

Study of Factors Influencing Dynamic Measurements Using SnO₂ Gas Sensor

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The gas sensing behavior based on dynamic measurements of a single SnO₂ gas sensor was investigated by comparison with static measurements. The factors influencing nonlinear response such as modulation potential, duty ratio, heating waveform (rectangular, sinusoidal, saw-tooth, pulse, and others) were also studied. The temperature curves of the static and the dynamic measurements were investigated. Experimental data showed that temperature was the most important factor because changes in the frequency and the heating waveform could be the result of changes in temperature.

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