Formation of copper vanadate nanobelts and the electrochemical behaviors for the determination of ascorbic acid

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Fig. S1 shows the SEM image and EDS spectrum of the copper vanadate nanobelts. It is

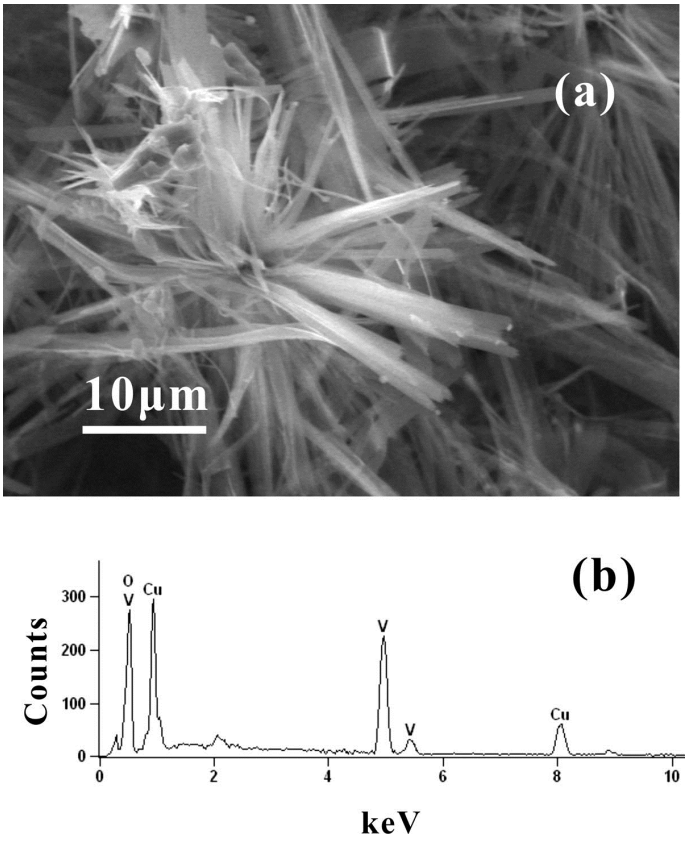

Fig. S1 (a) SEM image of the copper vanadate nanobelts.
(b) EDS spectrum of the copper vanadate nanobelts

shown that the products are composed of Cu, V and O.

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Fig. S2 shows the SEM images of the copper vanadate products with different magnifications obtained from 180℃ for 24 h using copper acetate and sodium vanadate as the raw materials, 3wt.% PVP as the surfactant. It is shown that the products consist of rod-shaped morphology with the diameter of sub-microscale and nanoscale size without adjusting the pH value.

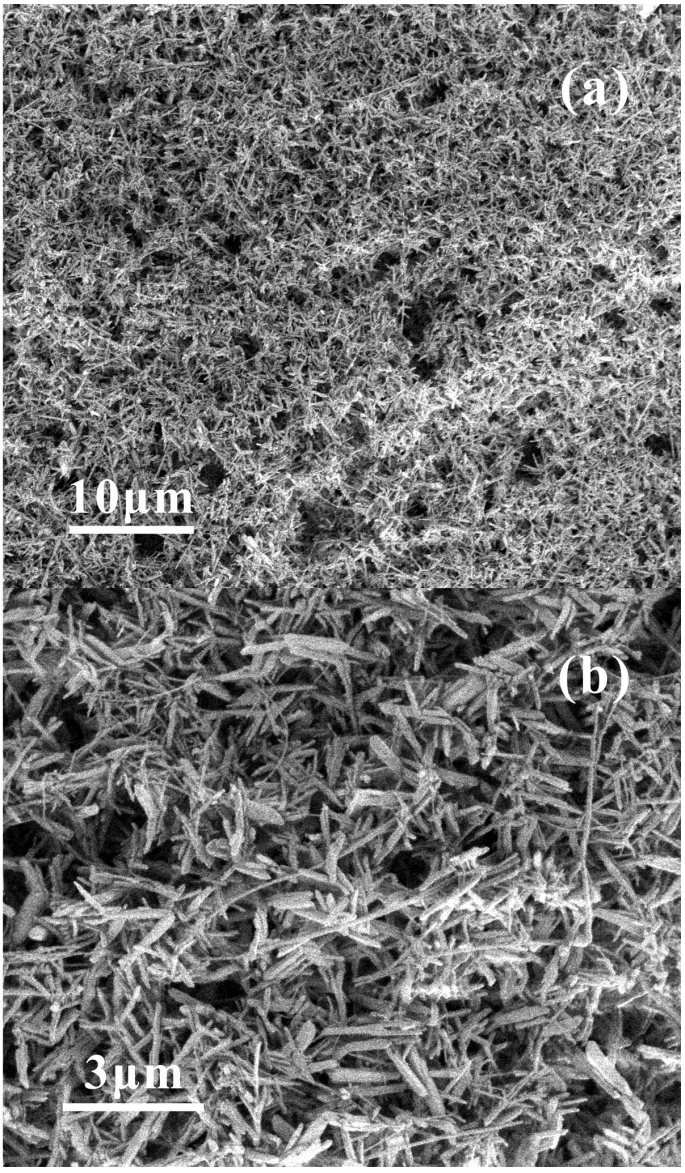

Fig. S2 SEM images of the copper vanadate products with different magnifications obtained from 180℃ for 24 h using copper acetate and sodium vanadate as the raw materials, 3wt.% PVP as the surfactant

Fig. S3 shows the SEM images of the copper vanadate products obtained from 180℃ for 24 h, pH=2 using PVP with different concentrations, copper acetate and sodium vanadate as the raw materials.

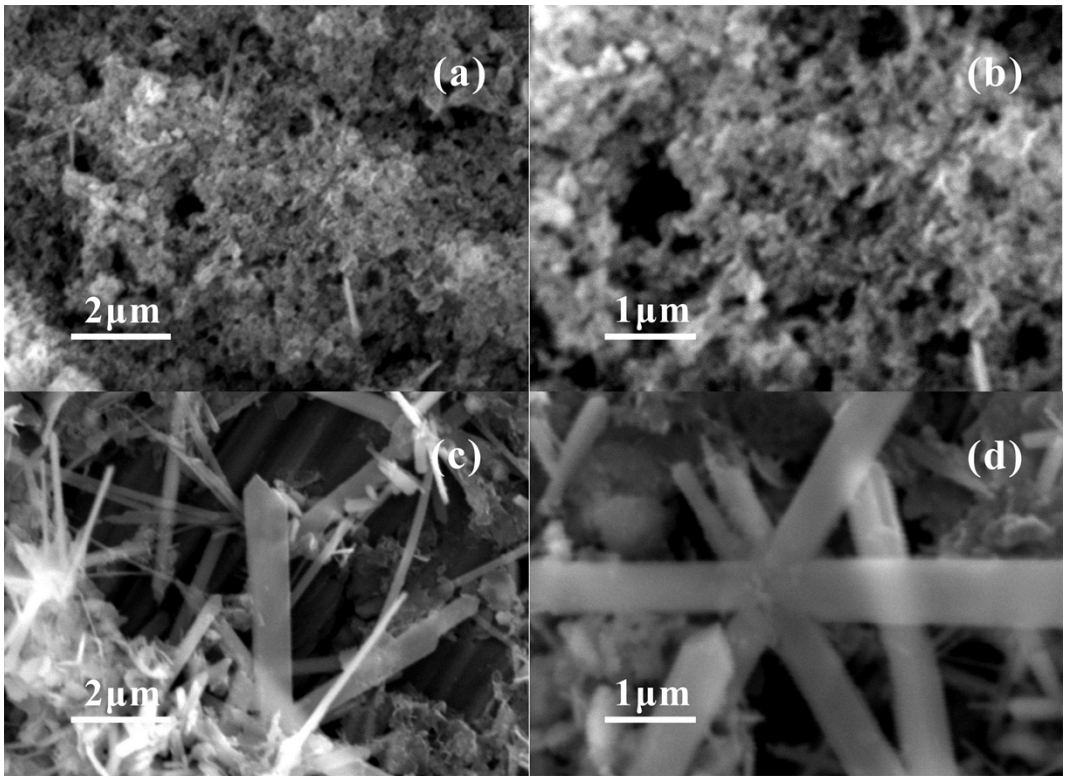

Fig. S3 SEM images of the copper vanadate products obtained from 180℃ for 24 h, pH=2 using PVP with different concentrations, copper acetate and sodium vanadate as the raw materials. (a) and (b) PVP 0.1wt.%, (c) and (d) PVP 1wt.%

Fig. S4 shows the SEM images of the copper vanadate products obtained from 180℃ for different duration times, pH=2 using 3wt.% PVP as the surfactant, copper acetate and sodium vanadate as the raw materials.

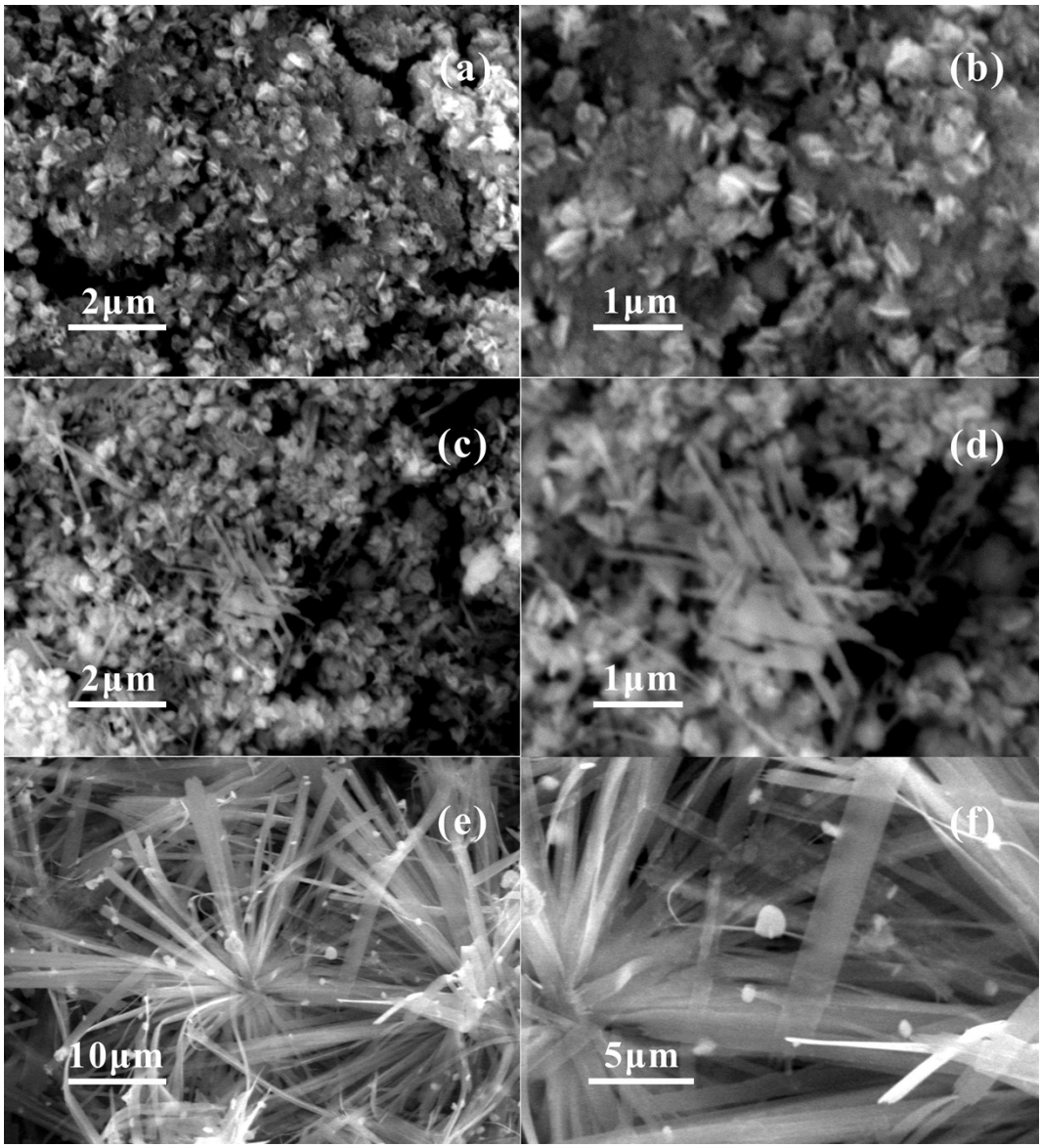

Fig. S4 SEM images of the copper vanadate products obtained from 180℃ for different duration times, pH=2 using 3wt.% PVP as the surfactant, copper acetate and sodium vanadate as the raw materials. (a) and (b) 0.5 h, (c) and (d) 6 h, (e) and (f) 12 h

Fig. S5 shows the SEM images of the copper vanadate products obtained from different temperatures for 24 h, pH=2 using 3wt.% PVP as the surfactant, copper acetate and sodium vanadate as the raw materials.

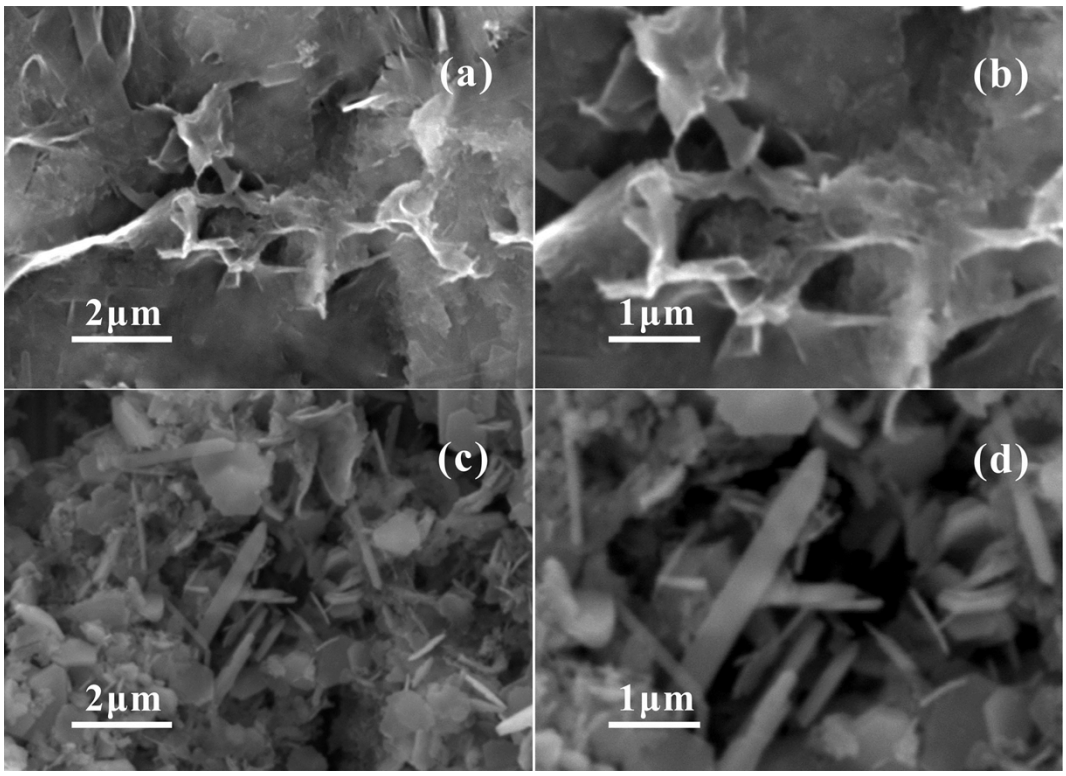

Fig. S5 SEM images of the copper vanadate products obtained from different temperatures for 24 h, pH=2 using 3wt.% PVP as the surfactant, copper acetate and sodium vanadate as the raw materials. (a) and (b) 80℃, (c) and (d) 120℃