Supporting Information

A fast and simplified synthesis of cuprous oxide nanoparticals: anneal studies and photocatalytic activity

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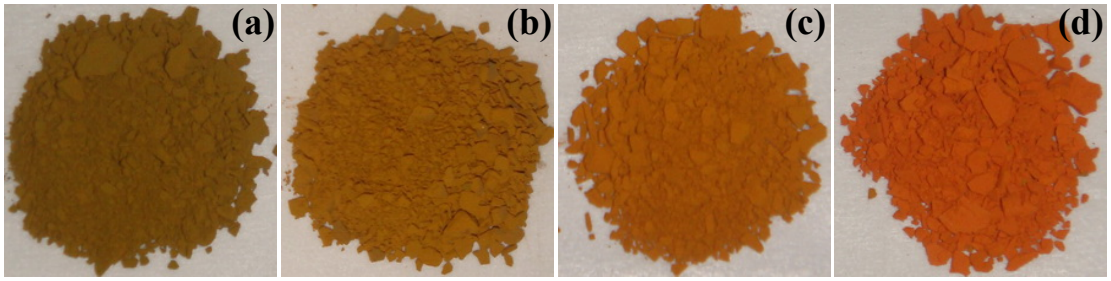

Figure S1 The photographs of Cu_2O NPs annealed at (a) 200, (b) 300, (c) 400, and (d) 500℃ under N_2 atmosphere for 2h.

Table S1 The peak height/area, peak height/area ratio of planes (111) and (200) for samples 1-5, respectively.

Samples	1	2	3	4	5
PH/A* (111)	186.1/285.2	188.2/286.1	594.2/577.7	1868.2/751.7	2519.4/982.16
PH/A ratio (111)	0.65	0.66	1.03	2.49	2.56
PH/A (200)	67.5/110.8	67.5/111.6	163.3/216.9	560.0/298.0	682.9/388.5
PH/A ratio (200)	0.61	0.61	0.75	1.87	1.75

* PH/A= peak height/area

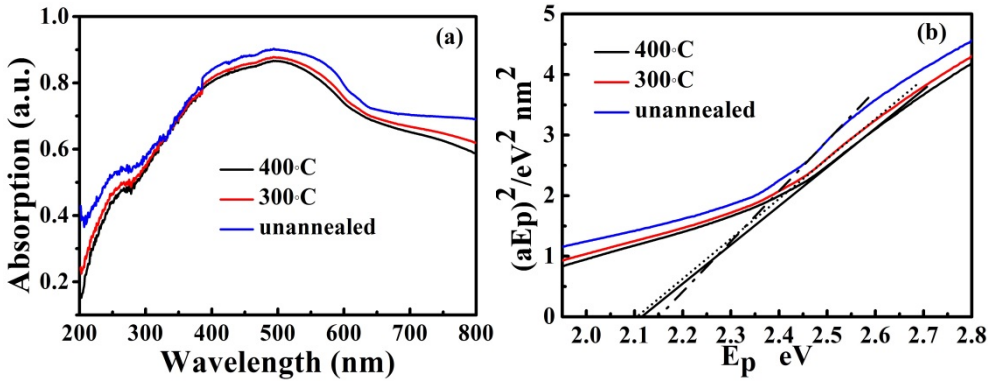

Figure S2 (a) The UV-vis diffuse reflectance spectra for unannealed Cu_2O NPs, and Cu_2O NPs annealed at 300 and 400 ℃, and (b) their corresponding $(\alpha Ep)^2$ vs Ep curves, respectively.

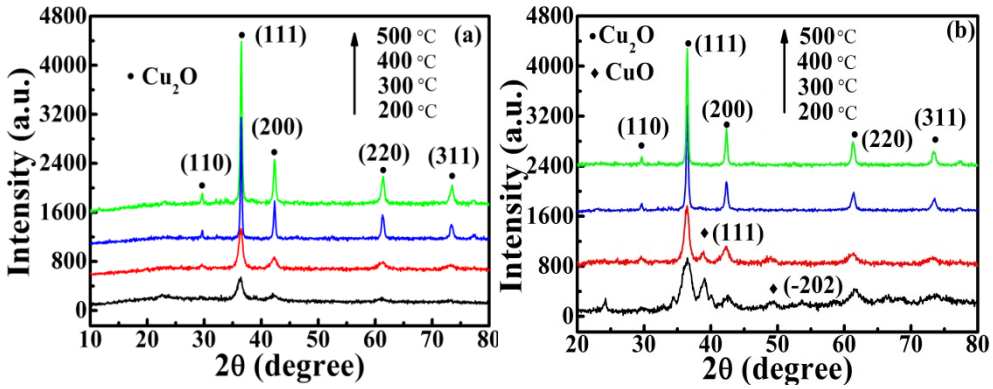

Figure S3 XRD patterns of samples 2-5 (a) before and (b) after PC experiments.