Electronic Supplementary Information (ESI)

Facile-growth mechanism of wurtzite ZnS nanostructures showing

intense ultraviolet luminescence

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Fig. S1 TGA curves of ZnS nanobelts grown for 6 h at reaction temperatures indicated in the units of °C.



Fig. S2 FTIR spectra of ZnS nanobelts grown for 6 h at reaction temperatures indicated in the units of °C.



Fig. S3 HAADF-STEM images of ZnS nanobelts grown at 180 °C for 6 (a) and 18 h (b), where each scale bar indicates 50 nm.



Fig. S4 TEM images of ZnS nanobelts grown for 6 h at 120 (a), 150 (b), and 180 °C (c), where each scale bar indicates 200 nm.



Fig. S5 Photoluminescence spectra of ZnS nanobelts grown for 6 h at reaction temperatures indicated in the units of °C. The nanobelts were suspended in ethanol and excited with 266 nm laser pulses of 6 ns.