



## Supplementary Material

# Three-Layer PdO/CuWO<sub>4</sub>/CuO System for Hydrogen Gas Sensing with Reduced Humidity Interference

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**Table S1.** Baseline resistances of investigated sensing films.

Specimen	Temperature	Dry Baseline Resistance	Humid Baseline Resistance
<sup>20</sup> Cu–O	300 °C	0.3 MΩ	0.3 MΩ
<sup>5</sup> W–O/ <sup>20</sup> Cu–O	300 °C	0.5 MΩ	2.0 MΩ
<sup>10</sup> W–O/ <sup>20</sup> Cu–O	300 °C	0.7 MΩ	1.5 MΩ
<sup>20</sup> W–O/ <sup>20</sup> Cu–O	300 °C	1.3 MΩ	2.4 MΩ
<sup>0.8</sup> Pd/ <sup>20</sup> Cu–O	100 °C	0.8 GΩ	1.2 GΩ
<sup>0.8</sup> Pd/ <sup>5</sup> W–O/ <sup>20</sup> Cu–O	100 °C	0.6 GΩ	2.6 GΩ
<sup>0.8</sup> Pd/ <sup>10</sup> W–O/ <sup>20</sup> Cu–O	100 °C	3.2 GΩ	4.8 GΩ
<sup>0.8</sup> Pd/ <sup>20</sup> W–O/ <sup>20</sup> Cu–O	100 °C	50 MΩ	40 MΩ

  

Specimen	Humidity	Sensitivity Dry	Humid Baseline Resistance
<sup>0.8</sup> Pd/ <sup>5</sup> W–O/ <sup>20</sup> Cu–O	0	3.33	5 GΩ
	30	2.62	6 GΩ
	60	2.24	4 GΩ
	90	2.21	8 GΩ
<sup>0.8</sup> Pd/ <sup>20</sup> W–O/ <sup>20</sup> Cu–O	0	4.39	44 MΩ
	30	3.39	44 MΩ
	60	1.68	46 MΩ
	90	1.70	45 MΩ