Electronic Supplementary Information

MnO_2 modified TiN nanotube arrays on Ti mesh for flexible supercapacitors

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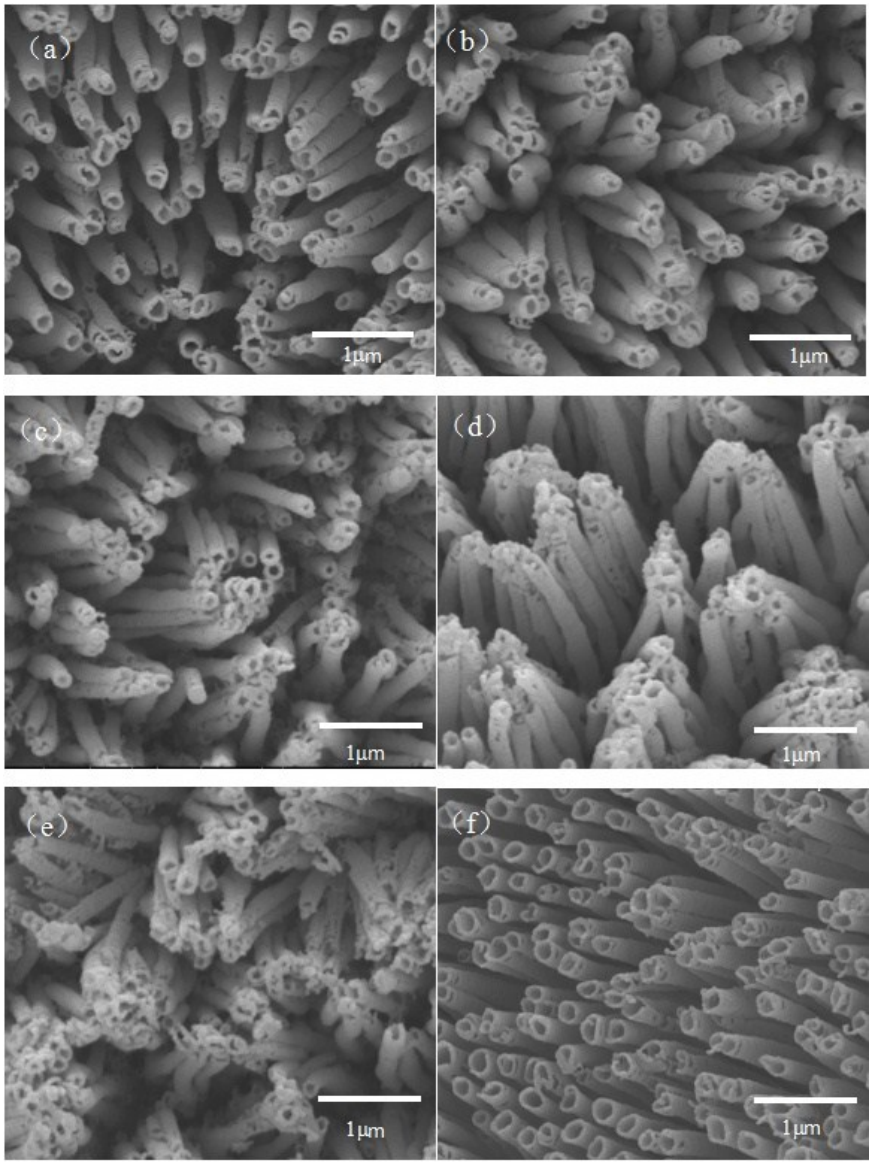

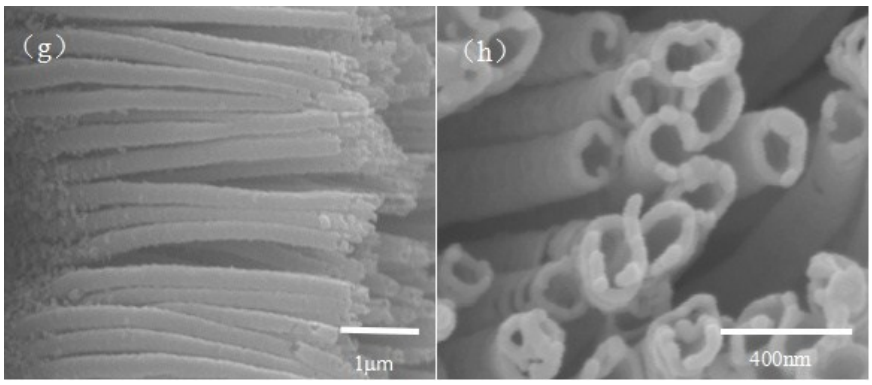

Fig.S1 SEM image of (a) 650ºC (b) 700ºC (c) 750ºC (d) 800ºC (e) 850ºC (f) original TiO_2 (g) cross section of original TiO_2 (h) pipe orifice of nanotube

Fig.S1 shows the TiO_2 nanotube arrays anneal under a series temperature in the NH_3 atmosphere, after annealing, the nanotube maintain the structure basically, some nanotubes tend to gather, with the temperature higher, the tendency more obvious, Fig.S2 shows the XRD pattern of the samples which are corresponding to the Fig.S1, in the Fig.S2, the diffraction peak of anarase disappear at 750 ^{o}C, so the sample with annealing under 750 ^{o}C is best choice.

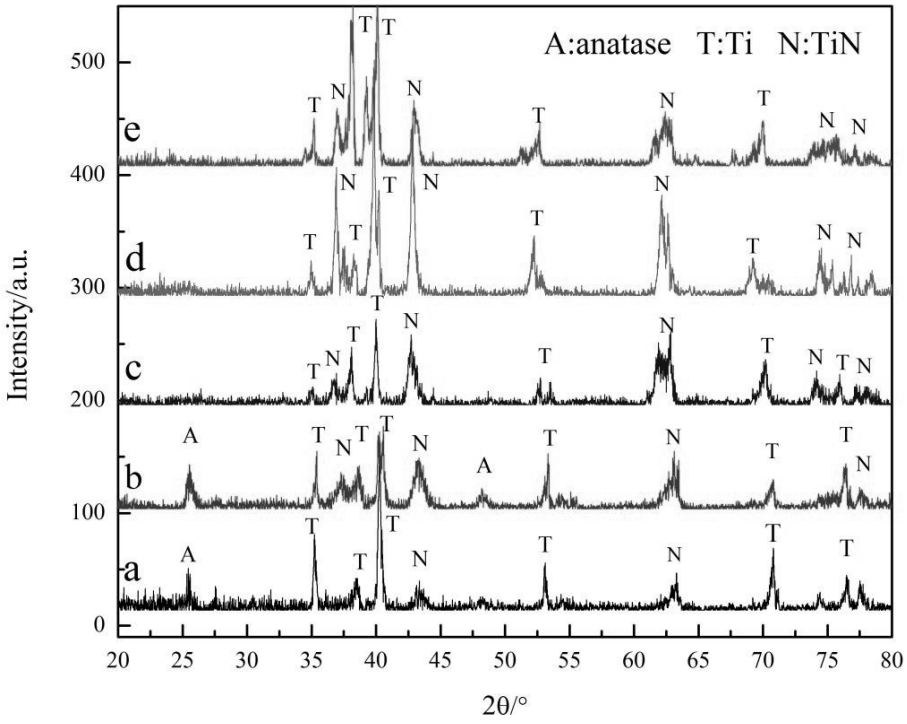

Fig.S2 XRD pattern of TiN for (a) 650ºC (b) 700ºC (c) 750ºC (d) 800ºC (e) 850ºC