

Supporting Information. (To be published in New Journal of Chemistry.)

**Low temperature Decomposition of Ozone by Facilely
Synthesized Cuprous Oxide Catalyst**

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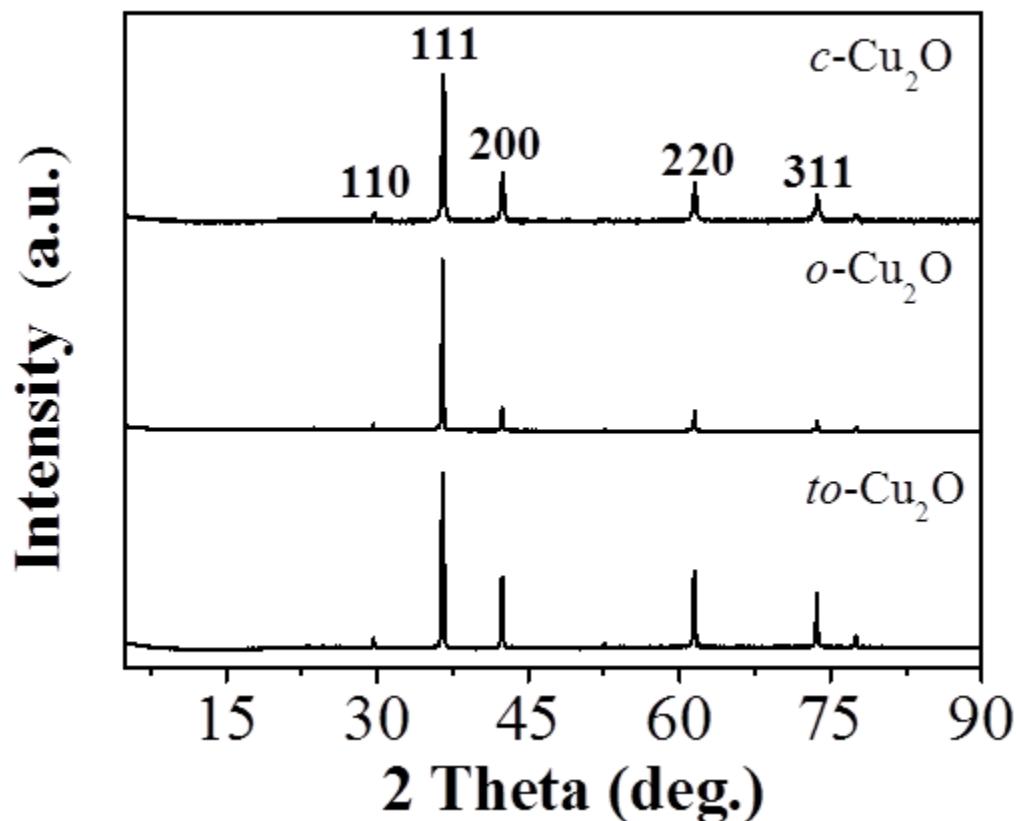


Figure S1. XRD patterns of Cu₂O crystals synthesized with various morphologies

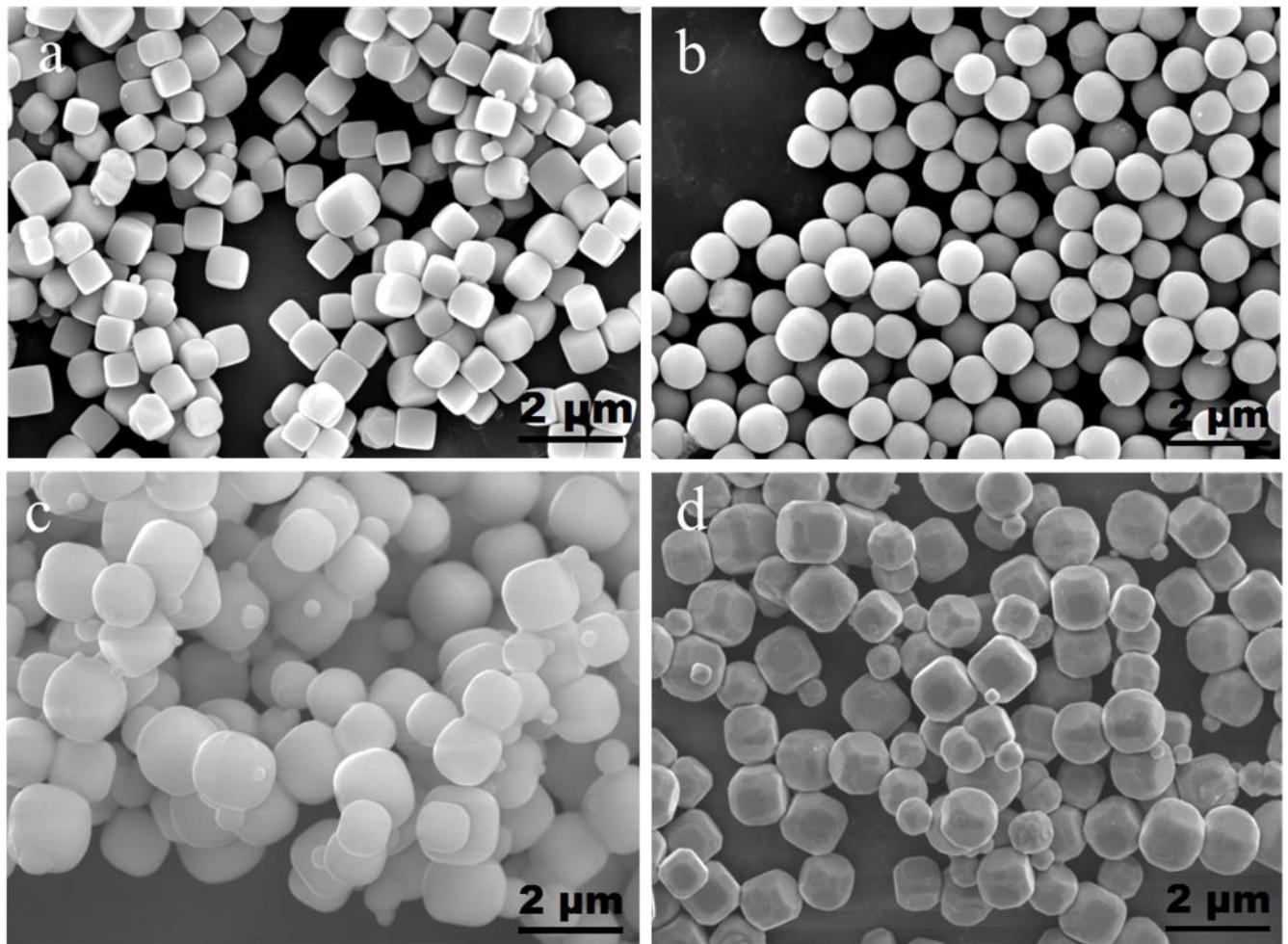


Figure S2. SEM images of the Cu₂O crystals synthesized with different PVP mass and AA adding rate: (a) 0.2 g, dumping (b) 1 g, dumping (c) 0 g, 0.20 ml min⁻¹ (d) 0 g, 0.40 ml min⁻¹.

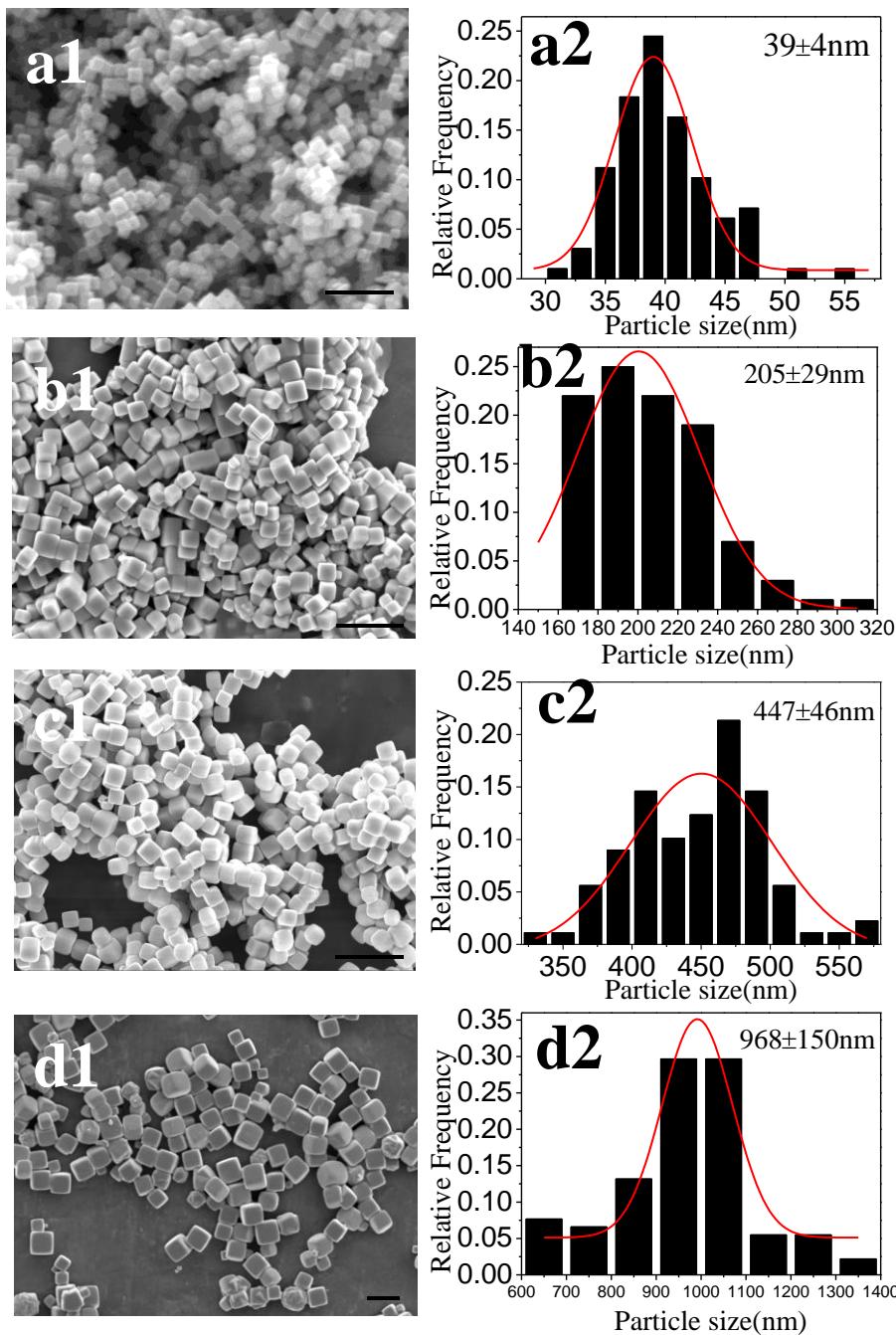


Figure S3. SEM images of the cube Cu₂O crystals synthesized with various size (a1-d1) and corresponding size distribution histograms (a2-d2)

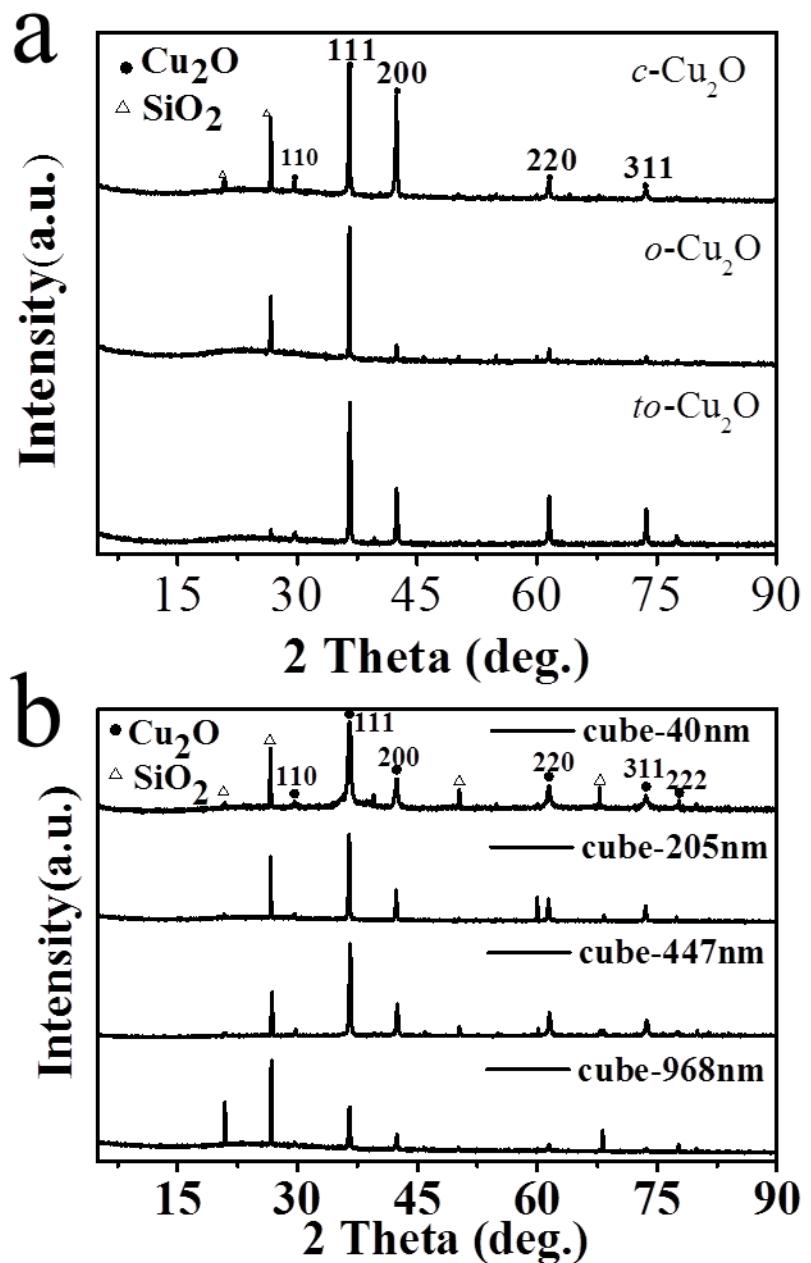


Figure S4. XRD patterns of Cu_2O crystals synthesized with various morphologies (a) and cubic Cu_2O with different size (b) after ozone test

The XRD peaks of SiO_2 in used catalysts originate from mixed quartz sand support.

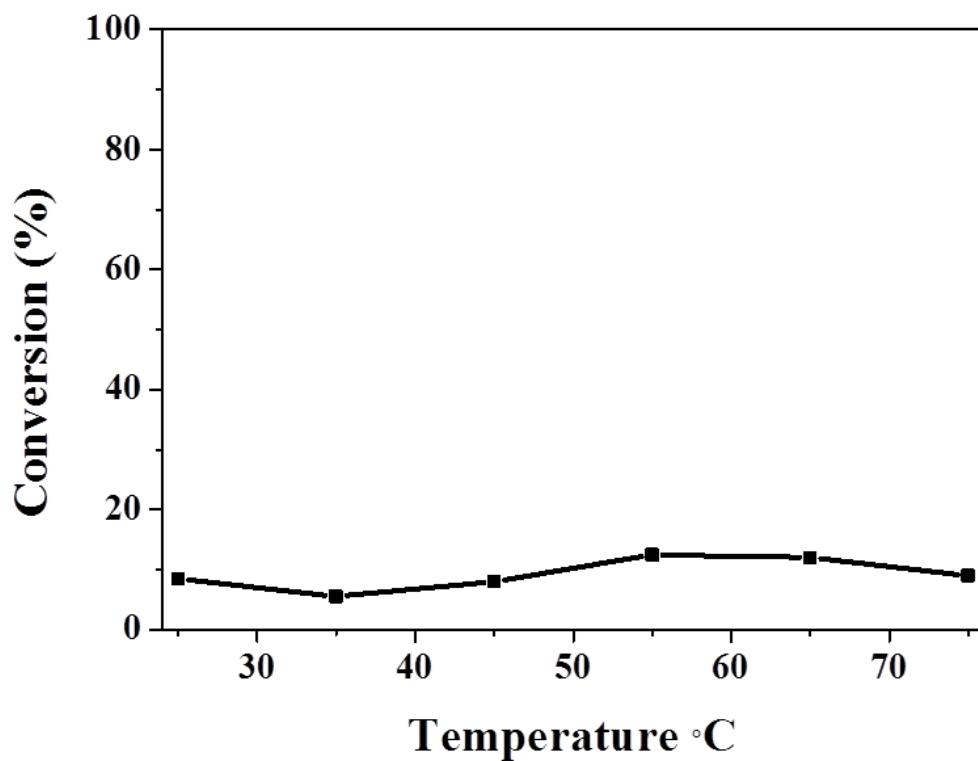


Figure S5. Ozone conversion as a function of temperature over quartz sand. (Ozone inlet concentration 20 ppm, SV 60000 ml g⁻¹ h⁻¹.)