

Electronic Supplementary Information

Rutile TiO₂ mesocrystallines with aggregated nanorod clusters: extremely rapid self-reaction of the single source and enhanced dye-sensitized solar cells performance†

Hequan Wang,^a Li Sun,^a Hai Wang,^{*b} Ling Xin,^{a,c} Qiuyue Wang,^c Yong Liu^c and Linjiang Wang^b

^a*College of Mechanical and Electrical Engineering, Shenyang Aerospace University, Shenyang, 110136, China.*

^b*Key Laboratory of New Processing Technology for Nonferrous Metals and Materials, Ministry of Education, Guilin University of Technology, Guilin 541004, China. E-mail: hbwanghai@gmail.com, Fax: +86-773-5896-671; Tel: +86-773-5896-672.*

^c*School of Physics and Engineering, State Key Laboratory of Optoelectronic Materials and Technologies, Sun Yat-sen University, Guangzhou 510275, China.*

Figure captions

Fig. S1 High-magnification FESEM of the surface of individual rutile TiO₂ mesocrystalline prepared at 180 °C for 12 h.

Fig. S2 The FESEM images of RTM at 150 °C for 10 min (a-b) and at 90 °C for 6 h (c-d).

Fig. S3 Low- and high-magnification FESEM images of the RTM: (a, b) 150 °C, 10 min, (c, d) 150 °C, 48 h and (e, f) 180 °C, 48 h.

Fig. S4 Low- and high-magnification FESEM images of the free-standing rutile TiO₂ nanorod arrays prepared at different temperatures: (a, b) 120 °C, (c, d) 150 °C and (e, f) 180 °C.

Fig. S5 The FESEM image (a), TEM image (b-c) and XRD patterns of the RTM treated at 500 °C for 30 min.

Fig. S6 The comparative transmittance spectra for the P25+mesocrystals composites, P25 and RTM only thin film.

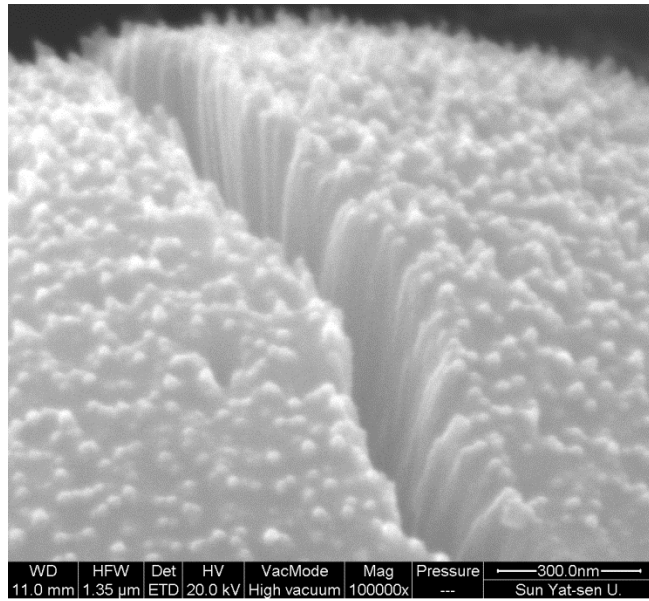


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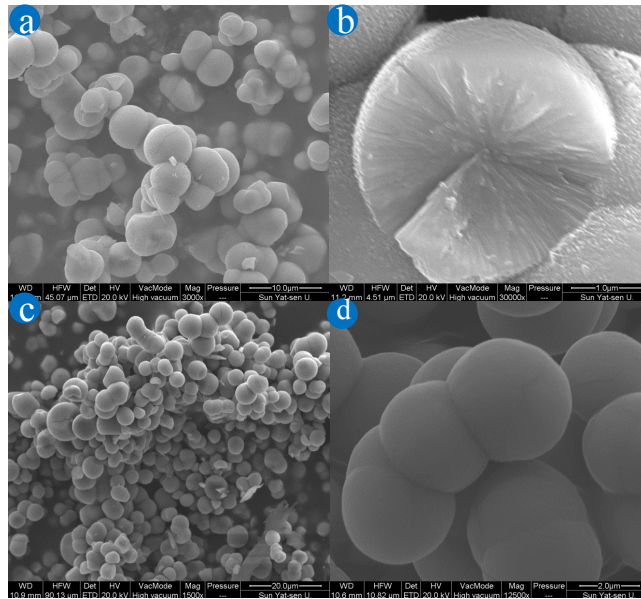


Fig. S2 The FESEM images of RTM at 150 °C for 10 min (a-b) and at 90 °C for 6 h (c-d).

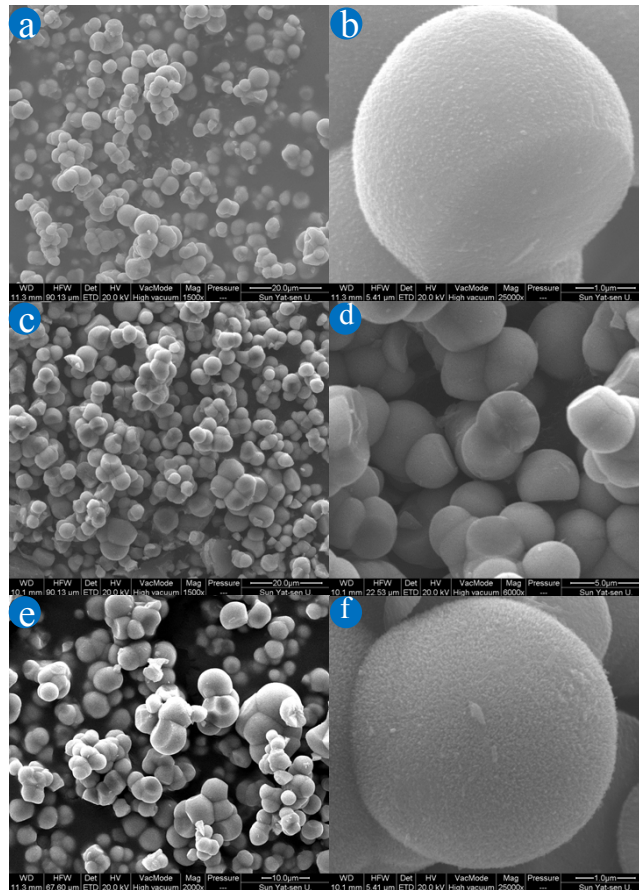


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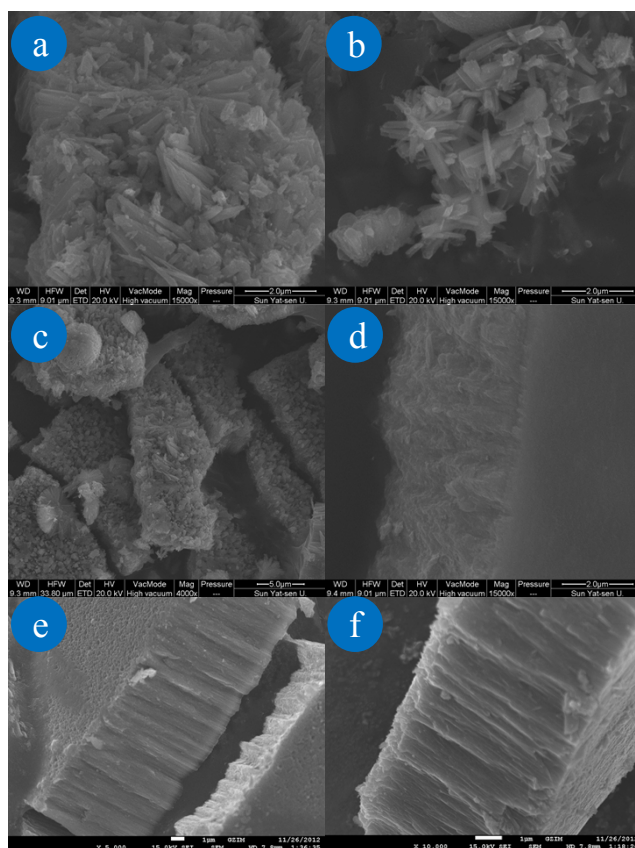


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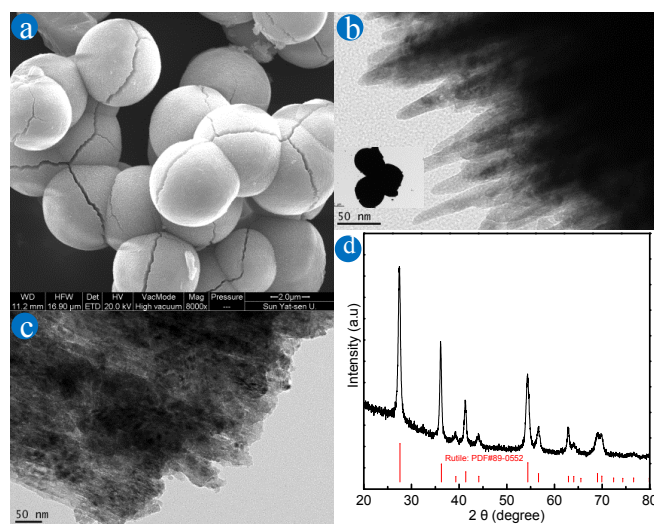


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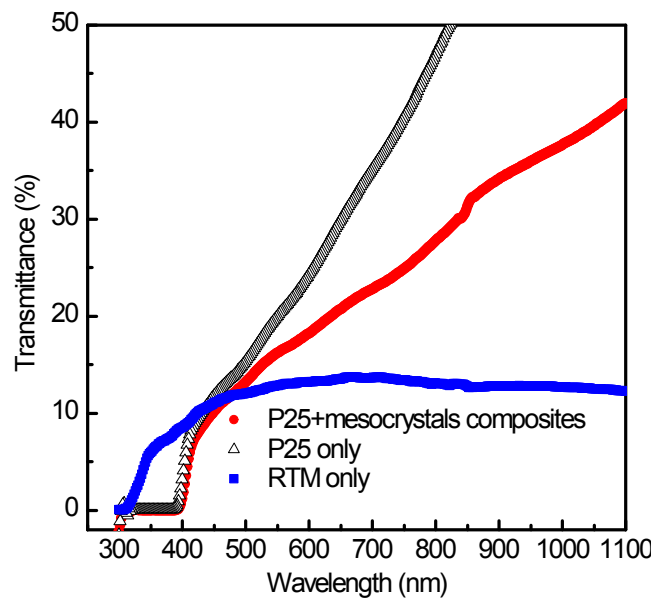


Fig. S6 The comparative transmittance spectra for the P25+mesocrystals composites, P25 and RTM only thin film.