

High sensitivity at high gas concentration gas sensor using porous SnO₂ on trench substrate

Minoru Abasaki, Shinichi Souma, Nobuyuki Moronuki, Masakazu Sugiyama

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Abstract

◆ High sensitivity at high gas concentration operation was performed using porous SnO₂ on trench substrate with dip coating

Introduction & Methods

Request

- Low cost
- High Sensitivity at high gas concentration

Issue

Flat substrate gas sensor using dip coating was low sensitivity at high gas concentration.

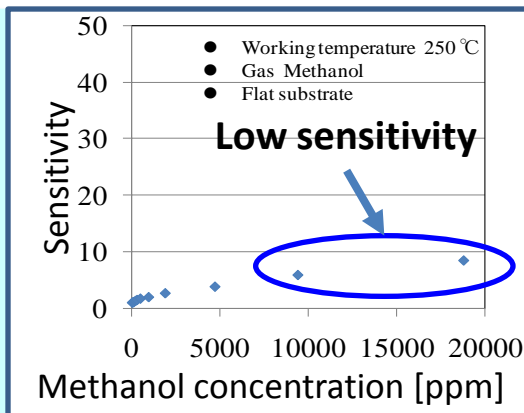


Fig. 1 Nano particle gas sensor characteristic on flat substrate.

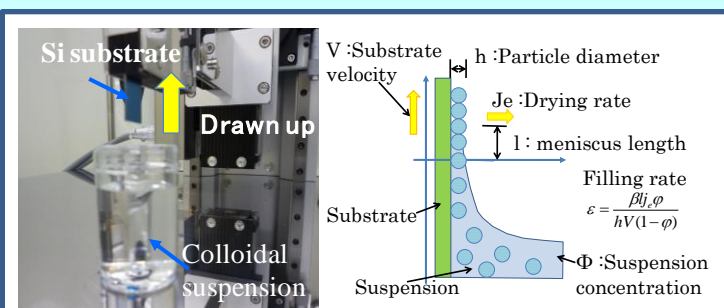


Fig. 2 Dip coating method

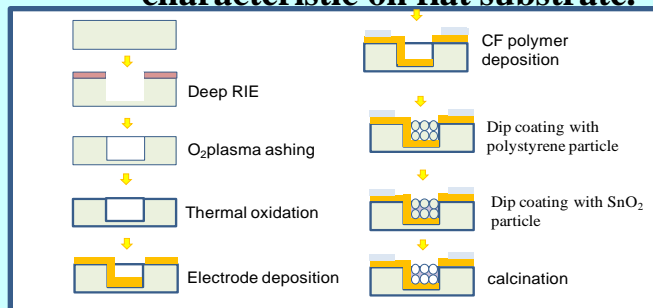


Fig. 3 Process flow

Results

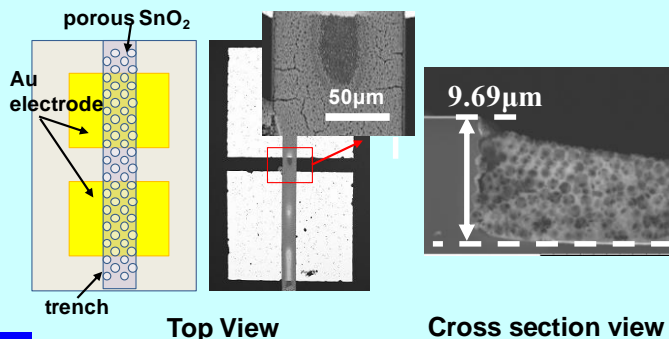
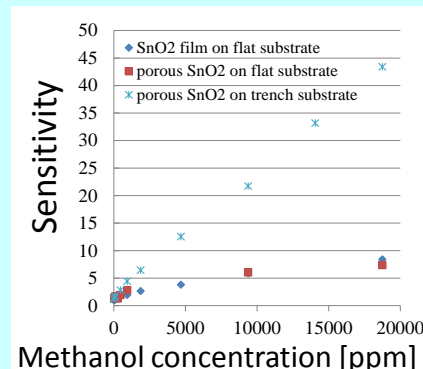


Fig. 4 porous SnO₂ gas sensor on trench substrate



Summary

- High sensitivity at high gas concentration was obtained with porous SnO₂ gas sensor on trench substrate