d) HRTEM images, (e) SAED pattern of ZnS(en)$_{0.5}$ precursor.