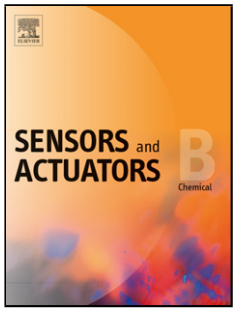

Title: Triple-shelled ZnO/$ZnFe_2O_4$ heterojunctional hollow microspheres derived from Prussian Blue analogue as high-performance acetone sensors

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Triple-shelled $ZnO/ZnFe_2O_4$ heterojunctional hollow microspheres derived from Prussian Blue analogue as high-performance acetone sensors

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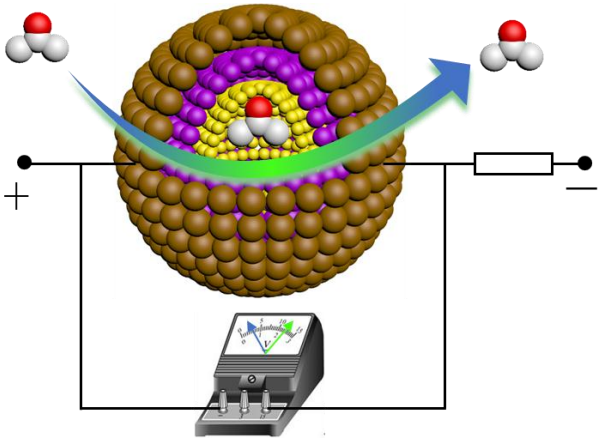
Graphical abstract



Through annealing treatment of Prussian Blue analogue of $Zn_3[Fe(CN)_6]_2 \cdot xH_2O$ solid microspheres, triple-shelled $ZnO/ZnFe_2O_4$ hollow microspheres have been successfully synthesized as sensing materials. Due to the striking synergy between active bicomponents and the intrinsic structural advantages, the sensor exhibited high sensitivity, good selectivity, rapid response ability, high reversibility and excellent cycling stability at ultralow working temperature (140 °C) towards acetone, shedding light on advanced gas sensors on environmental monitor.

Highlights