Supplementary Materials

An Electrospun Porous $CuBi_2O_4$ Nanofiber Photocathode for Efficient Solar Water Splitting

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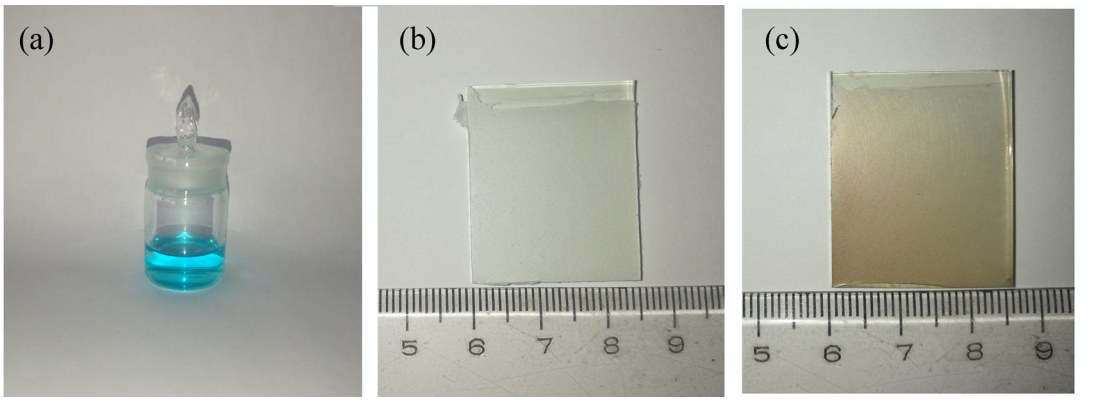

Figure S1. Digital micrograph of (a) solution precursor, (b) PVP-$CuBi_2O_4$ nanofiber mat before annealing and (c) $CuBi_2O_4$ nanofiber mat after annealing

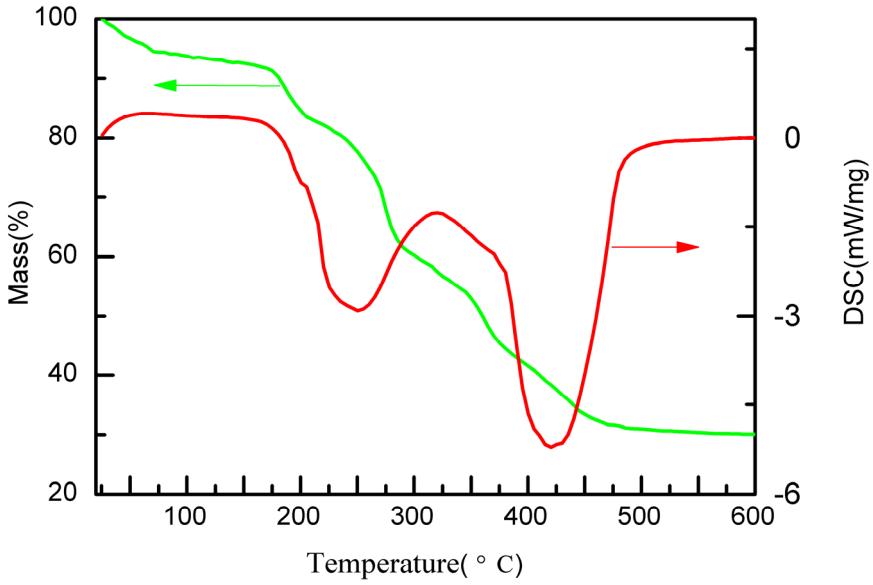

Figure S2. TG-DSC curve of the crystallization of $CuBi_2O_4$ nanofiber

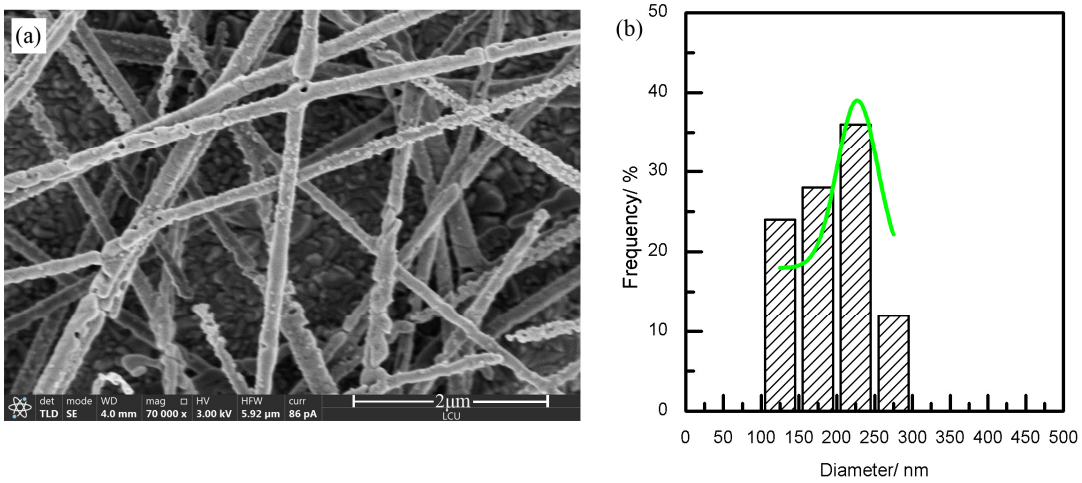

Figure S3. $CuBi_2O_4$ nanofiber (a) SEM, (b) corresponding diameter distribution

Table S1. Comparison of photocurrent data reported in the literature with the photocurrent value obtained in the present study

Fabrication method	Photocathode	Band gap(eV)	Performance (at 0.6 V RHE)	Ref
Pulsed laser deposition	pristine nanofilm	1.92	0.02 mA/cm^2	1
electrochemical deposition	nanoparticle film	1.6	0.06 mA/cm^2	2
Spray pyrolysis	pristine nanofilm	1.46	<0.30 mA/cm^2	3
drop casting	nanotextured films	1.82	0.09 mA/cm^2	4
drop casting	porous films with Cu:Bi=0.55	1.67	0.14 mA/cm^2	5
drop casting	nanofilm consist of open windows and struts	1.5	0.15 mA/cm^2	6
Electrospun	**pristine nanofiber**	**1.8**	**0.12 mA/cm^2**	**This work**
drop-casting	nanofilm with gradient self-doping	/	0.50 mA/cm^2	7
Electrospun	**nanofiber decorated with Pt**	**1.8**	**0.21 mA/cm^2**	**This work**

Reference

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