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Heterostructure of CuO microspheres modified with CuFe₂O₄ nanoparticles for highly sensitive H₂S gas sensor

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Highlights

- A semiconducting heterostructure composed of CuO microspheres whose surface was modified with CuFe₂O₄ nanoparticles has been synthesized using a facile two-step method.
- The surface modification process can be carried out readily in a controllable manner at room temperature.
- Highly sensitive H₂S gas sensor with fast response/recovery.
- The gas sensing mechanism of the p-CuO/n-CuFe₂O₄ junction was thoroughly discussed.

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