Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A

Supporting information

Template-free solvothermal fabrication of hierarchical TiO_2 hollow microspheres for efficient dye-sensitized solar cells

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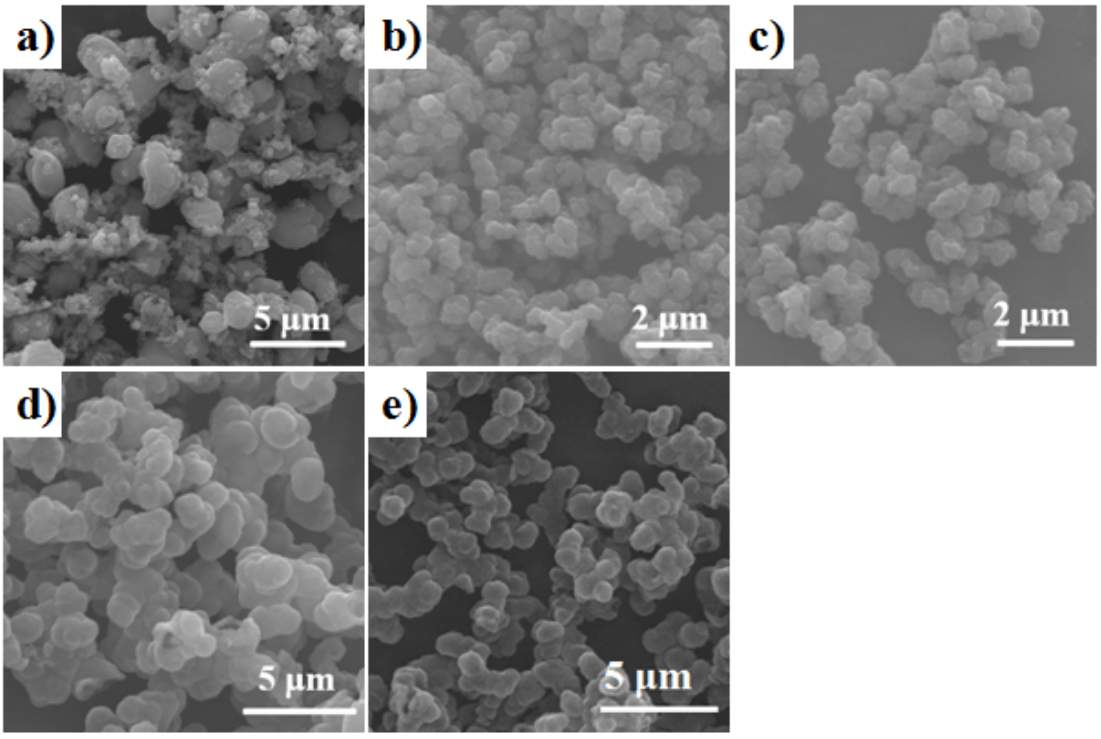

Fig. S1 SEM images of samples prepared with different titanium n-butoxide to oxalic acid dehydrate molar ratio (a, 1:7; b, 1:8; c, 1:9.5; d, 1:11; e, 1:21).

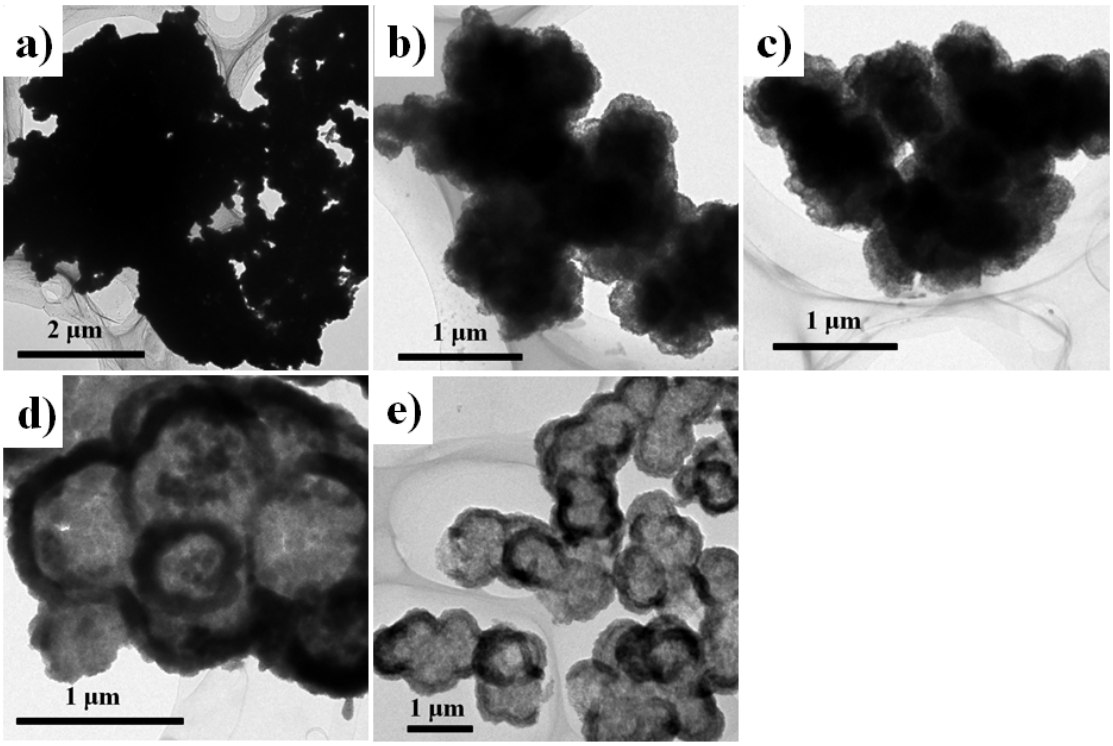

Fig. S2 TEM images of samples prepared with different titanium n-butoxide to oxalic acid dehydrate molar ratio (a, 1:7; b, 1:8; c, 1:9.5; d, 1:11; e, 1:21).

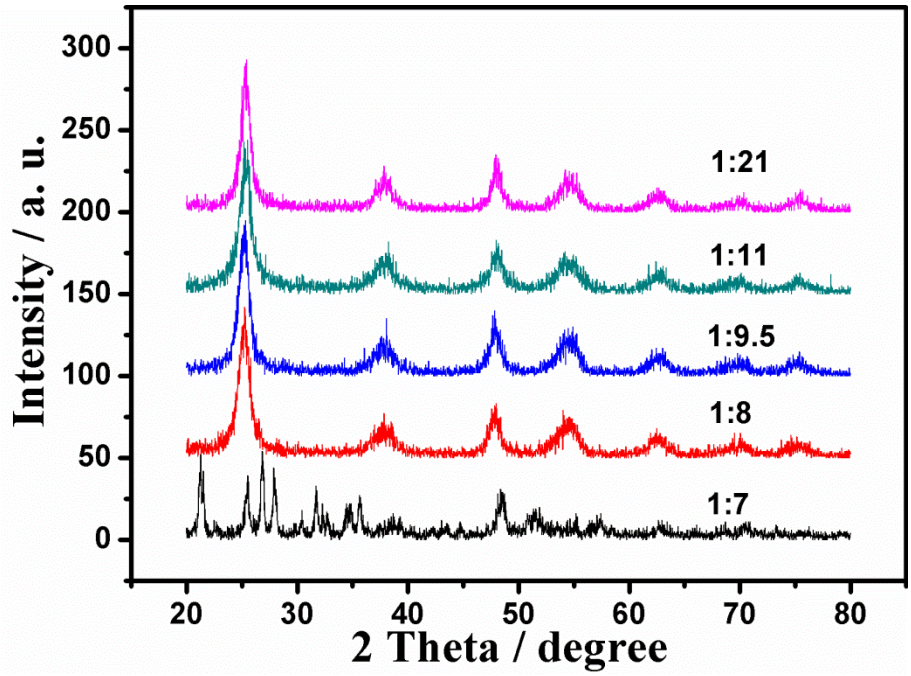

Fig. S3 XRD patterns of the samples prepared with different titanium n-butoxide to oxalic acid dihydrate molar ratio (1:7; 1:8; 1:9.5; 1;11; 1:21)

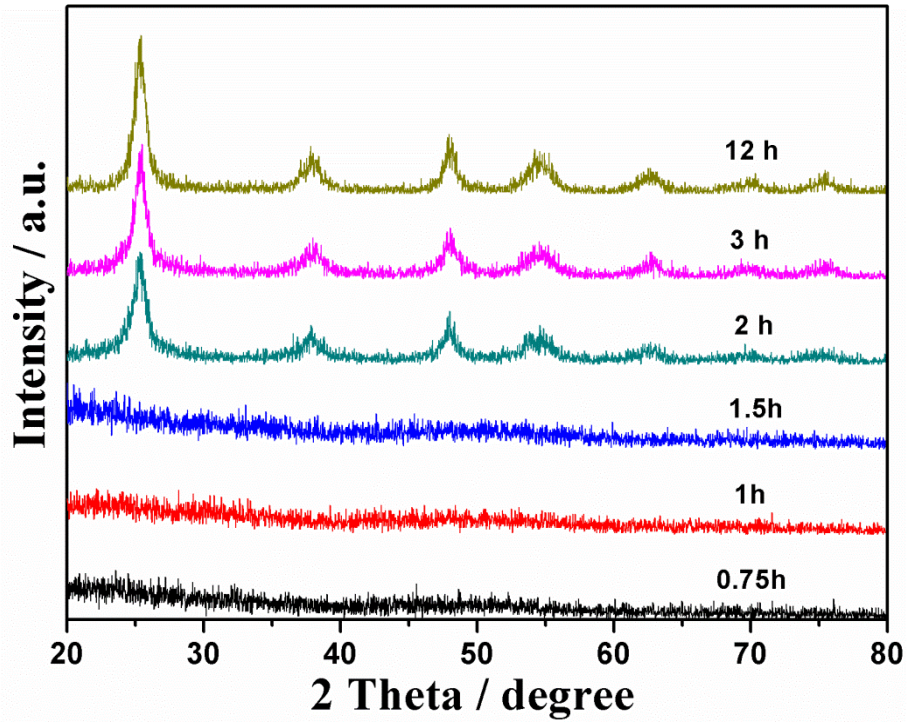

Fig. S4 XRD patterns of samples prepared via different reaction time (0.75 h, 1h, 1.5h, 2 h, 3h, 12 h).

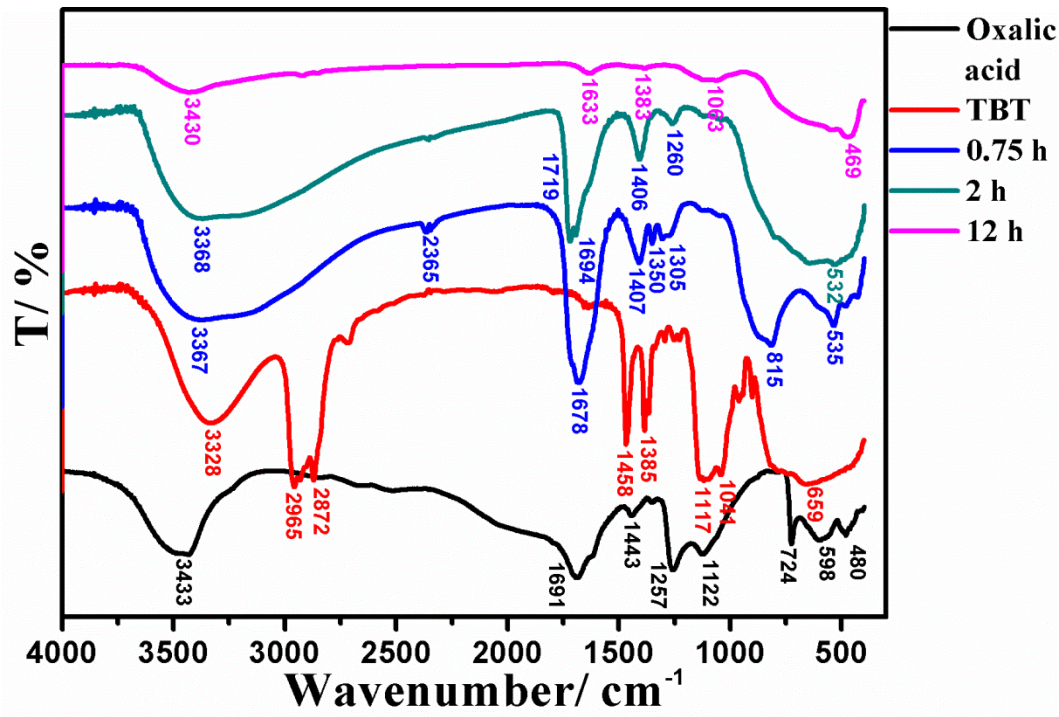

Fig. S5 The FTIR spectra of oxalic acid, titanium n-butoxide, and the products prepared via different reaction time (0.75 h, 2 h, 12 h).

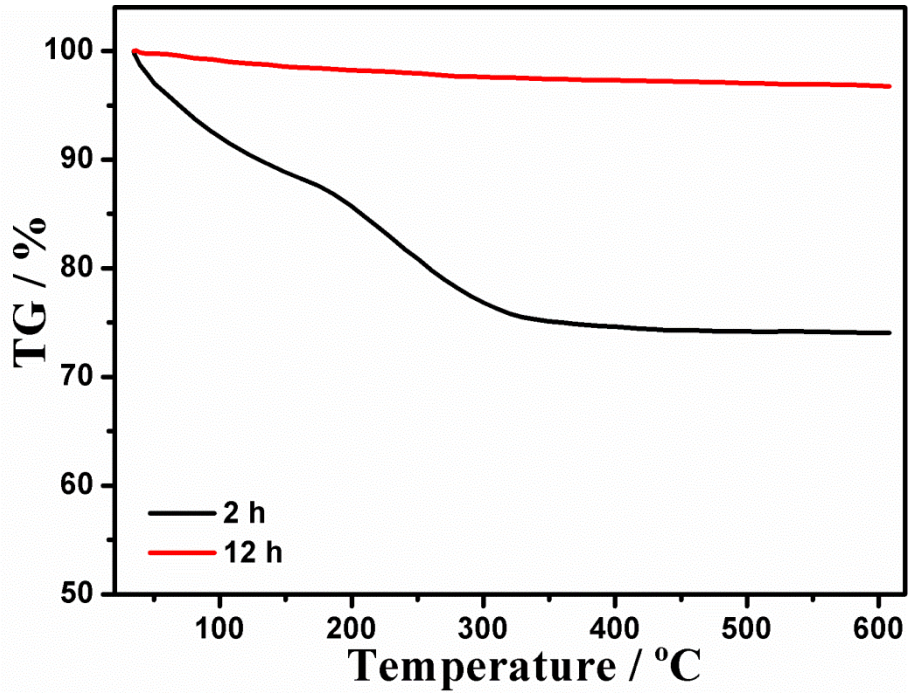

Fig. S6 TG curves of the product via a solvothermal reaction at 140 °C for 2 h and 12 h, respectively.