# Accepted Manuscript

Title: Stabilized zirconia-based selective NO<sub>2</sub> sensor using sol-gel derived Nb<sub>2</sub>O<sub>5</sub> sensing-electrode

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# ACCEPTED MANUSCRIPT

### Stabilized zirconia-based selective NO2 sensor using sol-gel derived

## Nb<sub>2</sub>O<sub>5</sub> sensing-electrode

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#### **Graphical abstract**



#### Highlights

- Stabilized zirconia-based sensor using sol-gel derived Nb<sub>2</sub>O<sub>5</sub> was fabricated.
- High selectivity and sensitivity to NO<sub>2</sub> at 800°C in 5-21 vol% O<sub>2</sub> concentrations.
- The sensor exhibited long-term NO<sub>2</sub> stability with quick response and recovery.

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