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Abnormal n-p-n type conductivity transition of hollow ZnO/ZnFe₂O₄ nanostructures during gas sensing process: The role of ZnO-ZnFe₂O₄ hetero-interface

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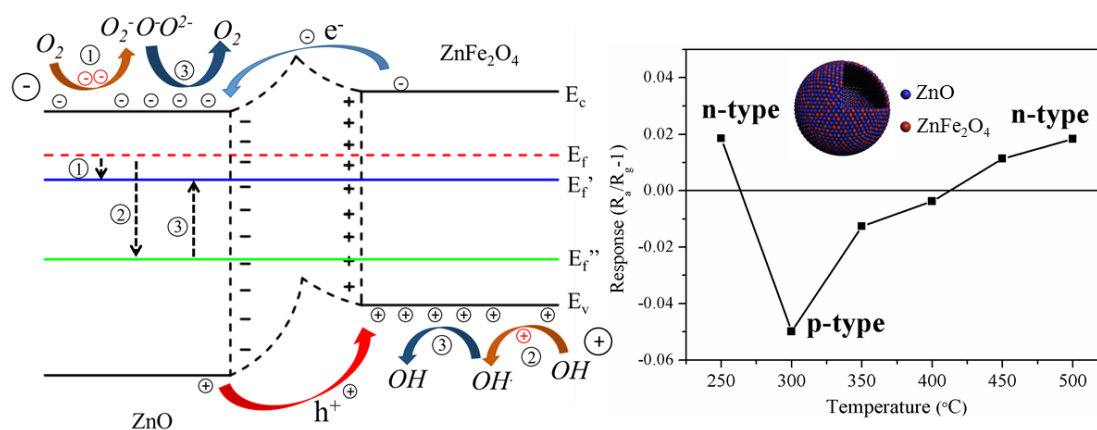
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Graphical abstract



Highlights

1. Hollow ZnO/ZnFe₂O₄ microspheres with heterogeneous features were synthesized by directly pyrolysis of Prussian blue analogue.
2. Abnormal n-p-n type conductivity transition of hollow ZnO/ZnFe₂O₄ microspheres could be observed during gas sensing process.
3. The conductivity transition is ascribed to the trade-off of highly separated electron-hole pairs originated from ZnO-ZnFe₂O₄ hetero-interfaces.

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