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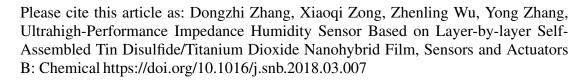
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## ACCEPTED MANUSCRIPT

Ultrahigh-Performance Impedance Humidity Sensor Based on Layer-by-layer Self-Assembled Tin Disulfide/Titanium Dioxide Nanohybrid Film

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## Highlights

- SnS<sub>2</sub>/TiO<sub>2</sub> film–based impedance humidity sensor was fabricated via layer-by-layer self-assembly.
- Ultrahigh sensitivity and response of SnS<sub>2</sub>/TiO<sub>2</sub> film sensor toward humidity was demonstrated.
- The sensing mechanism for the SnS<sub>2</sub>/TiO<sub>2</sub> film sensor toward humidity was discussed.

#### **Abstract**

An ultrahigh-performance impedance-type humidity sensor based on tin disulfide

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