## **Supporting information**

## Reduction-Induced Synthesis of Reduced Graphene Oxide-Wrapped Cu<sub>2</sub>O/Cu Nanoparticles for Photodegradation of Methylene Blue

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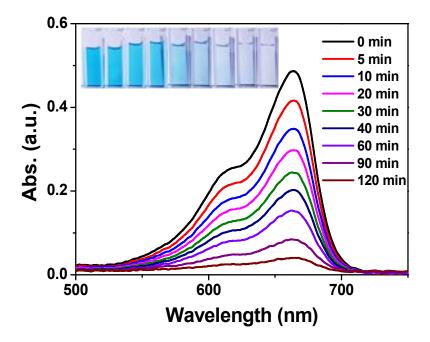
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**Figure S1** Absorption spectra of  $Cu_2O/rGO$  composites having the reducing duration of 30 min and the inset shows the digital photographs of MB solution when irradiated to light with  $Cu_2O/rGO$  composite produced at 30 min of reducing duration with ascorbic acid from the beginning to 120 min

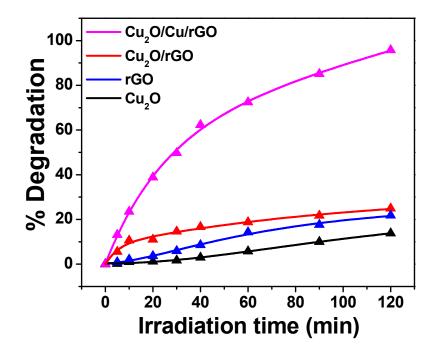


Figure S2 Percentage degradation of MB under the irradiation of visible light with Cu<sub>2</sub>O, rGO, Cu<sub>2</sub>O/rGO and Cu<sub>2</sub>O/Cu/rGO and composite

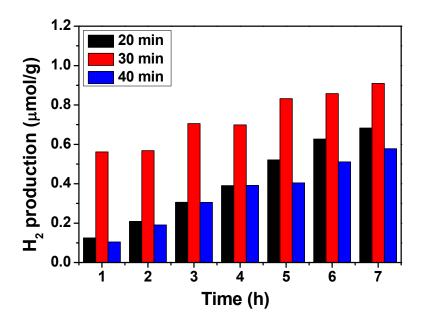


Figure S3  $H_2$  evolution rate of the Cu<sub>2</sub>O/Cu/rGO composite synthesized at different reduction durations (20, 30, 40 min)

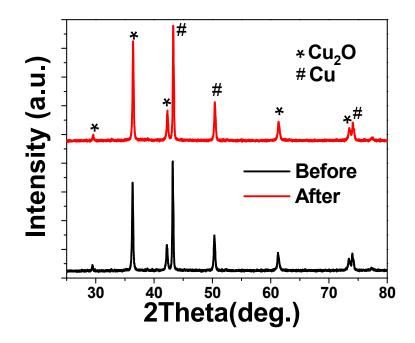


Figure S4 XRD patterns of chemically synthesized  $Cu_2O/Cu/rGO$  nanocomposite before and after the  $H_2$  evolution process (irradiation time was 8 hrs.)