

## Supporting Information

# Improved Sensitivity in Schottky Contacted Two-dimensional MoS<sub>2</sub> Gas Sensor

*Youngjun Kim<sup>1</sup>, Sang-Koo Kang<sup>1</sup>, Nan-Cho Oh<sup>2</sup>, Hi-Deok Lee<sup>2,3</sup>, Soo-Min Lee<sup>2</sup>, Jusang Park<sup>1\*</sup> and Hyungjun Kim<sup>1\*</sup>*

<sup>1</sup>School of Electrical and Electronic Engineering, Yonsei University, Seoul 120-749, Korea

<sup>2</sup>Korea Sensor Lab, Daejeon, Korea

<sup>3</sup>Department of Electronics Engineering, Chungnam National University, Daejeon, Korea

\*Corresponding authors: [hyungjun@yonsei.ac.kr](mailto:hyungjun@yonsei.ac.kr) (H. Kim), [jusang@yonsei.ac.kr](mailto:jusang@yonsei.ac.kr) (J. Park)

#### A. CVD MoS<sub>2</sub> process temperature

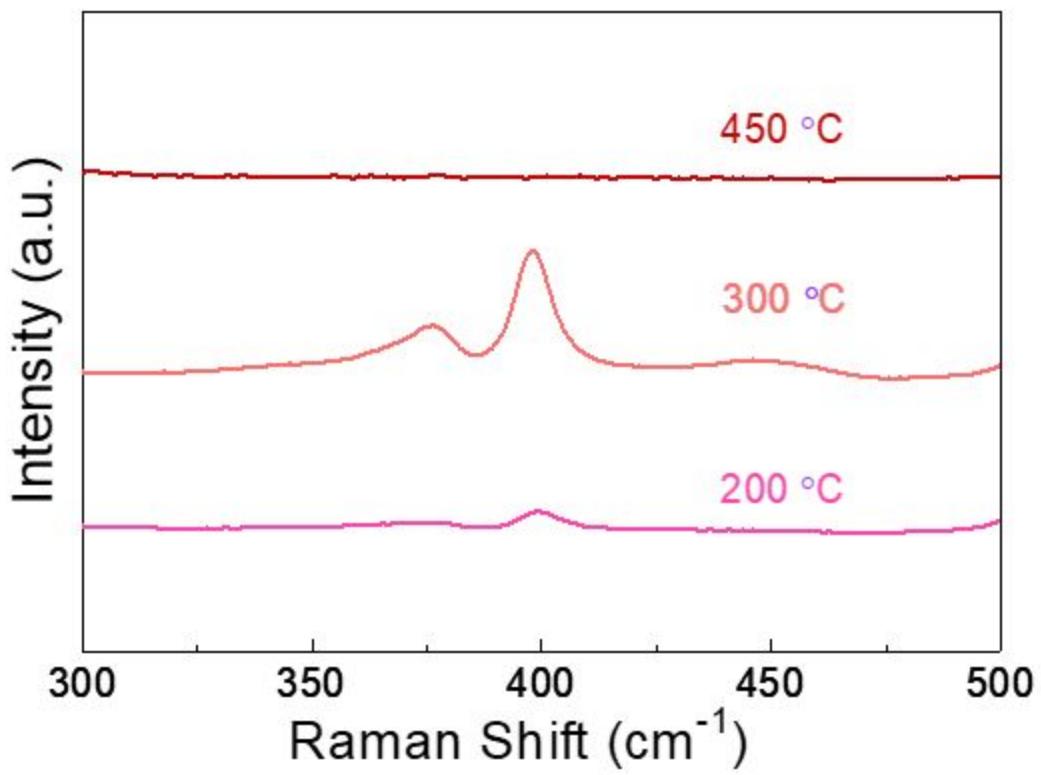
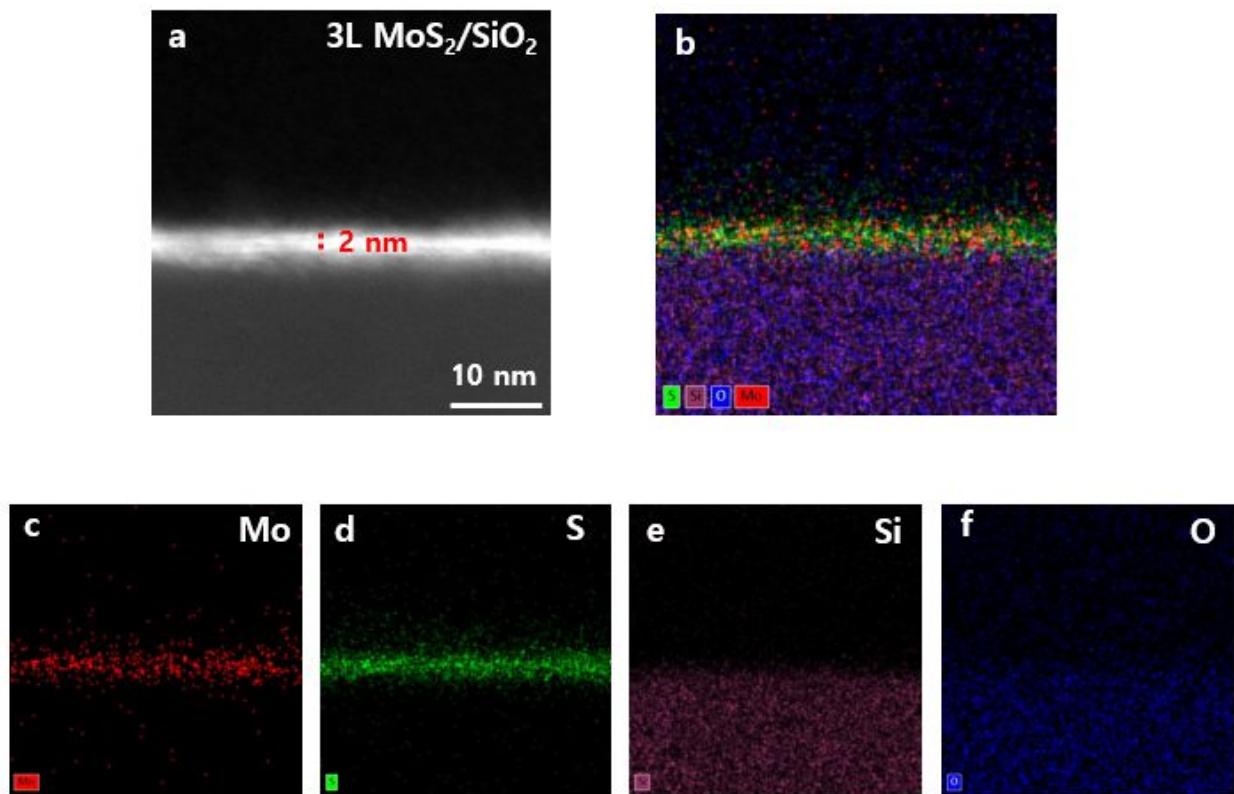


Figure. S1 Raman spectra of the MoS<sub>2</sub> at different CVD process temperatures.

## B. Characterization 3L MoS<sub>2</sub> on SiO<sub>2</sub>



**Figure S2** (a) High-angle annular dark-field (HAADF) image of 3L MoS<sub>2</sub> EDS mapping of 3L MoS<sub>2</sub> (b), Mo atoms (c), S atoms (d), Si atoms (e), and O atoms (f).