

# ESI

## Hollow cube-like CuS derived from Cu<sub>2</sub>O crystals for the highly efficient elimination of electromagnetic pollution

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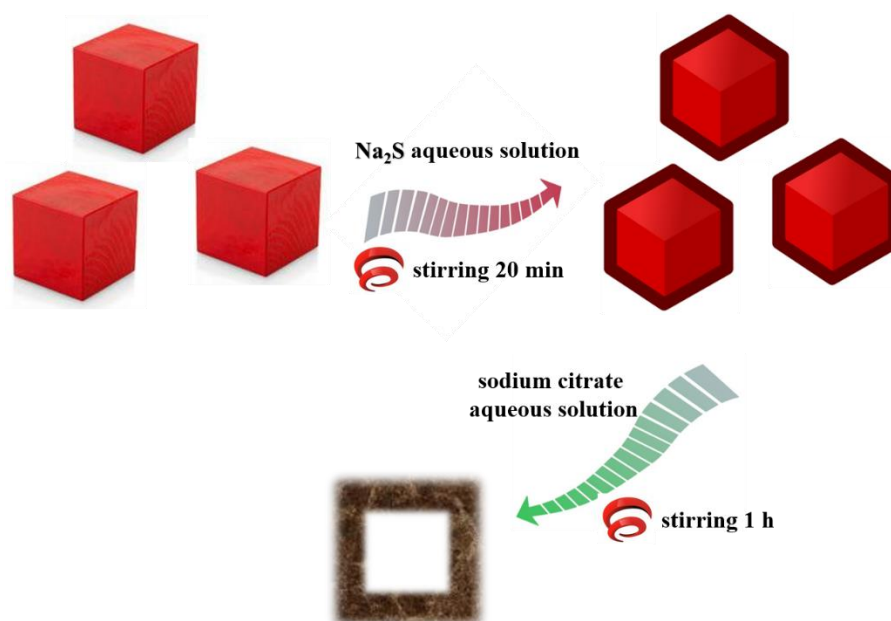
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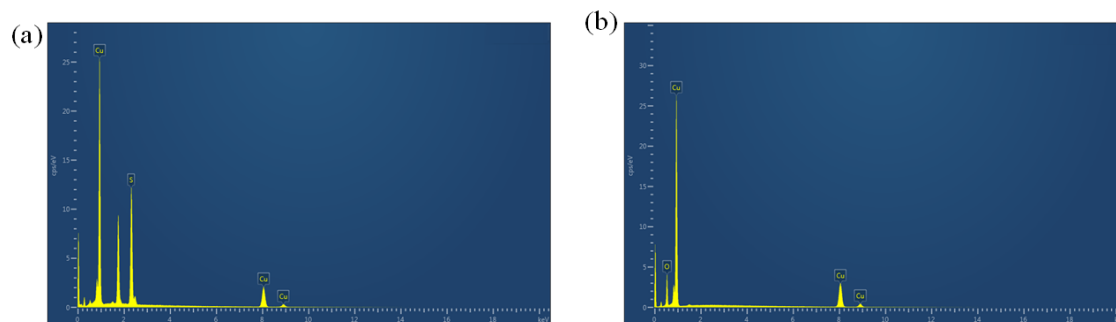
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Figure S1 shows the Schematic illustration of the formation mechanism of the hollow cube-like CuS.



**Fig. S1.** The proposed formation process of the hollow cube-like CuS.

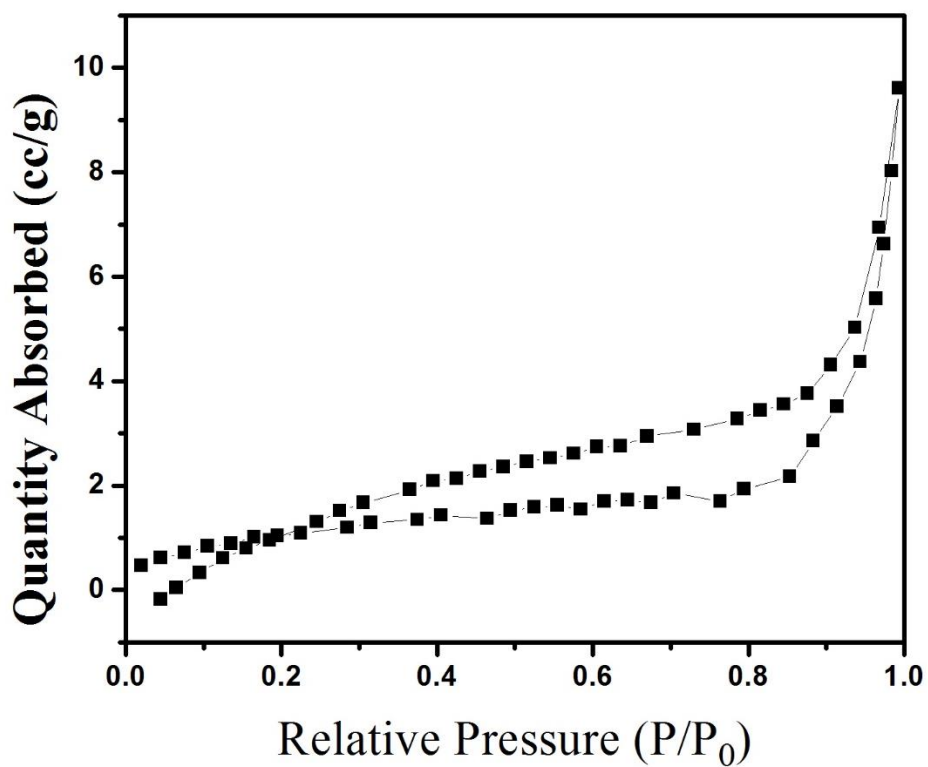
In Fig. S2, EDS patterns of Cu<sub>2</sub>O and CuS are displayed. In Fig. S2a, it can be found that the as-obtained Cu<sub>2</sub>O is made up of Cu and O elements. Table S1 shows that the atomic ratio of Cu: O is 38.29: 61.71, which is close to the chemical stoichiometry of Cu<sub>2</sub>O. In Fig. S2b, the EDS result indicates the presence of Cu and S, and the atomic ratio of Cu: S is 50.33: 49.67. As a whole, the EDS results have given approximate components contents, which contribute to analysis of material's property.



**Fig. S2.** EDS patterns of Cu<sub>2</sub>O (a) and CuS (b).

Table S1. EDS results of Cu<sub>2</sub>O and CuS.

Sample	Elements	Wt%	At%
Cu <sub>2</sub> O	Cu	13.51	38.29
	O	86.49	61.71
	total	100	100
Sample	Elements	Wt%	At%
CuS	Cu	33.83	50.33
	S	66.17	49.67
	total	100	100



**Figure S3.** Nitrogen adsorption-desorption isotherm of CuS.

Sample	$S_{\text{BET}}(\text{m}^2\text{g}^{-1})$	$V_{\text{pore}}(\text{cm}^3\text{g}^{-1})$
CuS	6.719	0.017