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Odor Sensor Utilizing Surface Plasmon Resonance

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An odor sensor based on surface plasmon resonance (SPR) has been studied for the detection of harmful gases such as ammonia and amines. The sensor was prepared by depositing a molecular recognition membrane on a substrate coated with Au thin film using plasma chemical vapour deposition (CVD). The SPR sensor with acrylic acid thin film as the molecular recognition membrane exhibited excellent selectivity and high sensitivity for ammonia and amines.

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