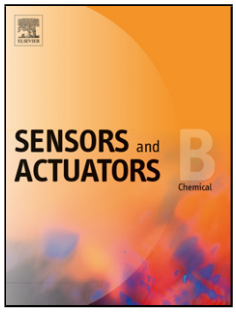

Title: Synthesis and Characterization of $MnFe_2O_4$ Nanoparticles for Impedometric Ammonia Gas Sensor

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Highlights:

- For the first time $MnFe_2O_4$ is being used as the gas sensing material, particularly for ammonia gas sensing.
- The material detects as low as 10 ppm of ammonia which is lower than recommended level of 25 ppm
- The conductivity is found to increase in the order of 10^2 magnitudes with increasing concentration of ammonia.
- The sensitivity reaches 100% for ammonia.
- Shows specific selectivity to Ammonia gas than other toxic gases like chloroform, etc.