Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Crystallization of amorphous anodized TiO_2 nanotube arrays

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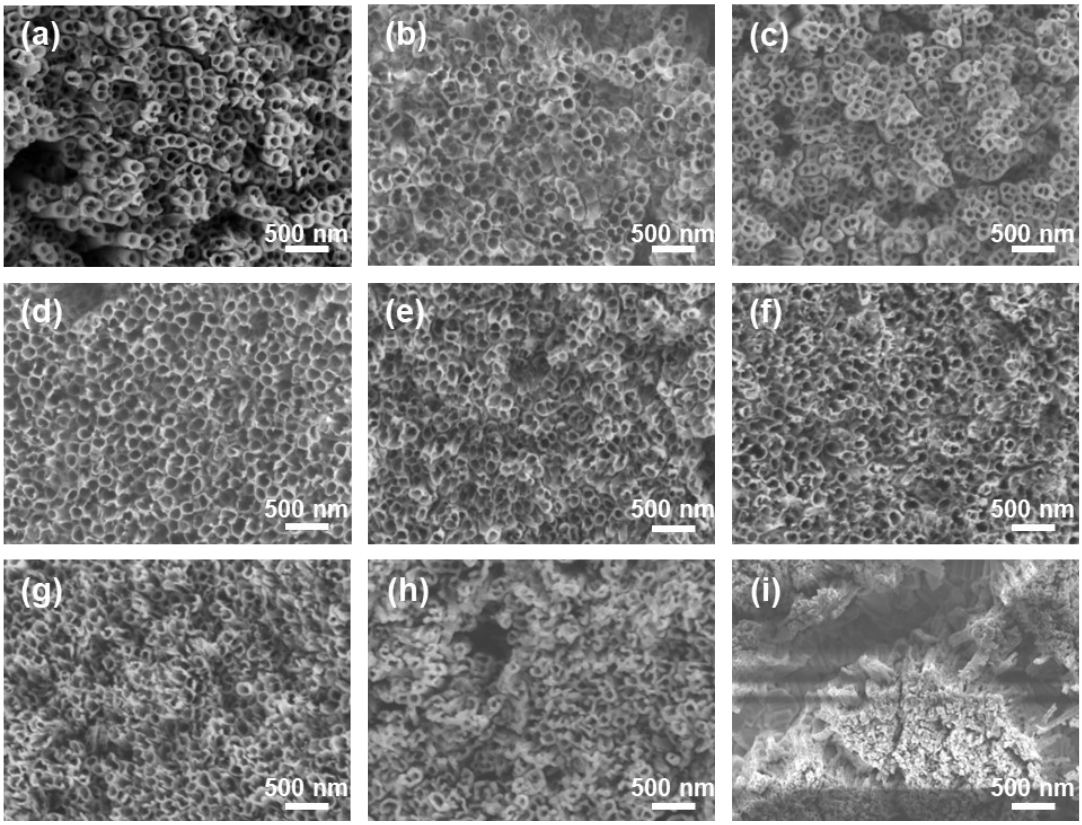

Fig. S1 SEM images of TNTAs grown for 5 h and annealed at different temperatures: (a) 100 ℃, (b) 200 ℃, (c) 300 ℃, (d) 400 ℃, (e) 500 ℃, (f) 600 ℃, (g) 700 ℃, (h) 800 ℃, (i) 900 ℃

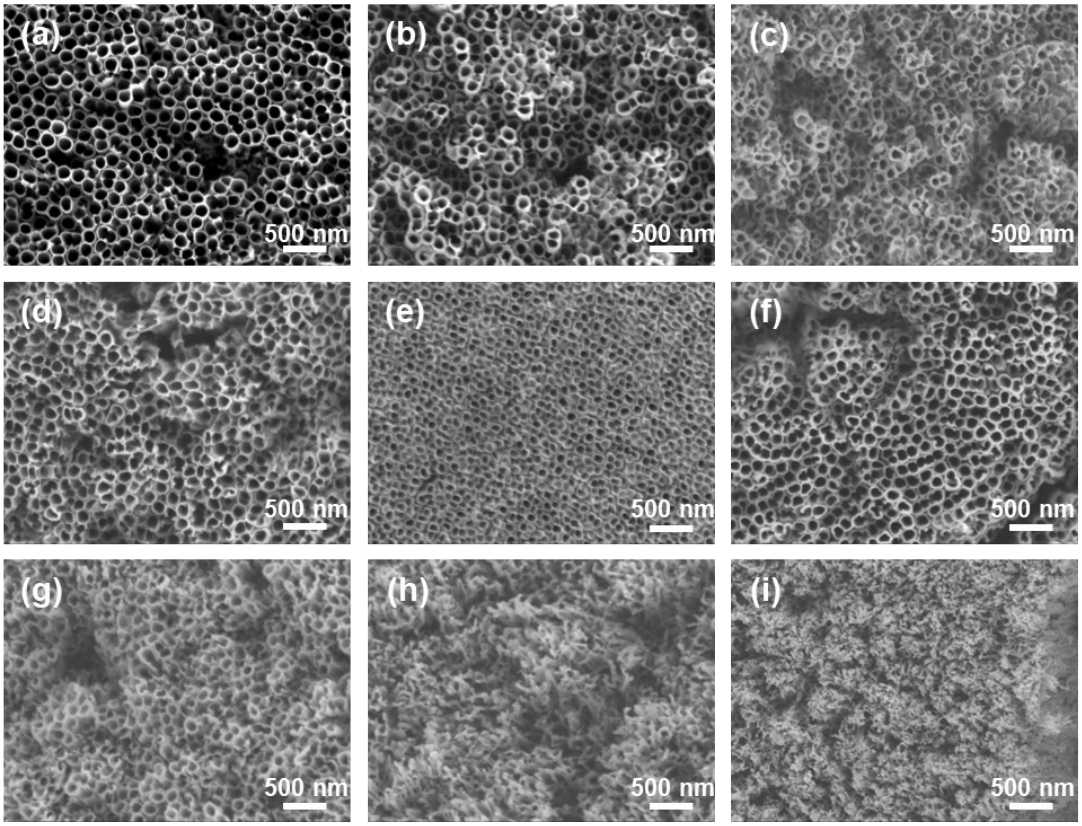

Fig. S2 SEM images of TNTAs grown for 10 h and annealed at different temperatures: (a) 100 ℃, (b) 200 ℃, (c) 300 ℃, (d) 400 ℃, (e) 500 ℃, (f) 600 ℃, (g) 700 ℃, (h) 800 ℃, (i) 900 ℃

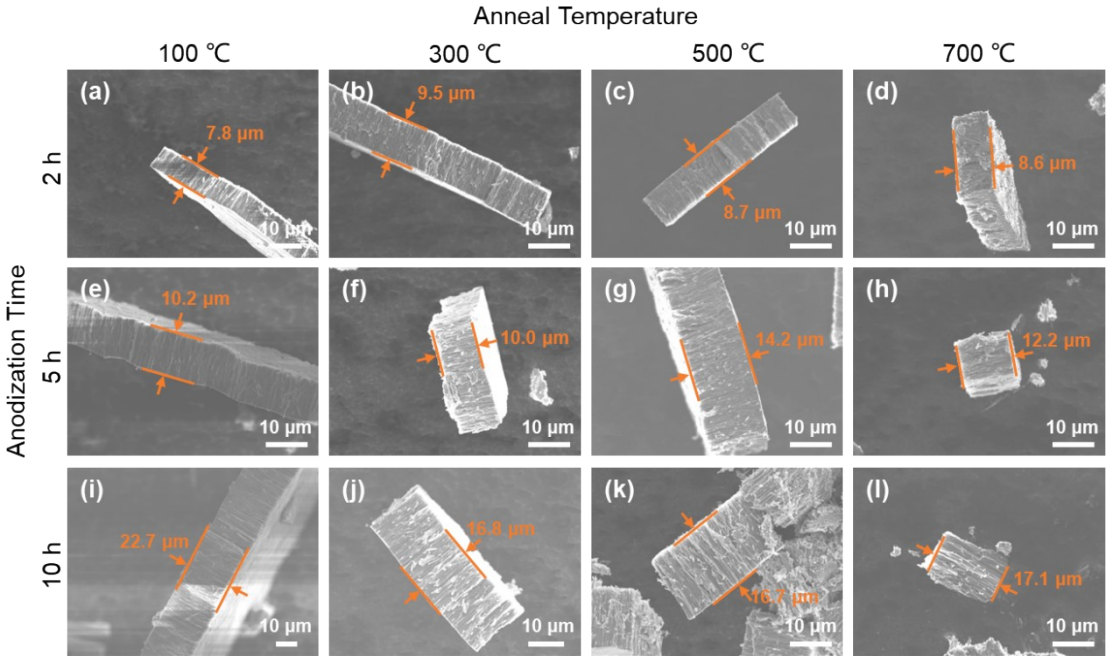

Fig. S3 SEM images of nanotubes with varying anodization times and annealing temperatures

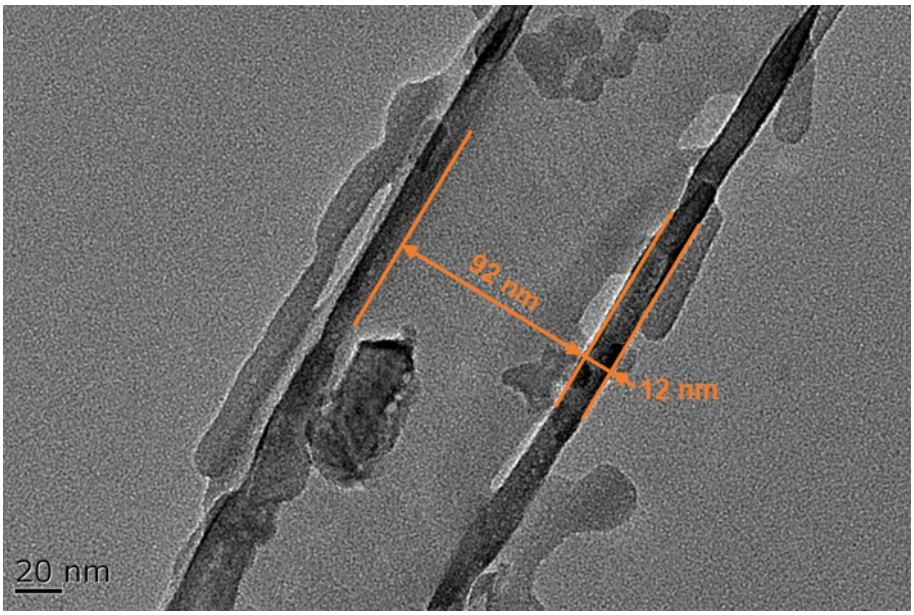

Fig. S4 SEM image of nanotubes anodized for 2 h without annealing

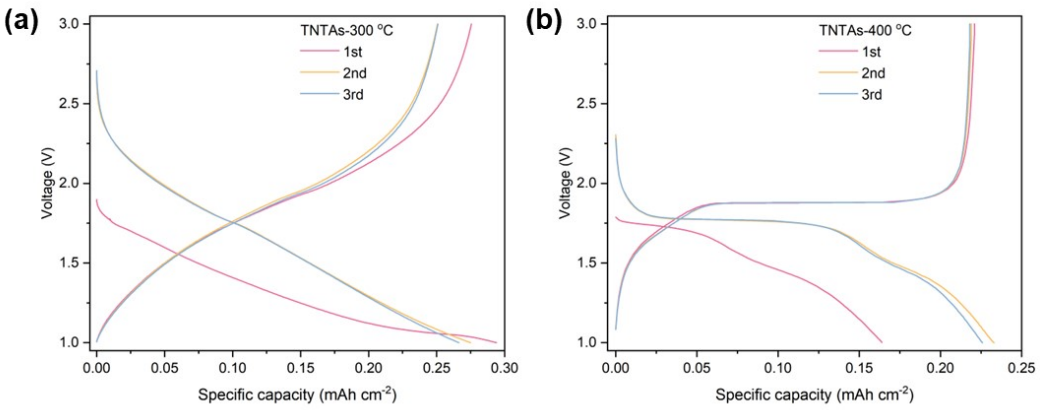

Fig. S5 Galvanostatic charge and discharge curves: (a) TNTAs annealed at 300 ℃ and (b) TNTAs annealed at 400 ℃ between 3.0 V and 1.0 V at 0.1 mA cm^{-2}

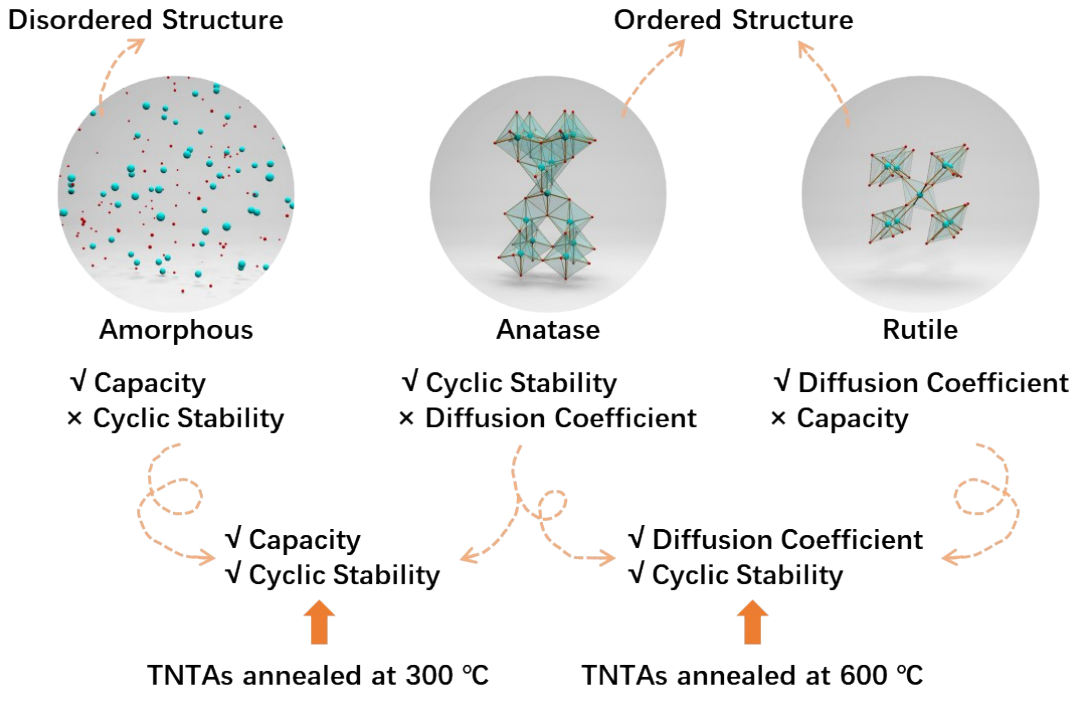

Fig. S6 The properties of TNTAs with different phases