

Supporting document for

Synthesis, Characterization and Optical Properties of Flower-like Tellurium

Shun Wang ^{a*} Weipeng Guan ^a Dekun Ma ^a Xian Chen ^a Li Wang ^b
Shaoming Huang ^{a*} Jichang Wang ^{c*}

^a Nano-materials & Chemistry Key Laboratory, Wenzhou University, Wenzhou, Zhejiang, China
325027;

^b Department of Physics, Wenzhou University, Wenzhou, Zhejiang, China 325027;

^c Department of Chemistry and Biochemistry, University of Windsor, ON, Canada N9B 3P4

* corresponding authors: shunwang@wzu.edu.cn, fax: 86-577-88373111.
smhuang@wzu.edu.cn, fax: 86-577-88373064.
jwang@uwindsor.ca; fax 1-519-973-7098.

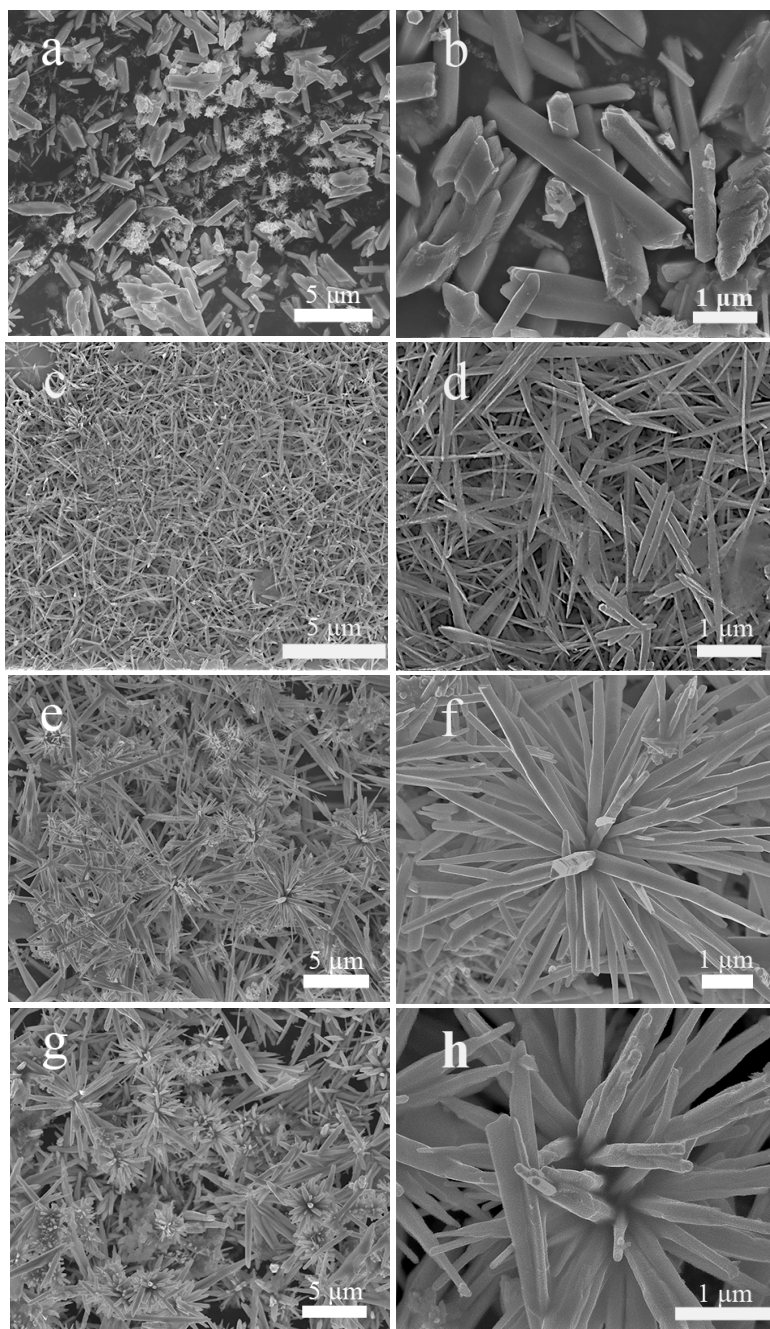


Figure S1. SEM images of the samples obtained at different NaOH concentrations: (a, b) 0.23 mol.L⁻¹, (c, d) 0.46 mol.L⁻¹, (e, f) 1.40 mol.L⁻¹ and (g, h) 2.32 mol.L⁻¹.

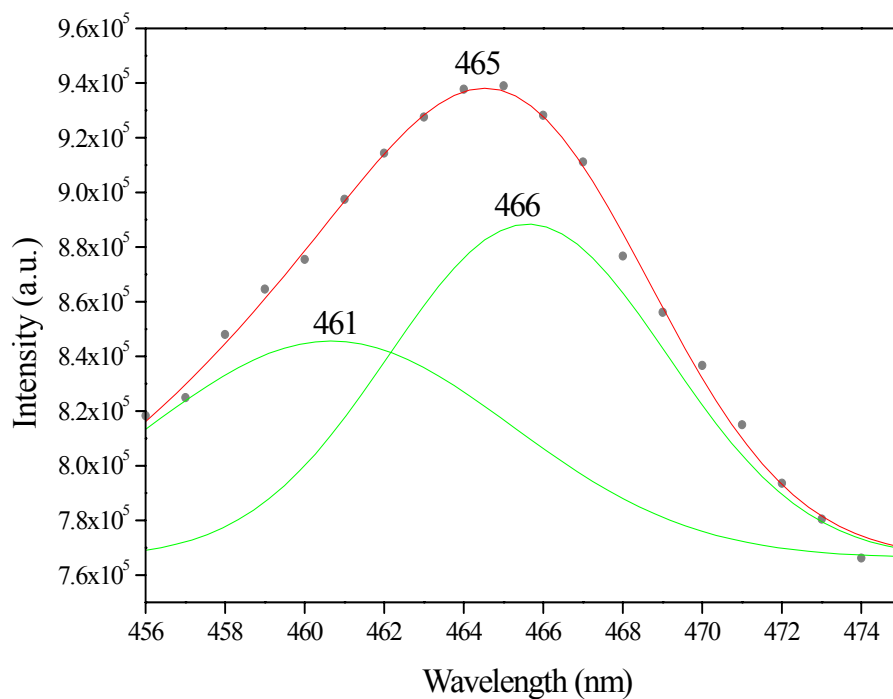


Figure S2. Photoluminescence emission spectrum of Te 3D flower-like superstructures with an excitation wavelength of 341 nm. The deconvolution of the emission band gave two Gaussian components (green lines) with peaks located at 461 and 466 nm.

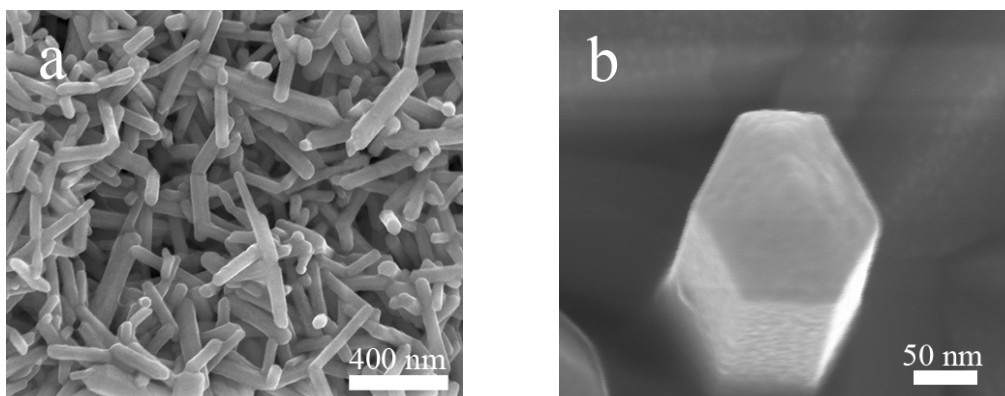


Figure S3. (a) Low-magnification and (b) high-magnification SEM images of tellurium nanocrystals synthesized in the presence of 0.15 g PVP at 120 °C for 3 h.