

Supporting Information

Hybrid ZnO/ZnS nanoforests as the electrode materials for high performance supercapacitor application

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Figure S1: Typical SEM images of the as-grown ZnO nanorods array made of axially grown ZnO nanorods (S1a-b) low-resolution and (S1c) high-magnification SEM images; and (S1d) corresponding EDS spectrum of ZnO nanorods.

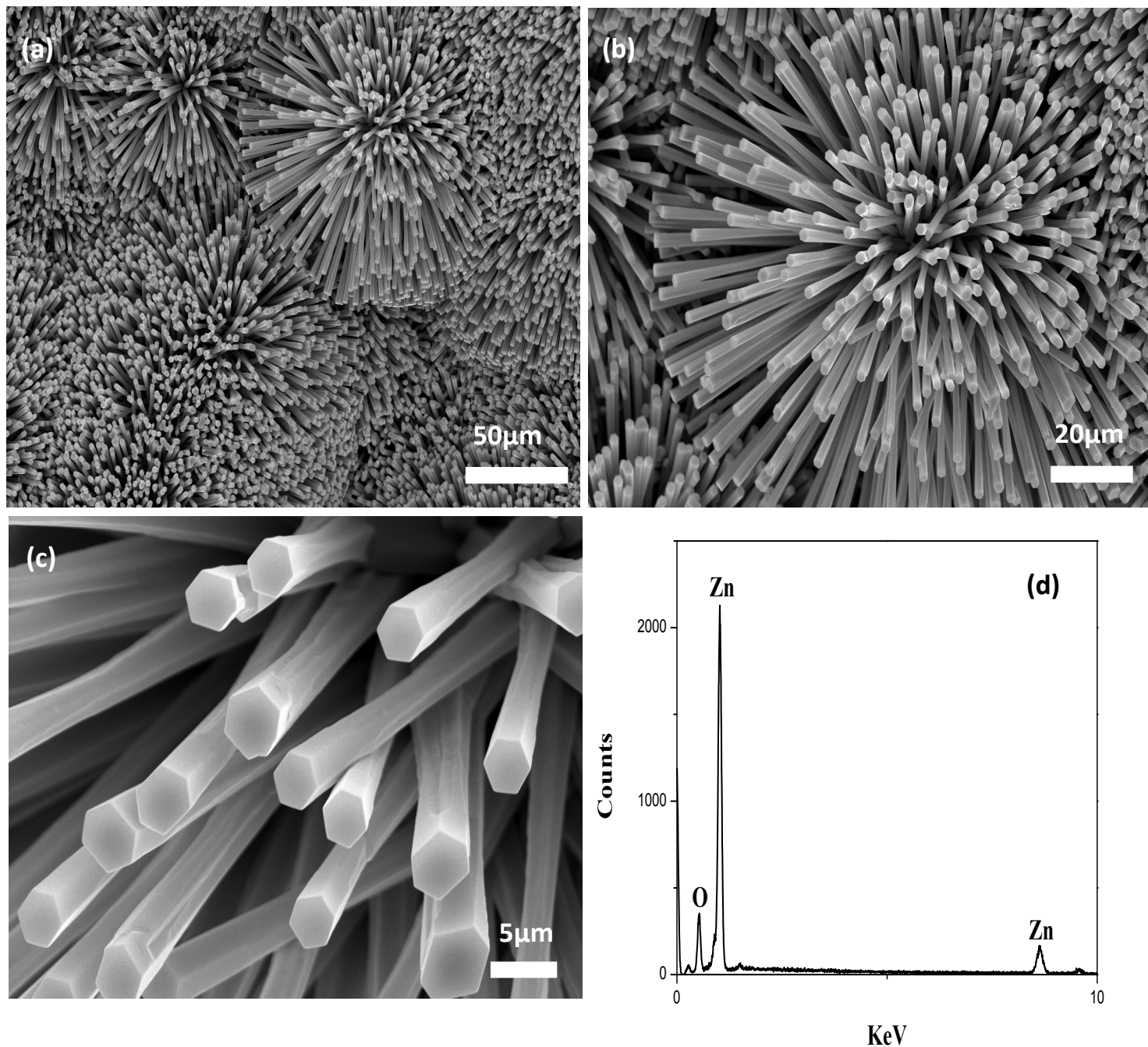


Figure S2: Typical SEM images of the as-grown ZnS microflowers made of thin ZnS nanosheets (S2a) low-magnification and (S2b) high-resolution SEM images; (S2c) corresponding EDS spectrum and (S2d) plausible growth mechanism for the formation of ZnS microflowers

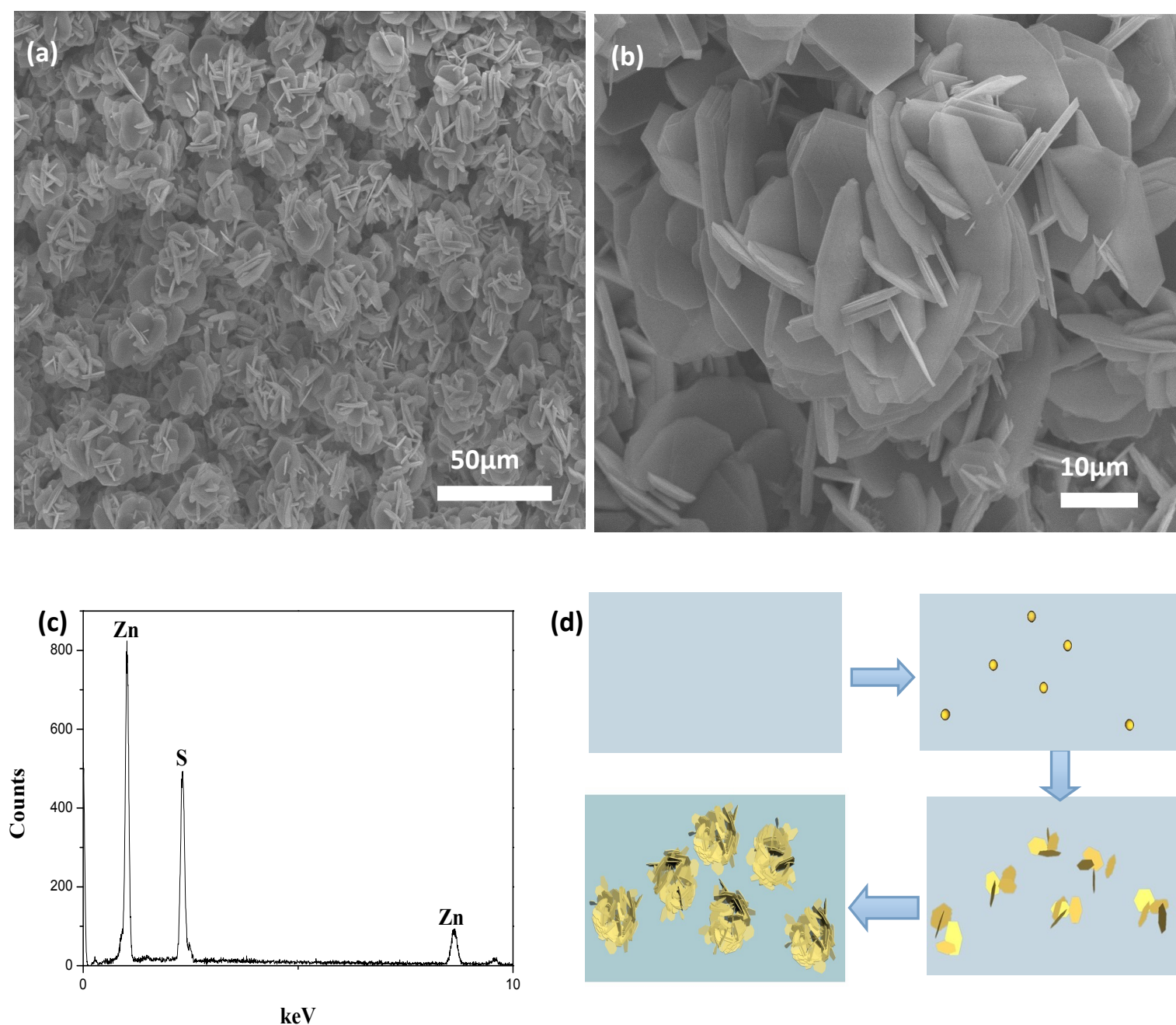


Figure S3: Electrochemical characterizations of ZnO urchins made of axially growth ZnO nanorods for supercapacitor application using three electrodes system; (S3a) CV curves at scan rates between 10 and 100 mVs⁻¹, (S3b) discharge curves at current densities ranged from 1.0 to 5.0 mA/cm², (S3c) Current density dependence of the areal capacitance, (S3d) Cycling performance at current density of 2.0 mA/cm².

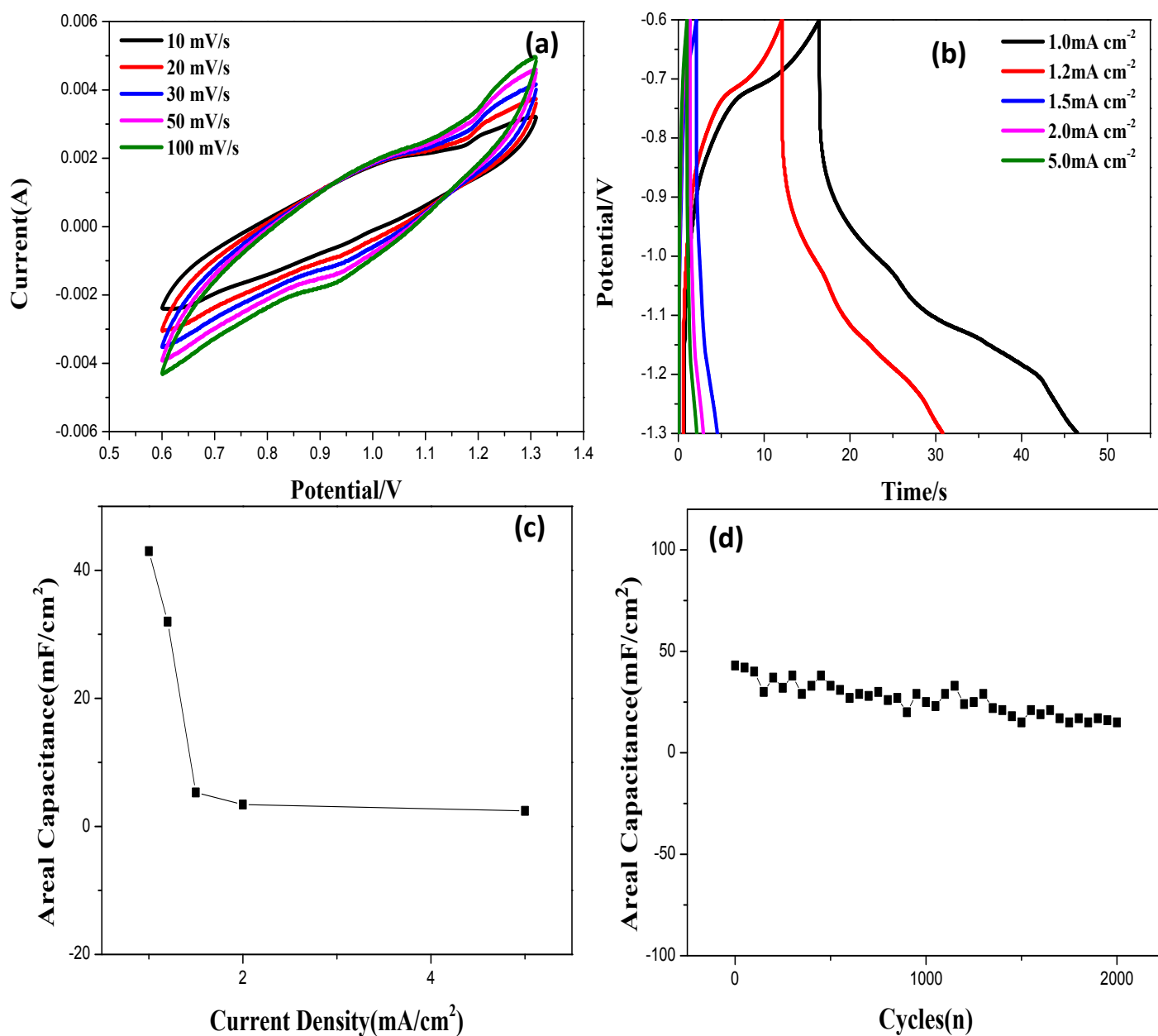


Figure S4: Electrochemical characterizations of ZnS nanoroses made of thin nanosheets of ZnS for supercapacitor application using three electrodes system; (S4a) CV curves at scan rates between 10 and 100 mVs⁻¹, (S4b) discharge curves at current densities ranged from 1.0 to 5.0 mA/cm², (S4c) Current density dependence of the areal capacitance, (S4d) Cycling performance at current density of 2.0 mA/cm².

