Supporting Information

Facile Synthesis of Hierarchical TiO_2 Spheres for Efficient Dye-Sensitized Solar Cells

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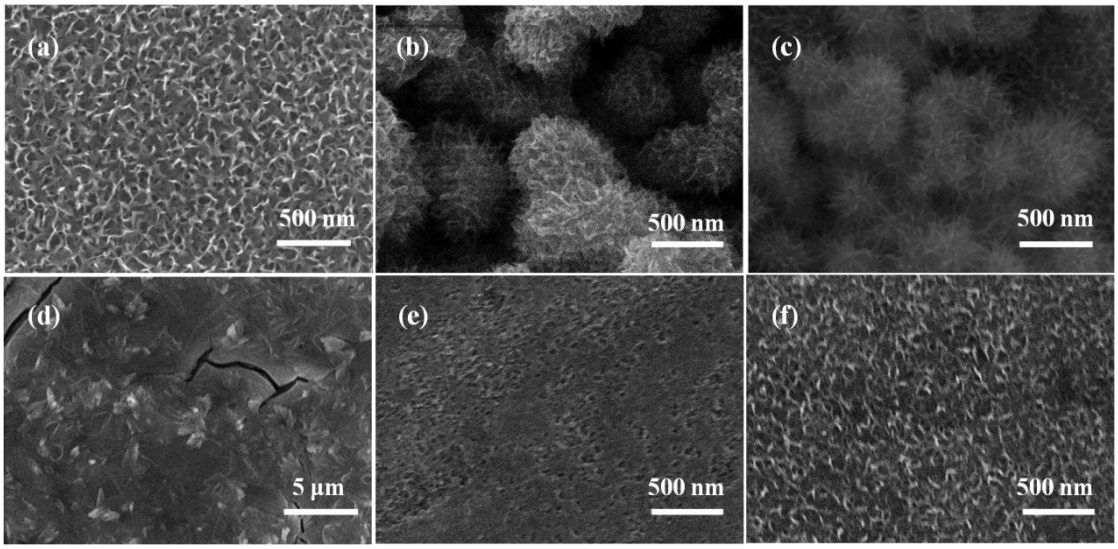

Figure S1. SEM images of TiO_2 products prepared in different conditions. (a) Surface structure on Ti foil prepared by hydrothermal processing in aqueous solution containing 15 mL H_2O_2 (30 wt%), 15 mL DI water and 0.3 M NaOH, with Ti foils as Ti source at 80 ^oC for 1 h. (b, c) spheres collected from Ti foil prepared by hydrothermal processing in aqueous solution containing 15 mL H_2O_2 (30 wt%), 15 mL DI water and 0.3 M NaOH, with Ti foils as Ti source for 1 h at (b) 60 ^oC and (c) 100 ^oC. (d, e, f) Surface structure on Ti foil prepared by hydrothermal processing in aqueous solution containing (d) 1.5 mL H_2O_2 (30 wt%), 28.5 mL DI water and 3 M NaOH, with Ti foils as Ti source at 80 ^oC for 1 h, (e) 15 mL H_2O_2 (30 wt%), 15 mL DI water, with Ti foils as Ti source at 80 ^oC for 1 h, and (f) 30 mL DI water and 0.3 M NaOH, with Ti foils as Ti source at 80 ^oC for 1 h.

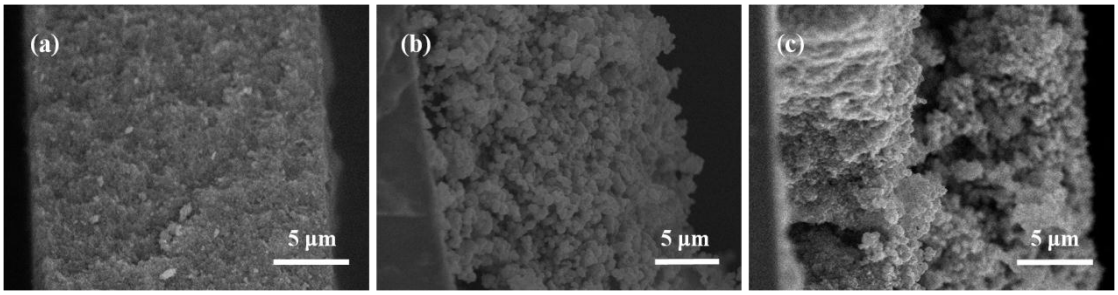

Figure S2. SEM images of the three films (a) P25 nanoparticle film, (b) sphere film, and (c) bi-layered film (P25 nanoparticles + spheres).