Electronic Supplementary Information (ESI)

Room Temperature Synthesis and Optical Properties of Small Diameter (5nm) ZnO Nanorod Arrays

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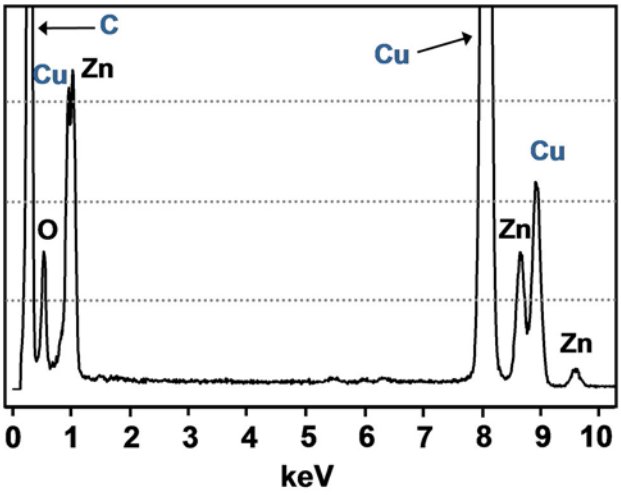

Figure S1. EDX pattern of the ZnO nanorods synthesized from the reaction with the aqueous 0.2 M Na_2O_2 solution at room temperature for 2 h.

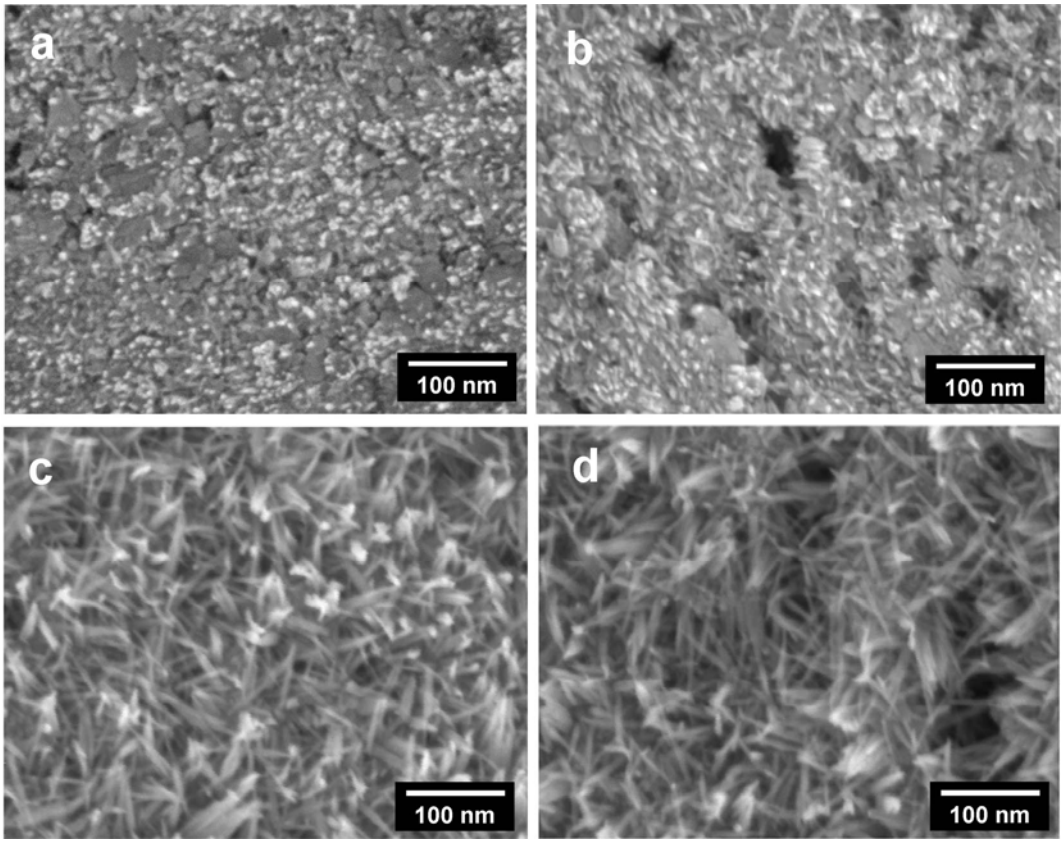

Figure S2. SEM images of the surface of the substrates after the reaction with the aqueous 0.2 M Na_2O_2 solution at room temperature: (a) 10 min reaction. (b) 30 min reaction. (c) 2 h reaction. (d) 6 h reaction.

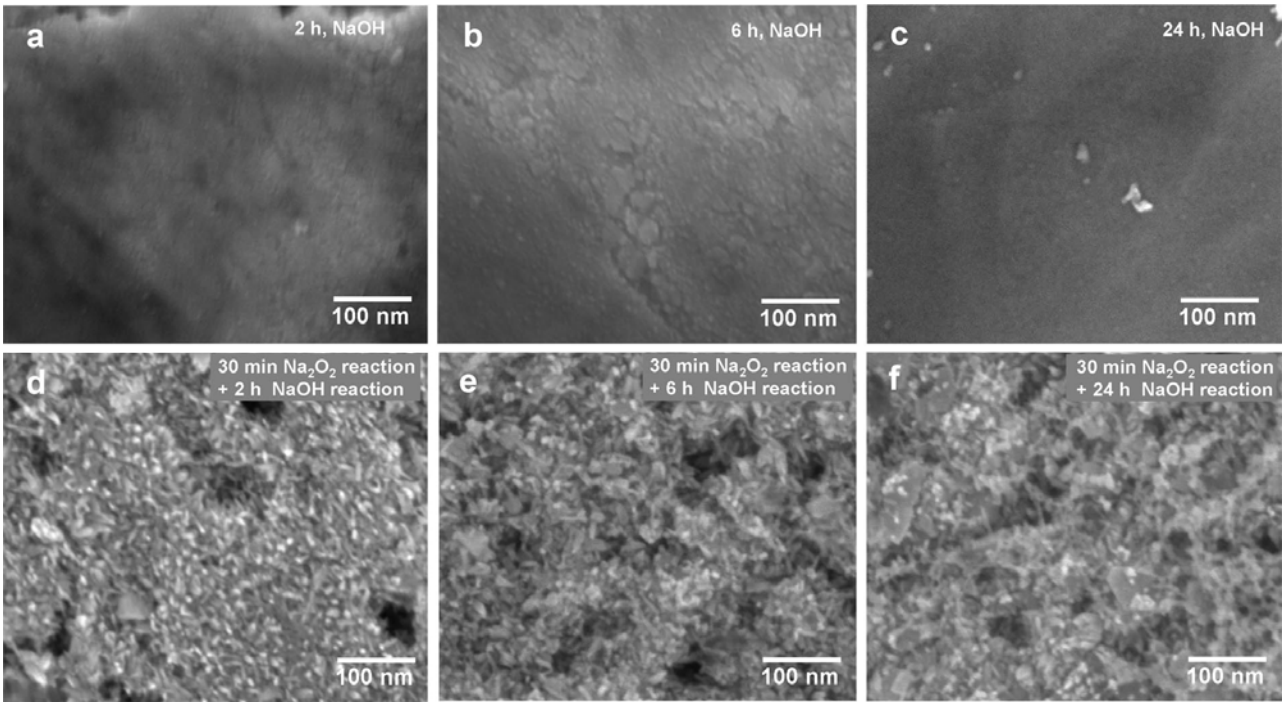

Figure S3. SEM images of the surface of the substrates after the reaction with the aqueous NaOH solution (pH 13.9) at room temperature: (a) 2 h reaction. (b) 6 h reaction. (c) 24 h reaction. SEM images of the surface of the substrates (as-prepared by the reaction with 0.2 M Na_2O_2 at room temperature for 30 min (Figure S2(b)) after the reaction with the aqueous NaOH solution (pH 13.9) at room temperature: (a) 2 h reaction. (b) 6 h reaction. (c) 24 h reaction.

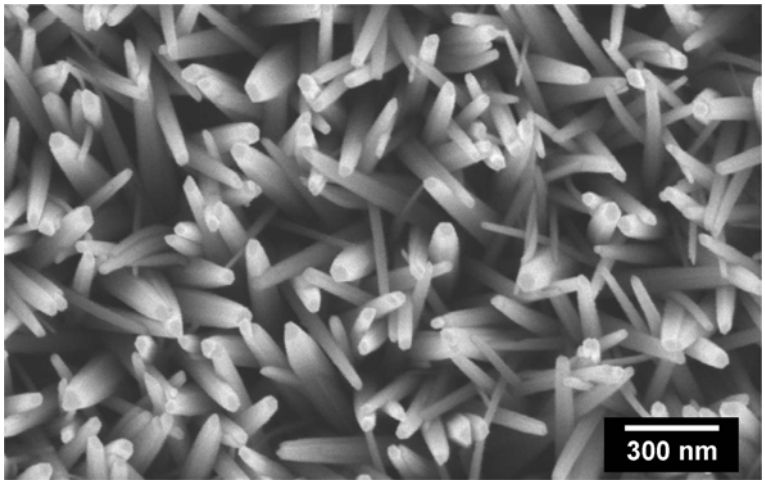

Figure S4. SEM image of the ZnO nanorod arrays synthesized from the reaction with the aqueous ammonia solution at 90°C for 2 h.