

Synergy Effect of Au and SiO₂ Modification on SnO₂ Sensor Properties in VOCs Detection in Humid Air

Dayana Gulevich ¹, Marina Rumyantseva ^{1,*}, Evgeny Gerasimov ², Nikolay Khmelevsky ³, Elena Tsvetkova ⁴ and Alexander Gaskov ¹

¹ Chemistry Department, Moscow State University, 119991 Moscow, Russia; dayana-nsu@mail.ru (D.G.); gaskov@inorg.chem.msu.ru (A.G.)

² Boreskov Institute of Catalysis SB RAS, 630090 Novosibirsk, Russia; gerasimov@catalysis.ru

³ LISM, Moscow State Technological University Stankin, 127055 Moscow, Russia; khmelevsky@mail.ru

⁴ Bauman Moscow State Technical University, 105005 Moscow, Russia; flowersova@mail.ru

* Correspondence: roum@inorg.chem.msu.ru; Tel.: +7-495-939-5471

Supplementary Information

The phase composition of sensitive materials was analyzed by X-ray diffraction on a DRON-4 diffractometer using monochromatic CuK α radiation ($\lambda = 1.5406 \text{ \AA}$) in the range of $2\theta = 5\text{--}60^\circ$ with 0.1° increment.

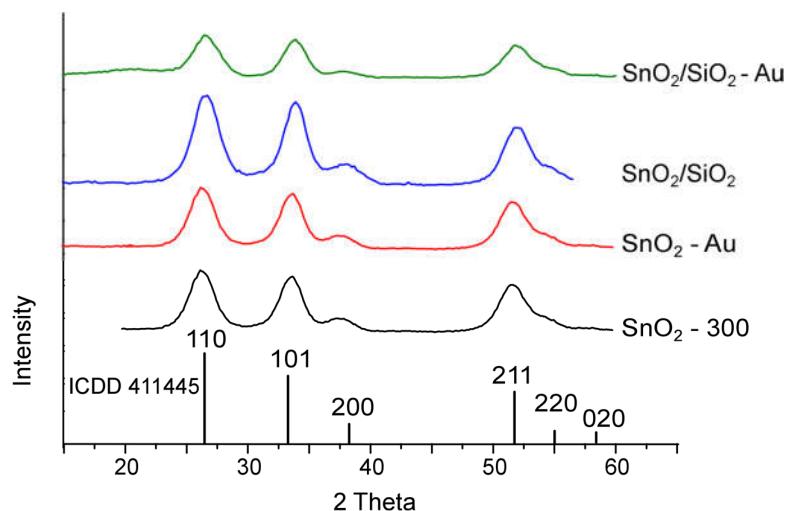


Figure S1. XRD patterns of nanocrystalline SnO₂-300, SnO₂-Au, SnO₂/SiO₂ and SnO₂/SiO₂ – Au.