Electronic Supplementary Material (ESI) for Nanoscale

Supplementary Information

Highly Efficient Completely Flexible Fiber-Shaped Dye-sensitized Solar Cell Based on TiO_2 Nanotube Array

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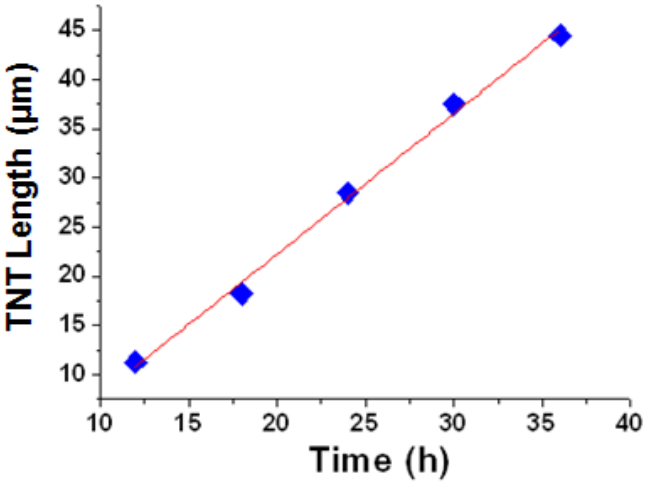

Fig.1. TiO_2 nanotube length varies with anodization Time. TNT:TiO_2 nanotube.

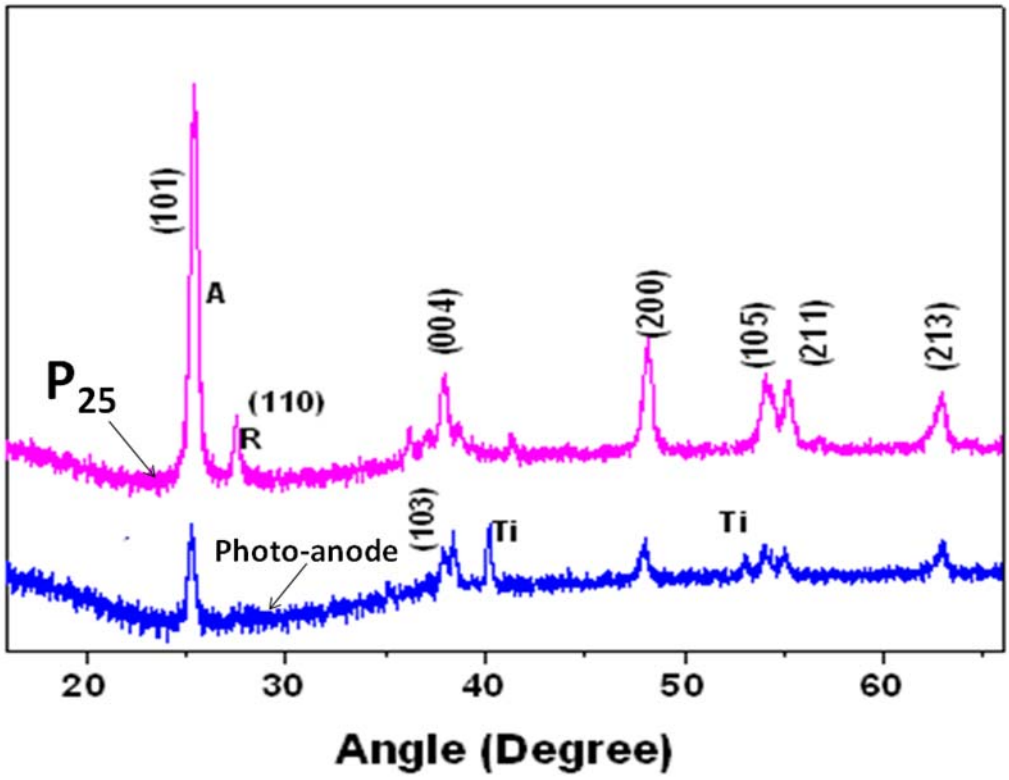

Fig.2. XRD characteristic of TiO_2 nanotube based photo-anode and commercail P25 nanopartiacle after annealing at 450 °C.

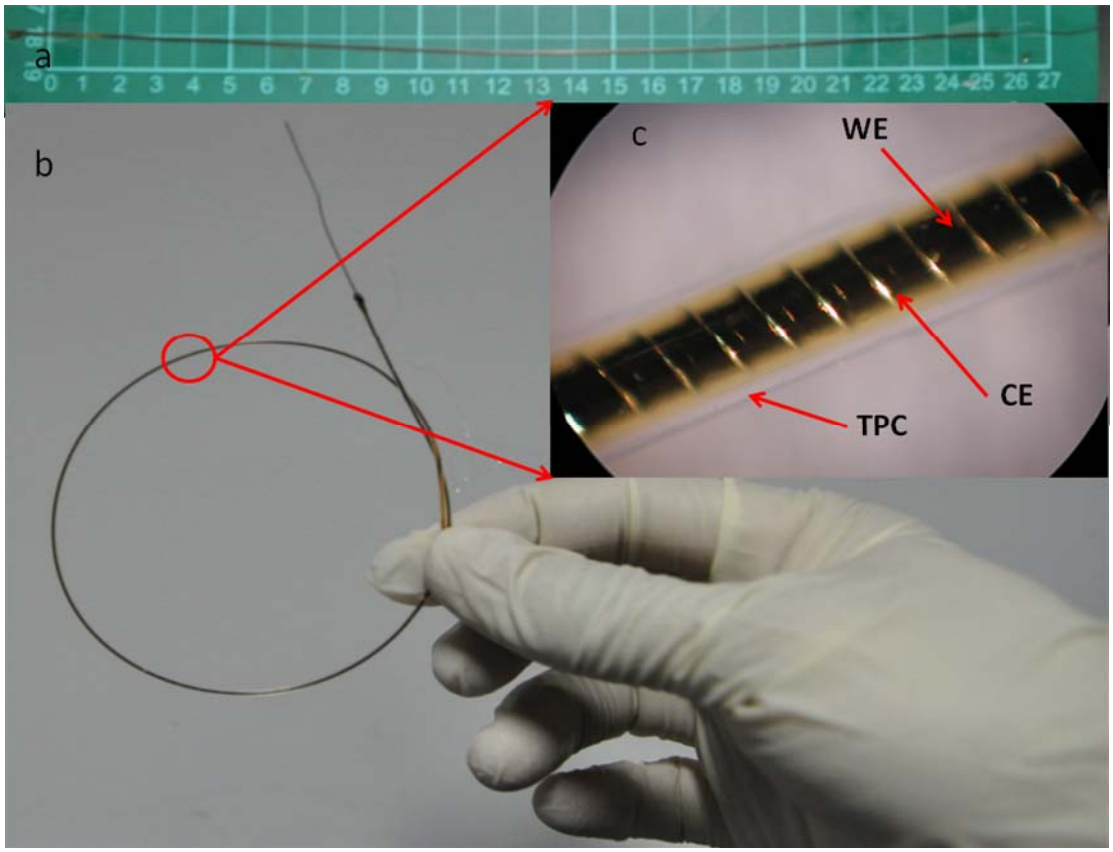

Fig.3. (a) Actual optical photo of a 24cm-long flexible fiber-shaped cell;(b) a flexible solar cell coil; (c) Internal structure of the flexible fiber-shaped cell under the optical microscope

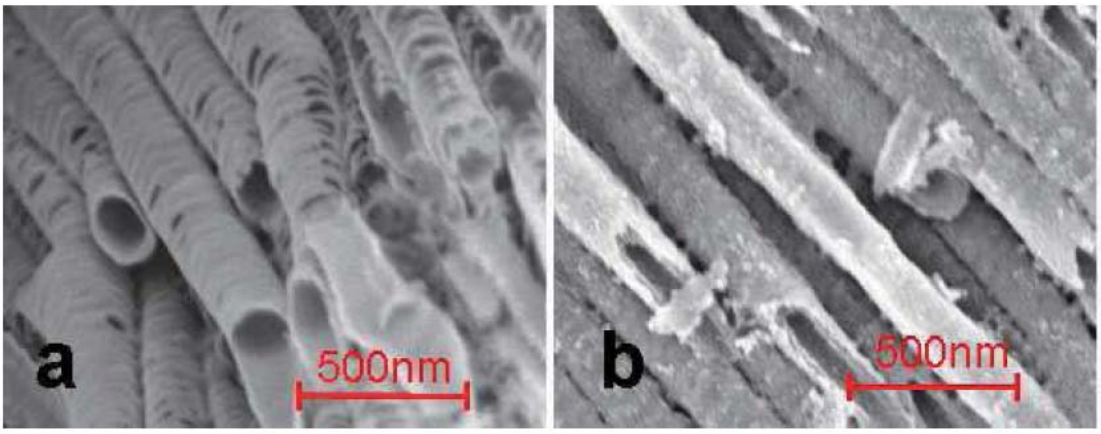

Fig4.(a)Side view of TiO_2 array before $TiCl_4$ Treated;(b) Side view of TiO_2 array after $TiCl_4$ treated.