

New Journal of Chemistry

Supplementary information

The effect of electrolytes on the electrochromic performance of nickel-substituted tungstophosphate and TiO₂ nanowires composite film

Shuping Liu^{a*}, Xiaowen Su^a, Dongxue Chu^b, Chao Ma^b, Yu Fu^b, Xiaoshu Qu^b, Jiahui Lu^a, Huanan Guan^a

^aCollege of Tourism and Cuisine, Harbin University of Commerce, Harbin City, 150028, P. R. China. ^bJiLin Institute of Chemical Technology, JiLin City, 132073, P. R. China.

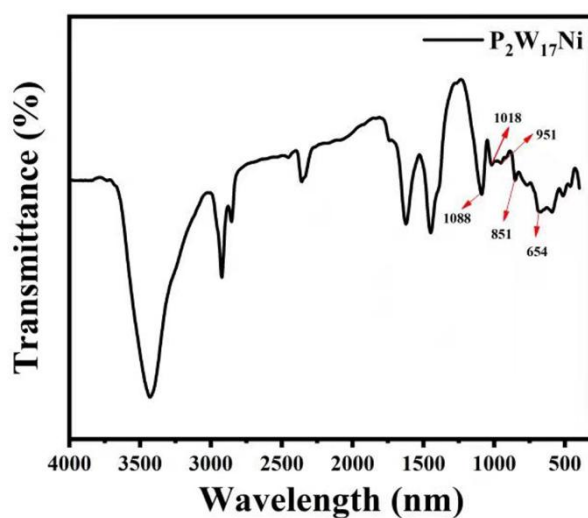


Figure S1. The IR spectra of P₂W₁₇Ni.

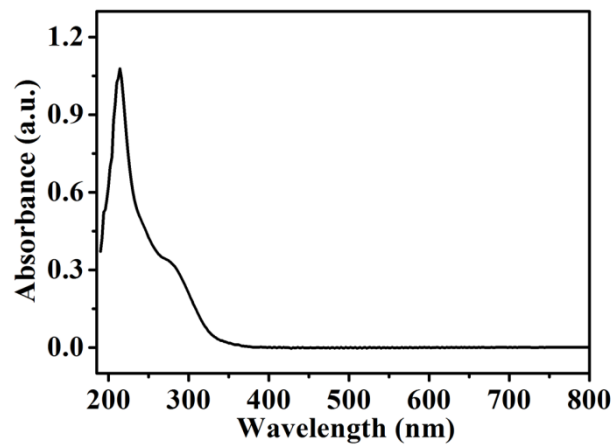


Figure S2. The UV-vis spectra of $P_2W_{17}Ni$ solution.

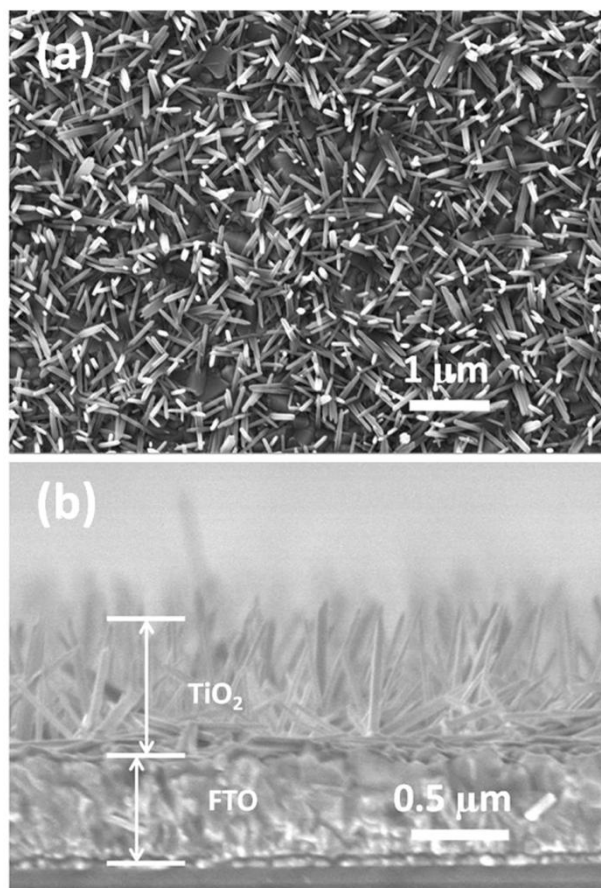


Figure S3. (a) Top-view SEM and (b) cross-section SEM images of TiO_2 nanowires.

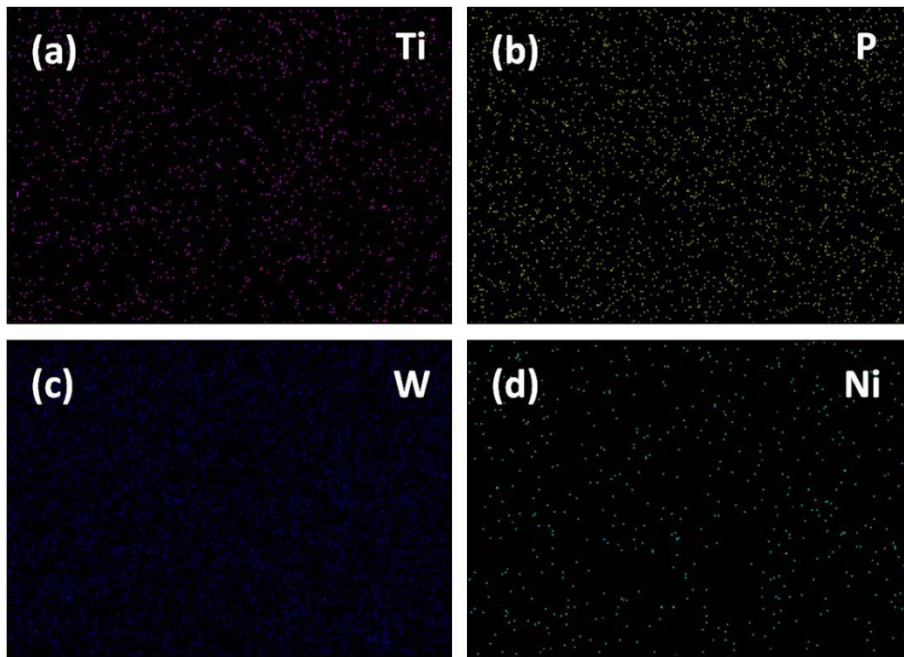


Figure S4. (a-d) EDS mapping images of the $\text{TiO}_2\text{-P}_2\text{W}_{17}\text{Ni}$ film for Ti, P, W and Ni, respectively.

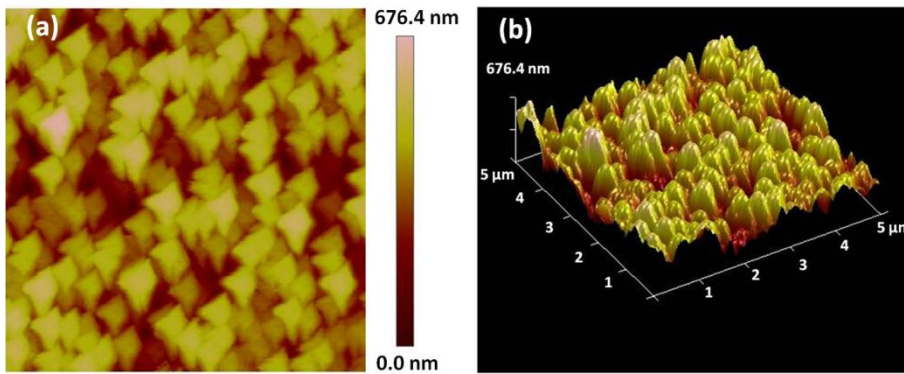


Figure S5. (a) 2D AFM and (b) 3D AFM images of TiO_2 nanowires.

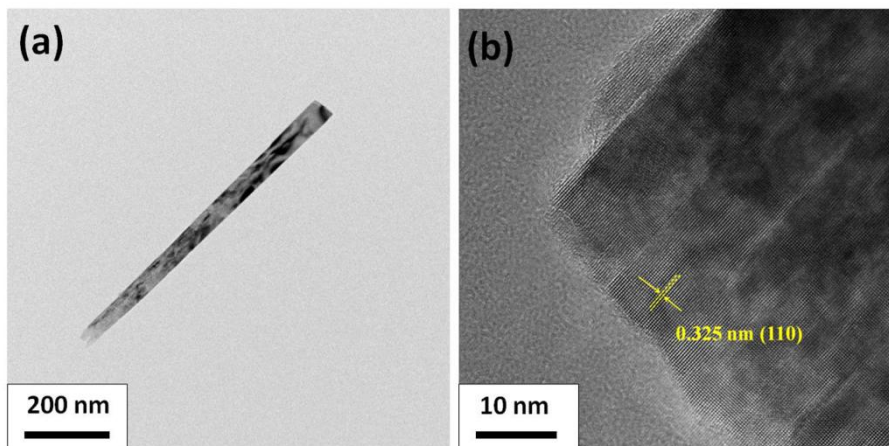


Figure S6. (a) TEM and (b) HRTEM images of TiO₂ nanowires.

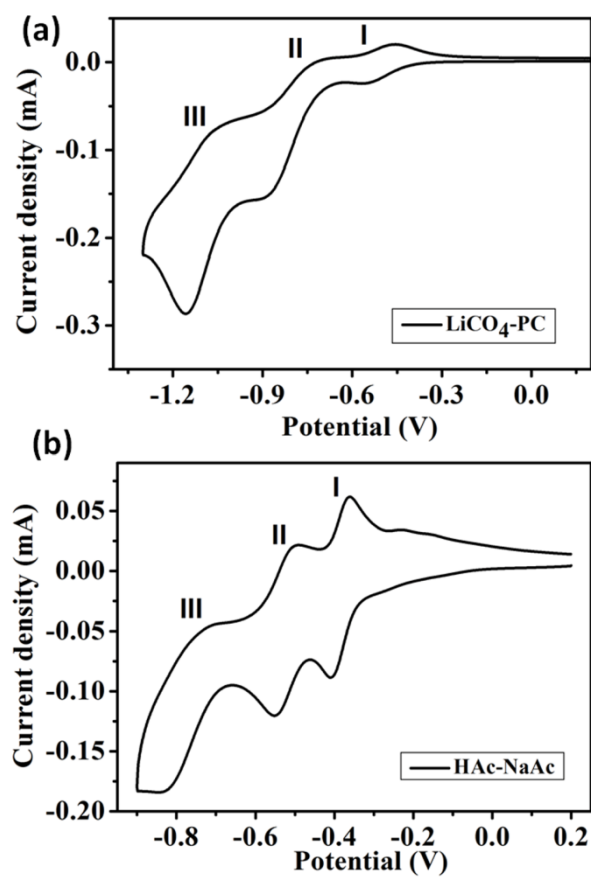


Figure S7. CV curves of P₂W₁₇Ni in (a) LiClO₄-PC solution and (b) HOAc-NaAc buffer solution (pH = 3.5).