

Supplementary Material (ESI) for CrystEngComm
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Electronic Supplementary Information

Shape-controlled synthesis of polyhedral 50-facet Cu₂O microcrystals with high-index facets

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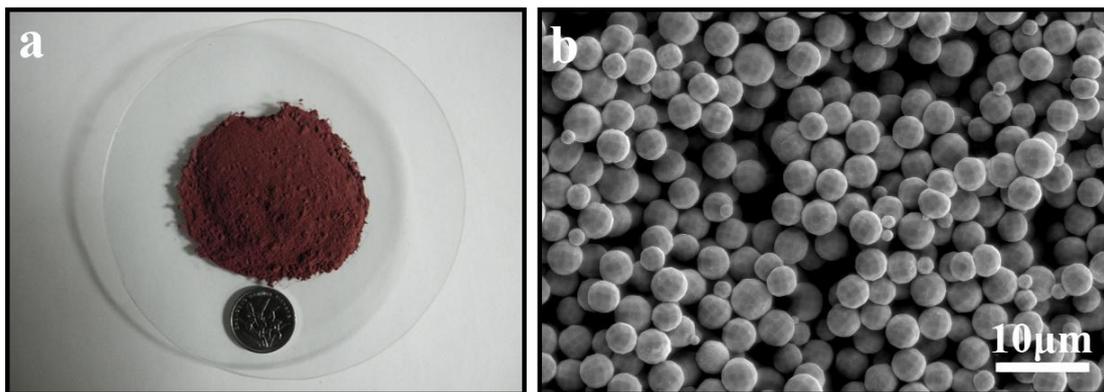


Figure S1. A digital photo and an SEM image of 50-facet Cu_2O polyhedra enclosed by {522} facets synthesized with 500 ml of 0.3 M $\text{Cu}(\text{CH}_3\text{COO})_2$, 200 ml of 6 M KOH and 100 ml 0.75 M glucose. Finally, 10.04 g Cu_2O production was obtained and the yield is higher than 93 %.

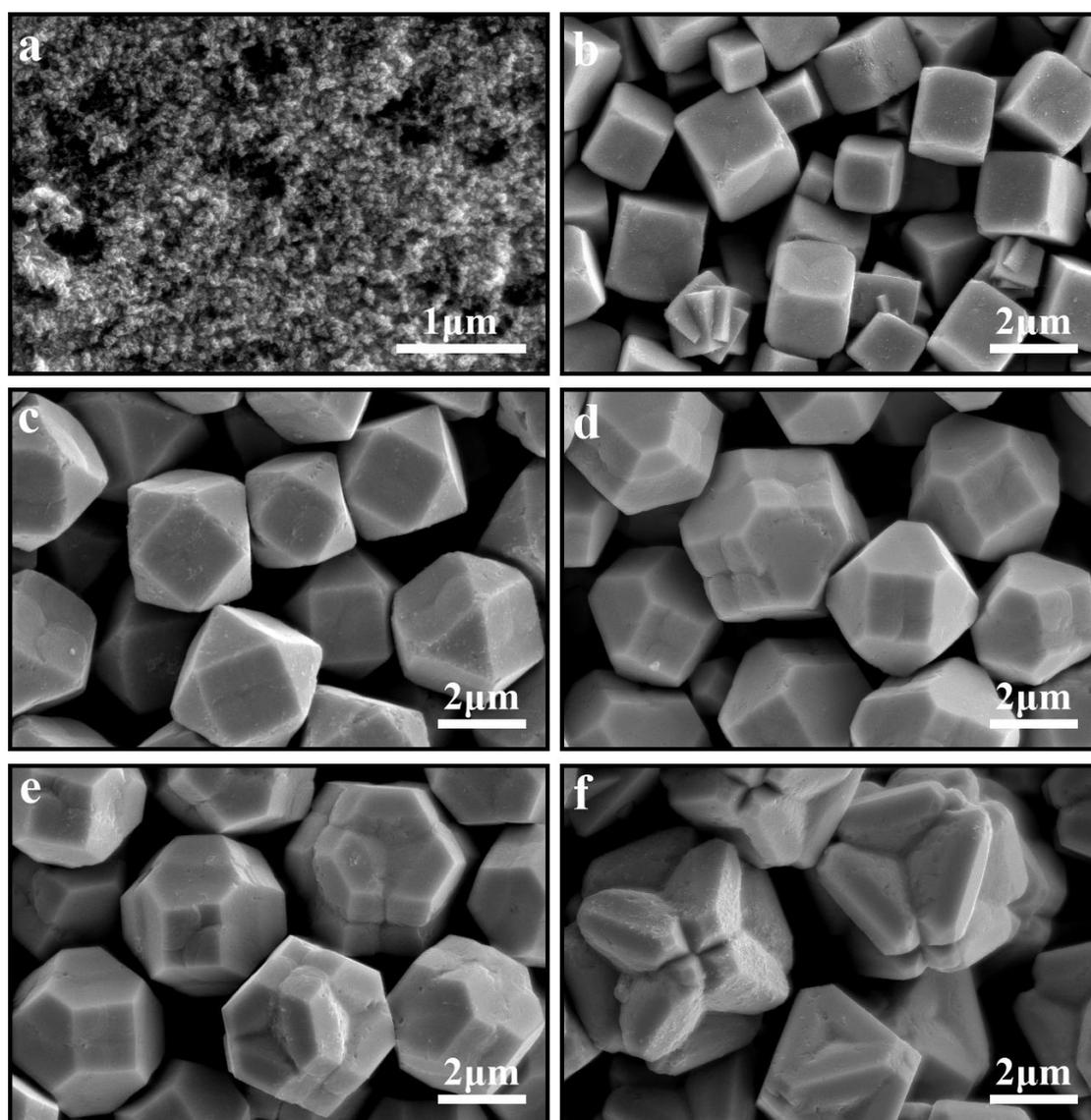


Figure S2. SEM images of Cu₂O polyhedra synthesized with different concentrations of LiOH. (a) 1 M; (b) 2 M; (c) 3 M; (d) 4 M; (e) 5 M; (f) 6 M.

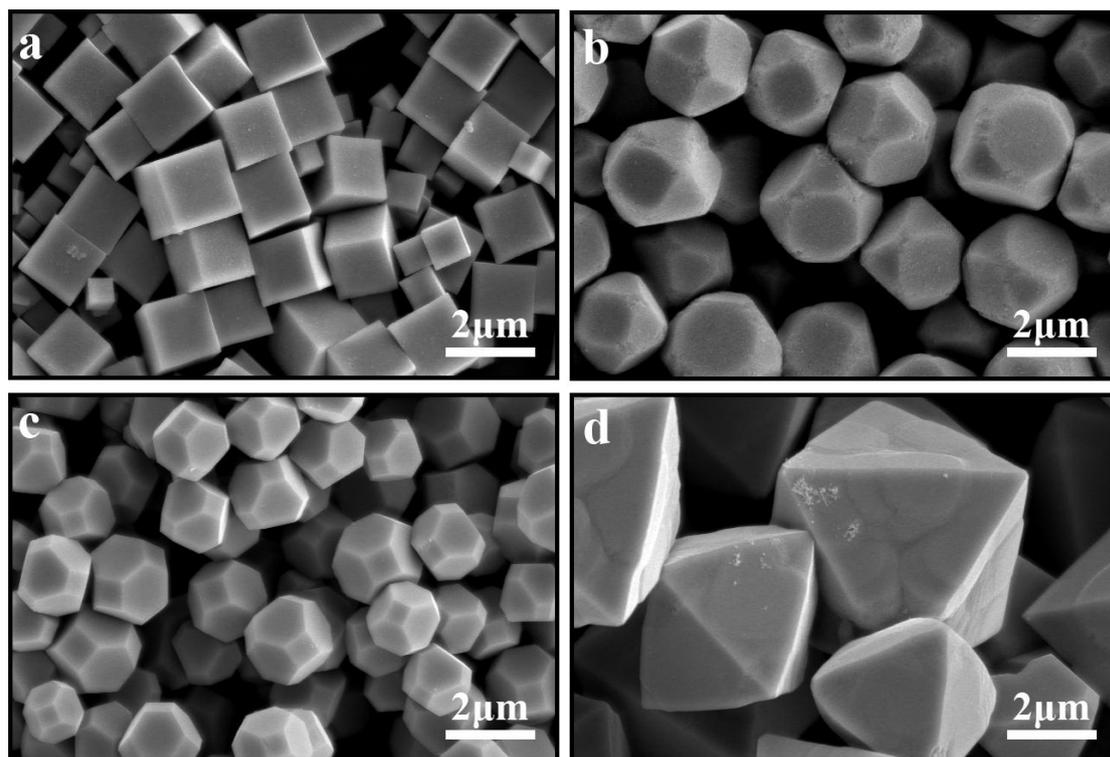


Figure S3. SEM images of Cu₂O polyhedra synthesized with 0.2 M CuSO₄ and different concentrations of NaOH. (a) 1 M; (b) 3 M; (c) 6 M; (d) 9 M.

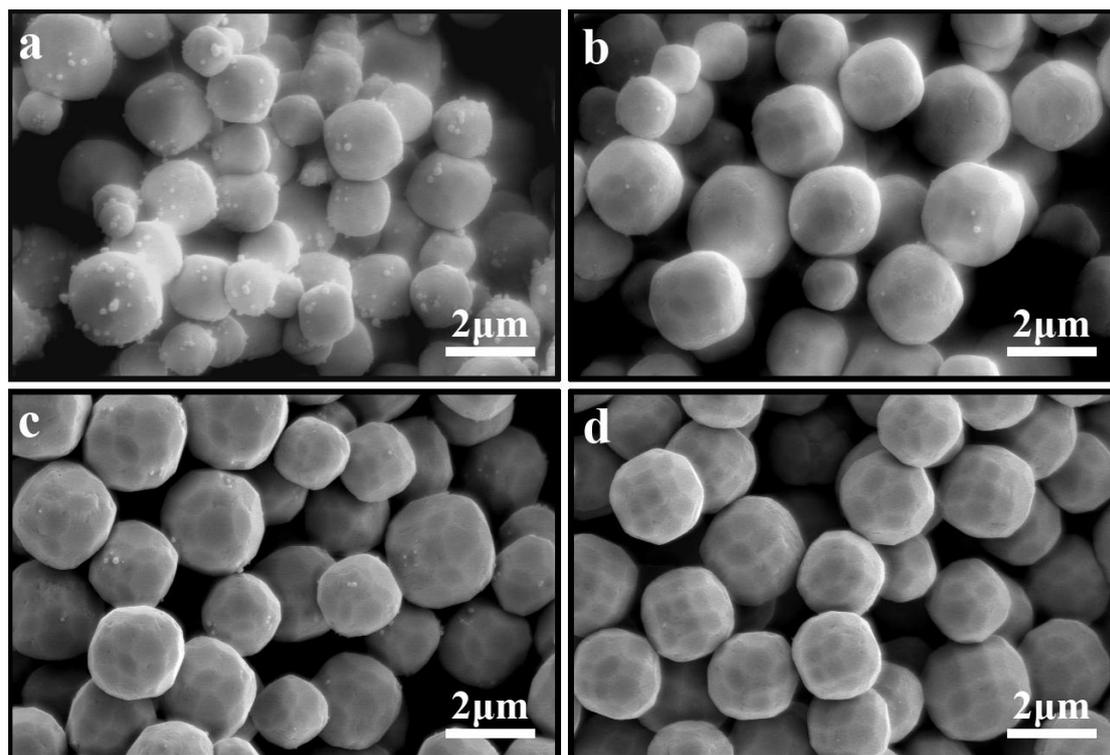


Figure S4. SEM images of Cu₂O polyhedra synthesized with different concentrations of Cu(CH₃COO)₂. (a) 0.05 M; (b) 0.1 M; (c) 0.2 M; (d) 0.3 M.