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

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

3 The observed response value of the film to NH<sub>3</sub> of 100 ppm was up to 2.75 with a  
4 response time as short as 10 s.

5 The outstanding sensing performance may be attributed to the porous, ultra-thin film  
6 structure and the “NH<sub>3</sub>-capture” effect of the “flickering” NiTSPc molecules.

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

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21 **Abstract**

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

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