Electronic Supplementary Information



Fig. S1 SEM image of an intermediate ZnO nanostructure showing the formation of 2D ZnO nanosheets by edge-sharing attachment of 1D nanorods.



Fig. S2 Schematic illustration of the single crystal wurtzite structure of ZnO. $\{10\overline{1}0\}$ planes are intentionally retained to exhibit their arrangements in a single ZnO crystal.



Fig. S3 Characterization of ZnO nanoparticles: (a) SEM image, (b) TEM image, and (c) XRD pattern.



Fig. S4 UV–visible absorption spectrum of the as-prepared ZnO mesocrystals. The weak absorbance in the visible range is indicated by a dotted rectangle.