

Supporting Information

Highly efficient dye-sensitized solar cell with an electrostatic spray deposited upright-standing boron-doped ZnO (BZO) nanoporous nanosheet-based photoanode

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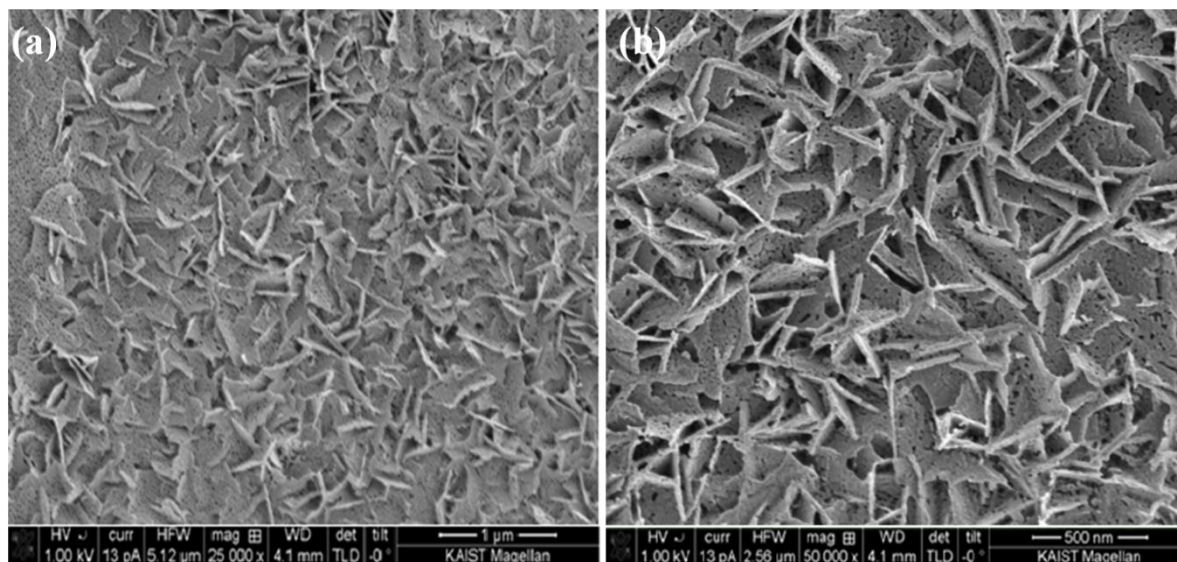


Figure S1. (a) FE-SEM image of as-prepared un-doped ZnO nanosheets (Sample 1), and (b) a magnified FE-SEM image of nanosheets (At synthesis temperature of 170 °C for sputtering time of 10 s after zero days).

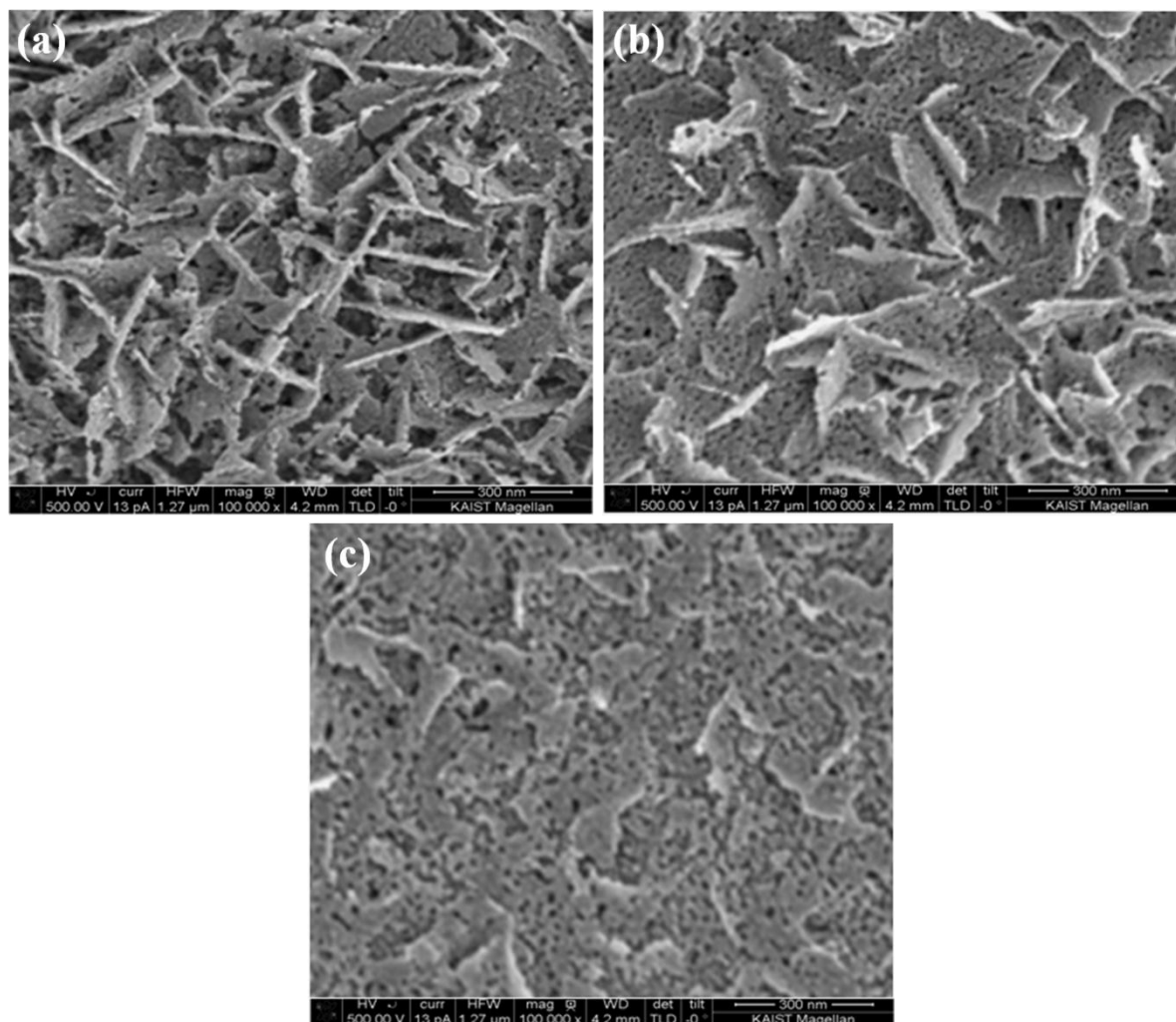


Figure S2. Magnified FE-SEM images showing the highly porous nature of BZO nanosheets films synthesized at different reaction temperatures: (a) 180 °C (sample 2); (b) 190 °C (sample 3), and (c) 200 °C (sample 4).

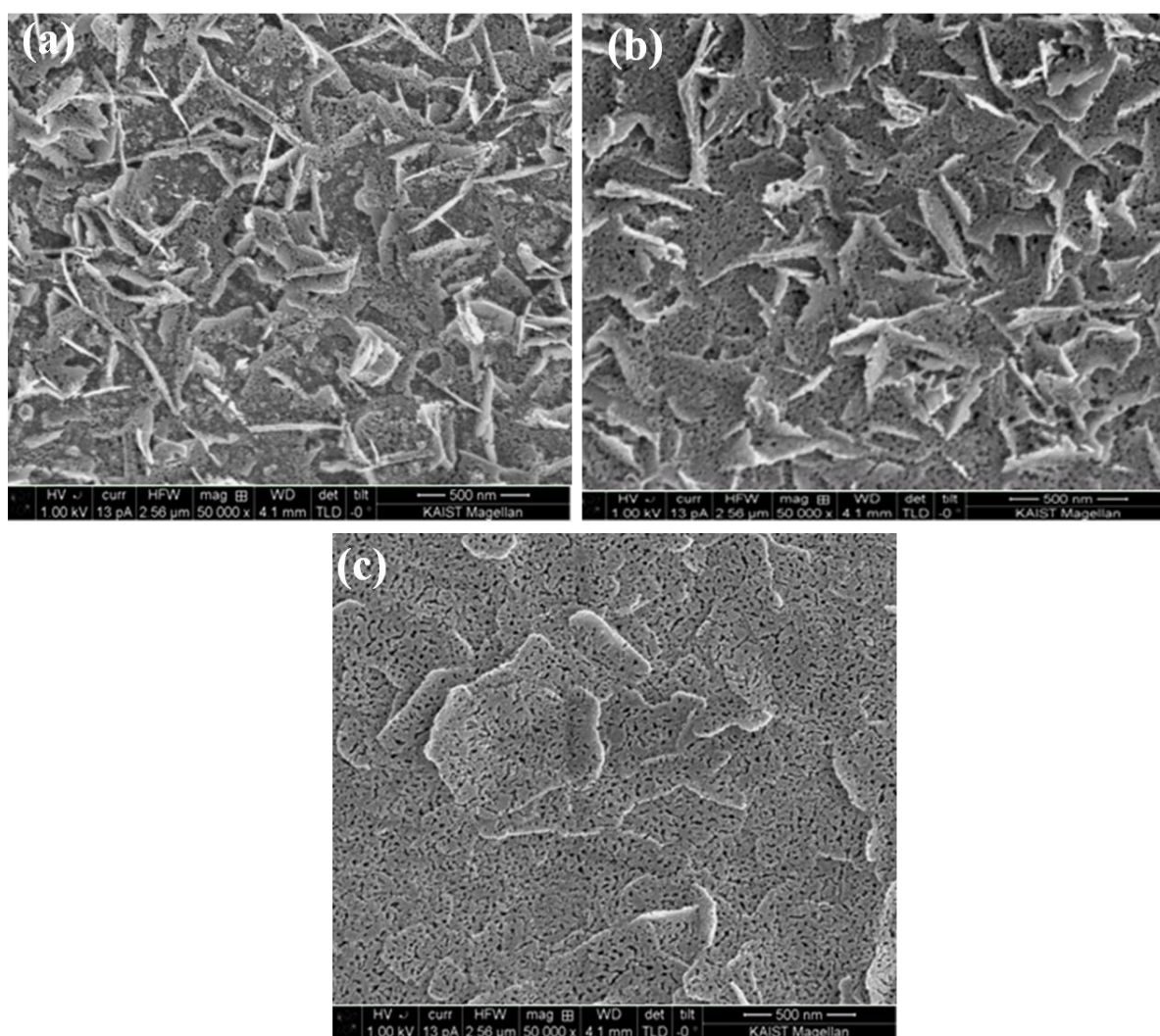


Figure S3. FE-SEM images showing the morphology evolution of un-doped ZnO nanosheets films synthesized at different reaction temperatures: (a) 180 °C (sample 6); (b) 190 °C (sample 7), and (c) 200 °C (sample 8).