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## **Supplementary Information**

## Highly Electropositive ReS<sub>2</sub> Based Ultra-Sensitive Flexible Humidity Sensor for Multifunctional Applications

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## ReS<sub>2</sub> sensor characterization

The long-term stability of the  $\text{ReS}_2$  based humidity sensor was seen by plotting sensitivity against the number of days. From figure SI 1 it is evident that the sensitivity of the fabricated sensor was



approximately 18.26 over one week.

Figure SI 1: Plot showing long-term stability of  $\text{ReS}_2$  based humidity sensor, wherein sensitivity was plotted against the number of days.