

Electronic supplementary information

## Nanoparticle-Aggregated Octahedral Copper Hierarchical Nanostructures

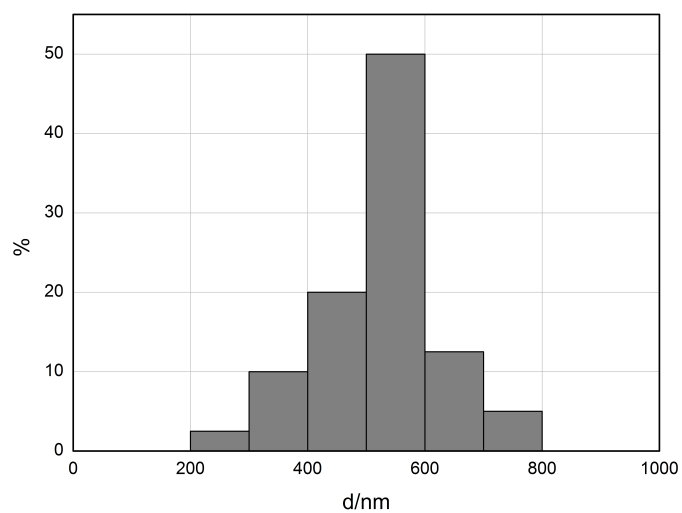
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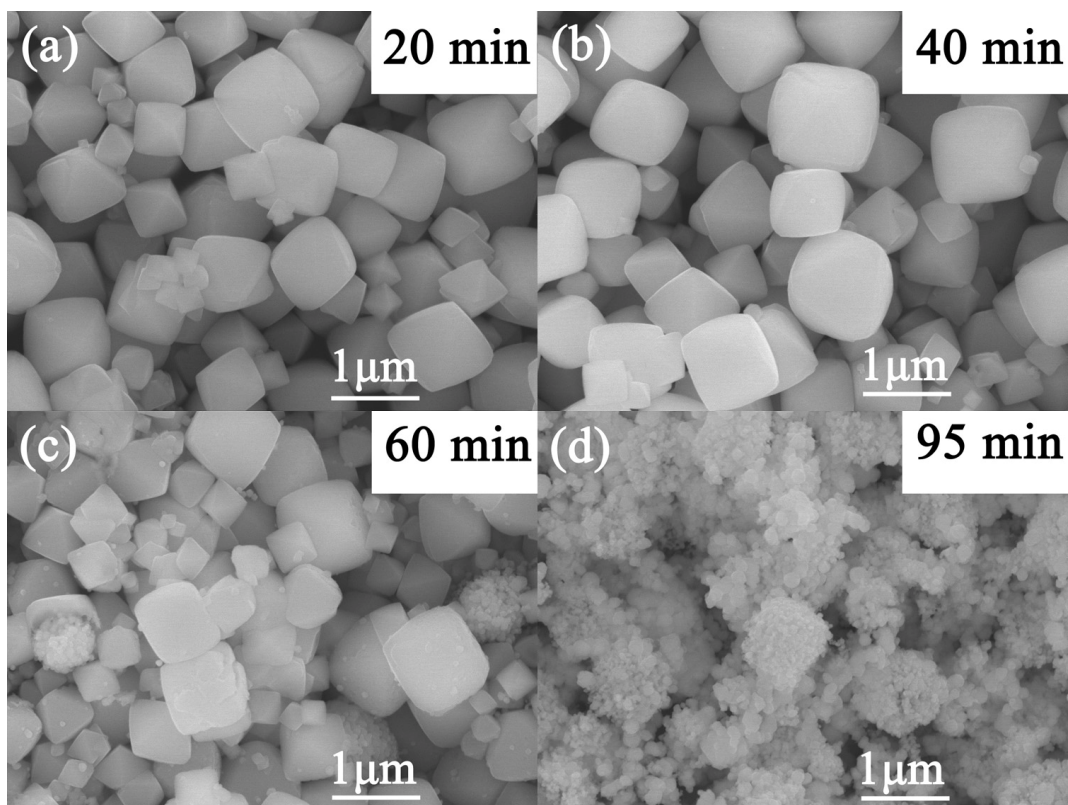
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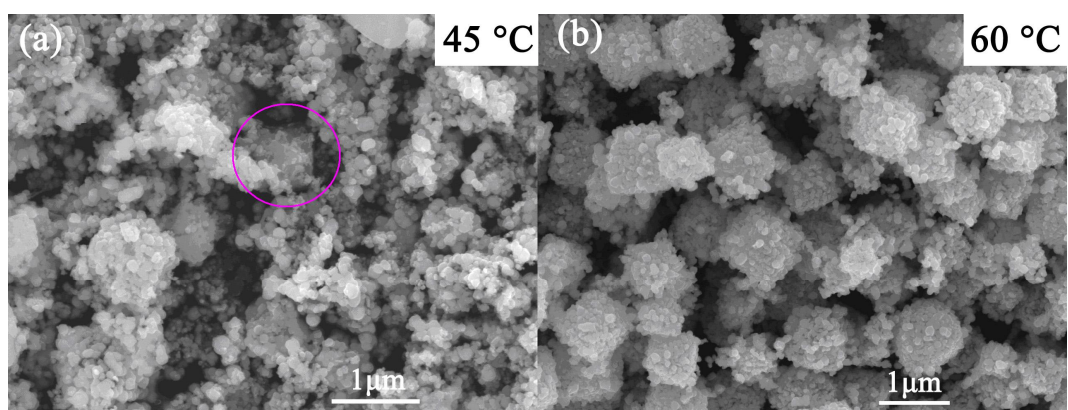
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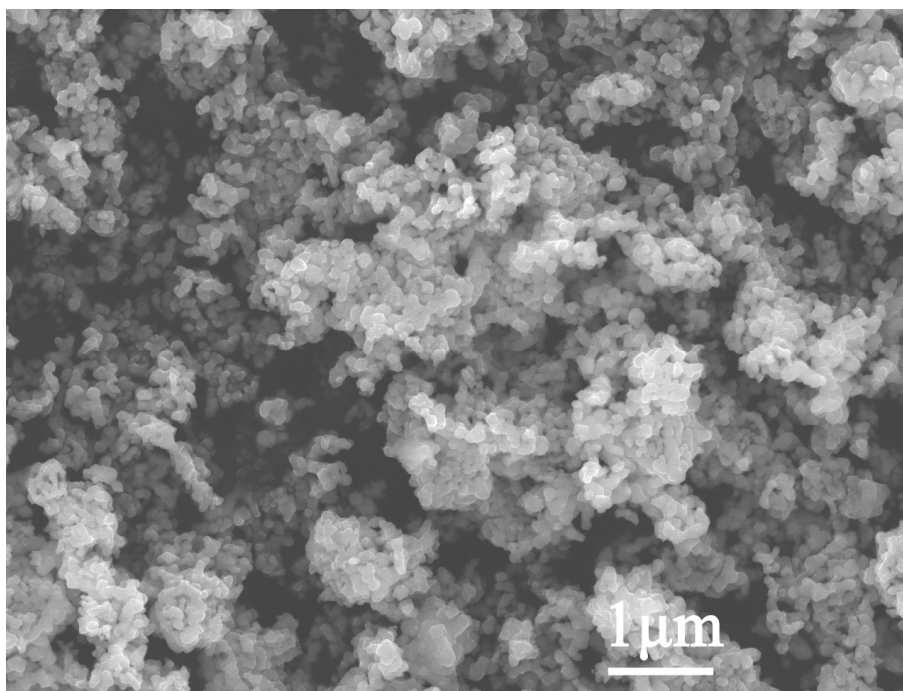
**Fig. S1** The size-distribution diagram of as-prepared products.



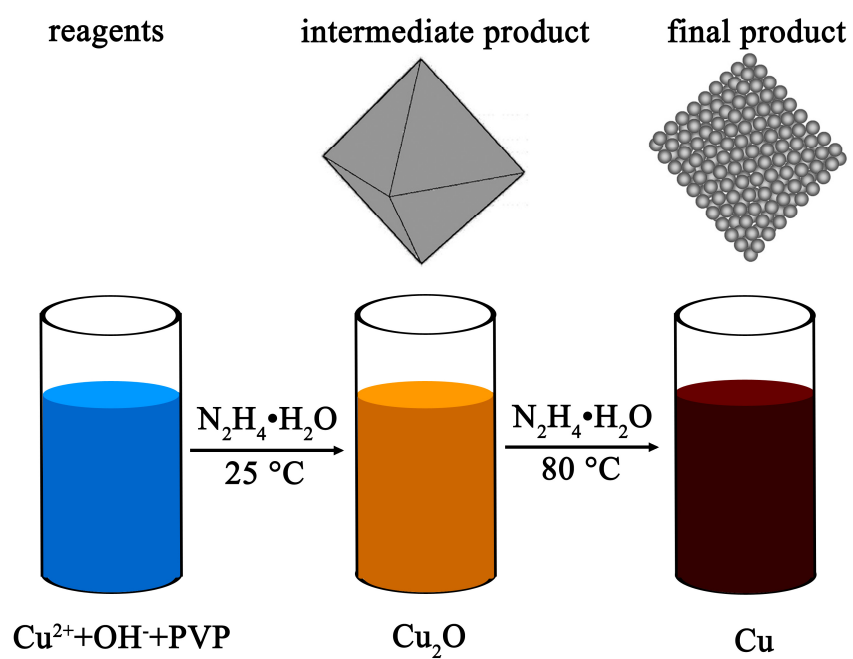
**Fig. S2** FESEM images of the products obtained at different reaction time without heating. (a) 20 min; (b) 40 min; (c) 60 min; (d) 90 min.



**Fig. S3** FESEM images of the products obtained at different reaction temperature. (a) 45 °C; (b) 60 °C.



**Fig. S4** FESEM image of the products obtained in the absence of PVP.



**Fig. S5** A schematic illustration of the formation process of the as-prepared octahedral copper hierarchical nanostructures.