Electronic Supplementary Material (ESI) for RSC Advances.

Hexagonal VO_2 Particles: Synthesis, Mechanism and Thermochromic Properties

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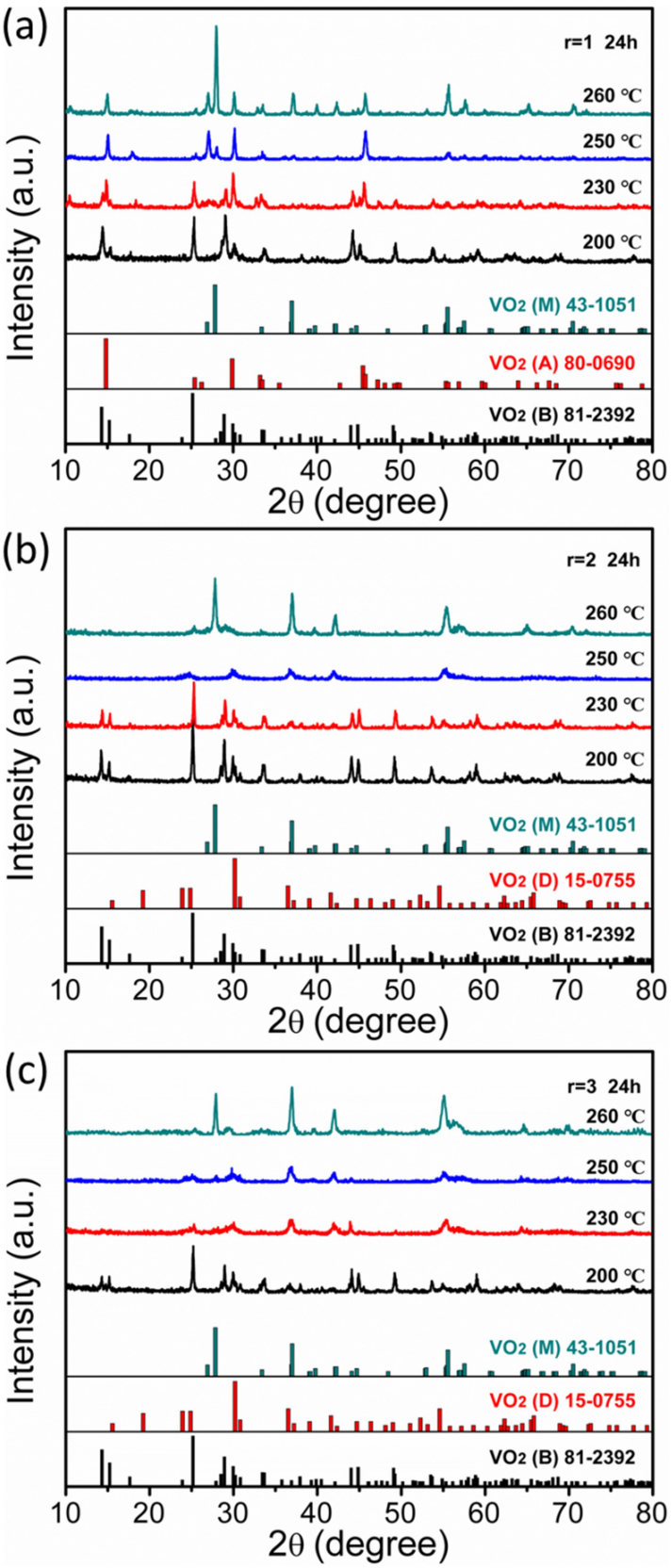

Fig. S1. (Color online) XRD patterns of samples obtained at different temperature and molar ratios (r) between $H_2C_2O_4$ and V_2O_5 for 24 h: (a) r=1, (b) r=2, (c) r=3.

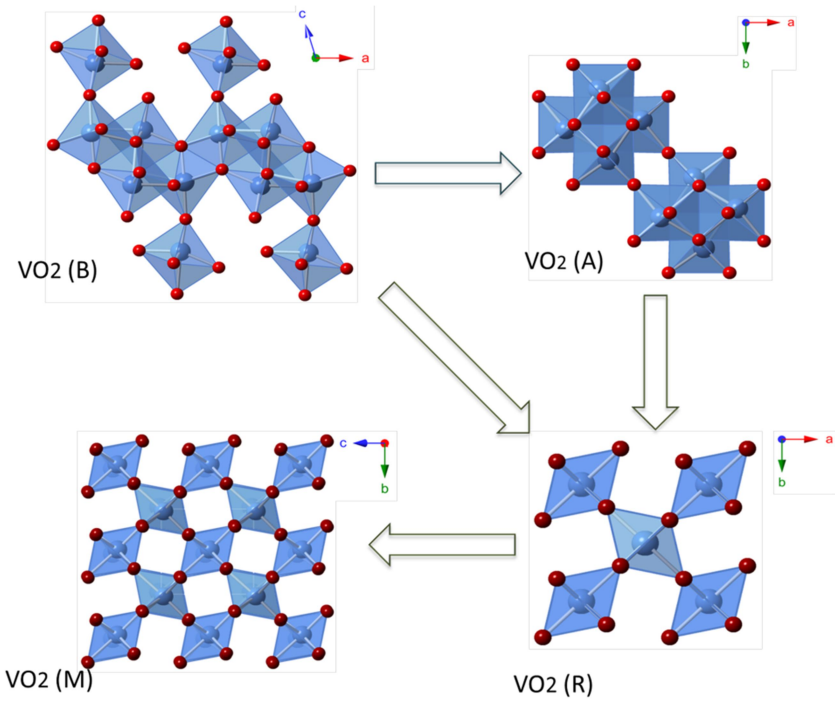

Fig. S2. (Color online) Schematic diagram of phase evolution of VO_2 polymorphs. Blue and red balls represent vanadium and oxygen atoms, respectively.

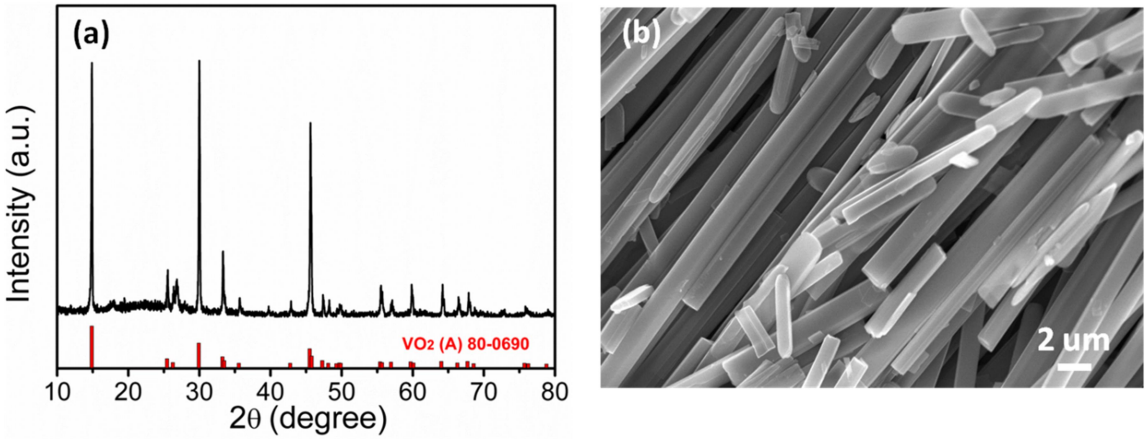

Fig. S3. (Color online) XRD SEM image of pure VO2 (A).

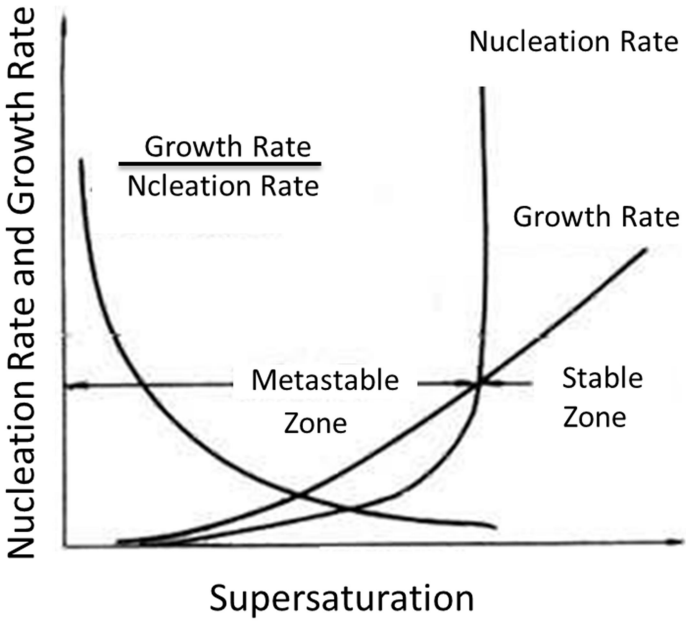

Fig. S4. (Color online) The relationship between supersaturation and crystal growth characterization in hydrothermal process.

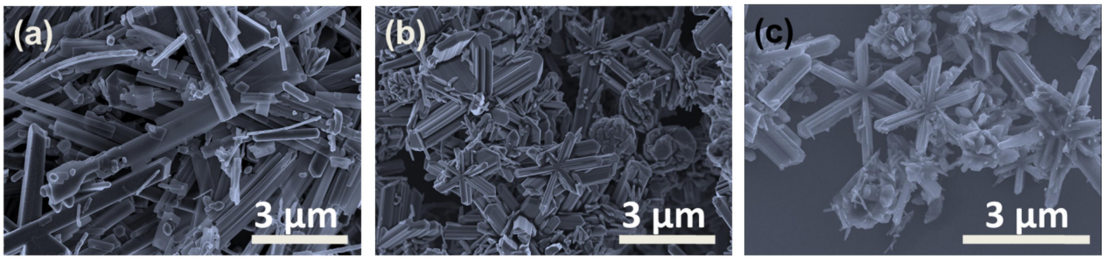

Fig. S5**.** The SEM images of samples annealed at 450 °C with (a) r=1, (b) r=2, (c)r=3, respectively.

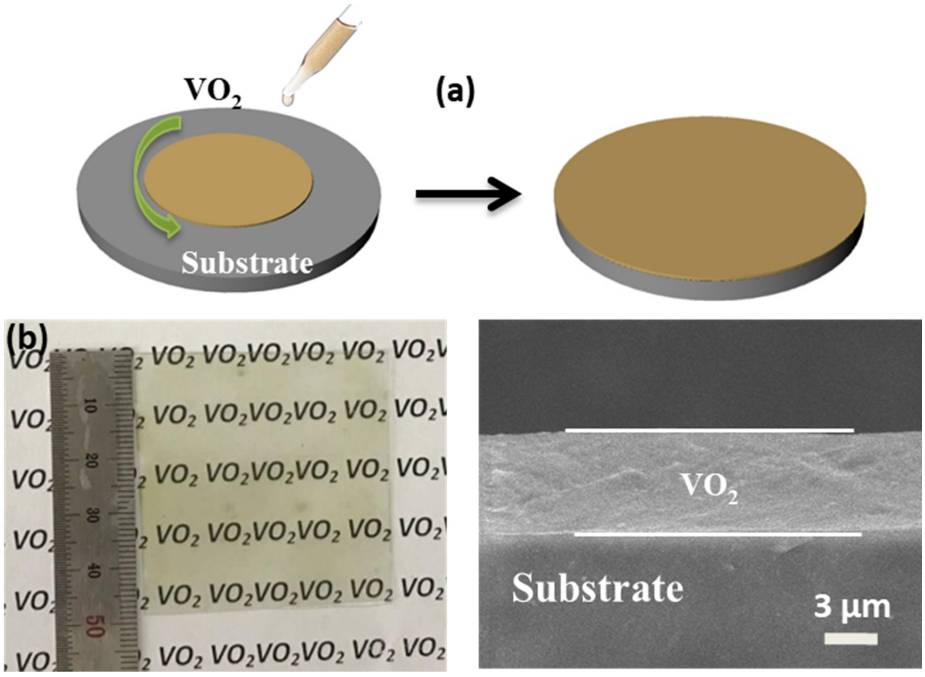

Fig. S6**.** (a) The fabricating process of VO_2 film, (b) Photographs of film, (c) the cross-sectional SEM image of the films.