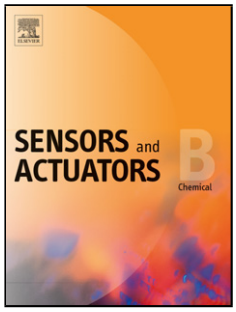

Title: Fast response ammonia sensor based on porous thin film of polyaniline/sulfonated nickel phthalocyanine composites

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The porous thin film of PANI/NiTSPc composites was deposited across the gaps of an interdigitated Au electrode by a simple electrochemical polymerization method.

The observed response value of the film to NH_3 of 100 ppm was up to 2.75 with a response time as short as 10 s.

The outstanding sensing performance may be attributed to the porous, ultra-thin film structure and the “NH3-capture” effect of the “flickering” NiTSPc molecules.

Fast response ammonia sensor based on porous thin film of polyaniline/sulfonated nickel phthalocyanine composites

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Abstract

Porous thin film composites of PANI/NiTSPc were deposited across the gaps of interdigitated Au electrodes (IAE) by an electrochemical polymerization method. The