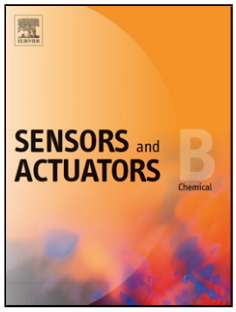

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Oxygen vacancy engineering for enhanced sensing performances: A case of SnO_2 nanoparticles-reduced graphene oxide hybrids for ultrasensitive ppb-level room-temperature NO_2 sensing

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Highlights

- SnO_2 nanoparticles decorated reduced graphene oxide hybrids with abundant oxygen vacancies have been prepared by two-step synthesis method.
- Novel NO_2 sensors have been fabricated SnO_2-RGO-OVs hybrids as sensing materials.
- SnO_2-RGO-OVs-based NO_2 sensor exhibit excellent room-temperature NO_2 sensing properties, including high sensitivity, fast response and recovery rate, and low detection limit.

Abstract