Supporting Information

Surfactant-assisted hydrothermal synthesis and electrochemical properties of nanoplates-assembled 3D flower-like $Cu_3V_2O_7(OH)_2 \cdot 2H_2O$ microstructures

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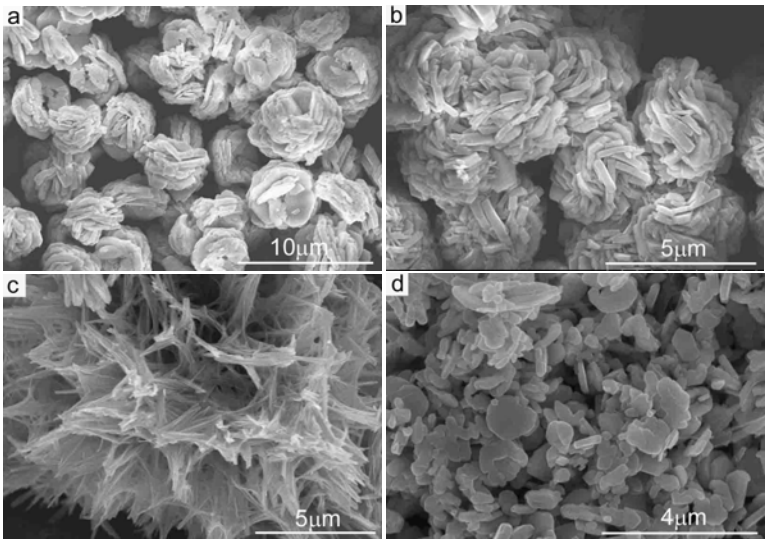

Fig. S1. SEM images of the products obtained at 80ºC for 24h without any additives (a) and with different additives (b) CPC, (c) SDS, (d) P123.

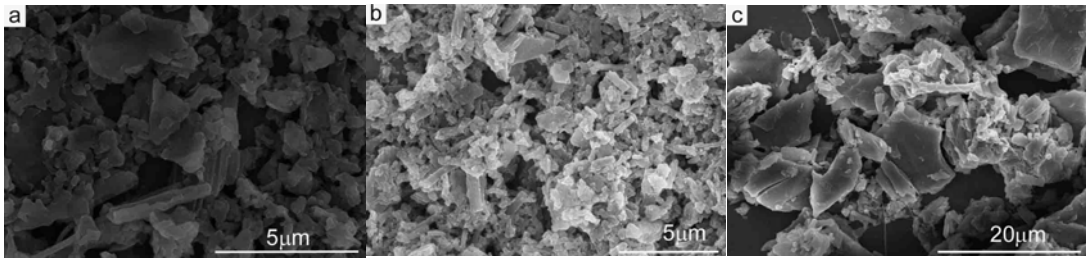

Fig. S2. SEM images of the samples prepared from the system with different copper sources : (a) $CuSO_4 \cdot 5H_2O$, (b) $CuCl_2 \cdot 2H_2O$, and (c) $Cu(NO_3)_2 \cdot 5H_2O$.

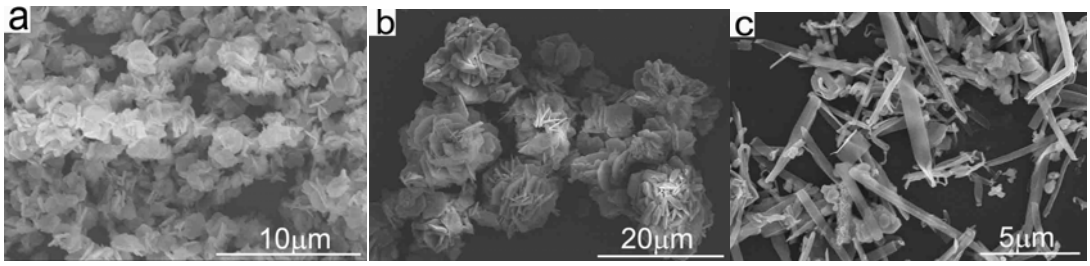

Fig. S3. SEM image of the products obtained under different reaction temperature: (a) 50 ºC, (b) 160 ºC, and (c) 180 ºC.

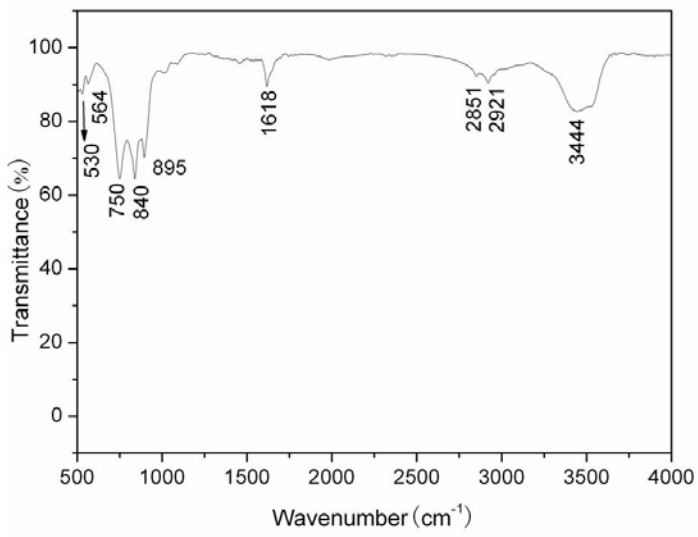

Fig. S4. FT-IR spectrum of the as-prepared $Cu_3V_2O_7(OH)_2 \cdot 2H_2O$ samples.

Bands at 2921 and 2851cm^{-1} can be attributed to the characteristic frequencies of residual CTAB. The bands centered at 3443 and 1617 cm^{-1}can be due to the water absorbed on the surface of the samples. 895, 840, 750, 564 and 530 cm^{-1} attributed to tetrahedral VO_4 and octahedral CuO_6 vibration modes.