

Supplementary Material

All-in-one: A versatile gas sensor based on fiber enhanced Raman spectroscopy for monitoring postharvest fruit conservation and ripening

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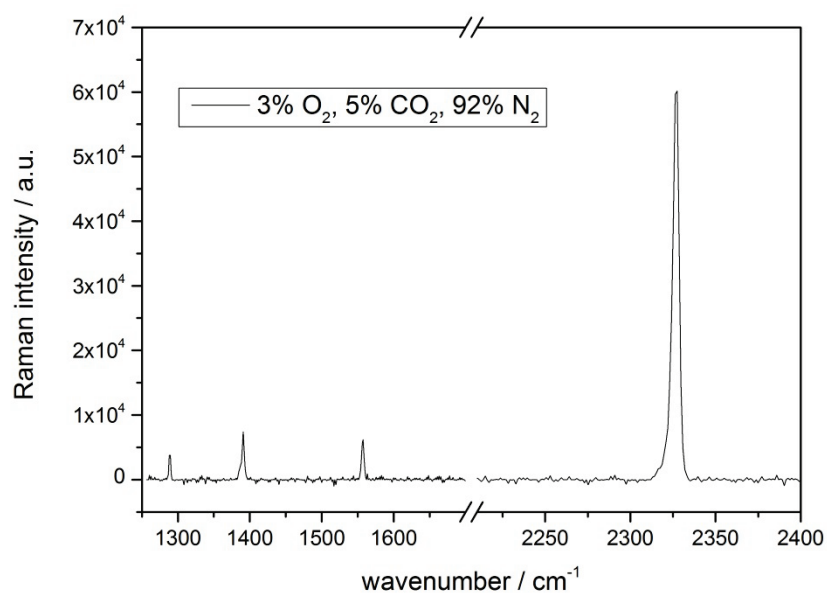


Figure S1: Exemplary Raman spectrum of a common low oxygen conservation chamber (LO) gas mixture of 3 % O₂, 5 % CO₂ and 92 % N₂. Observable are the Fermi dyad of carbon dioxide (1285 and 1388 cm⁻¹) and the vibrational bands of oxygen (1556 cm⁻¹) and nitrogen (2331 cm⁻¹).

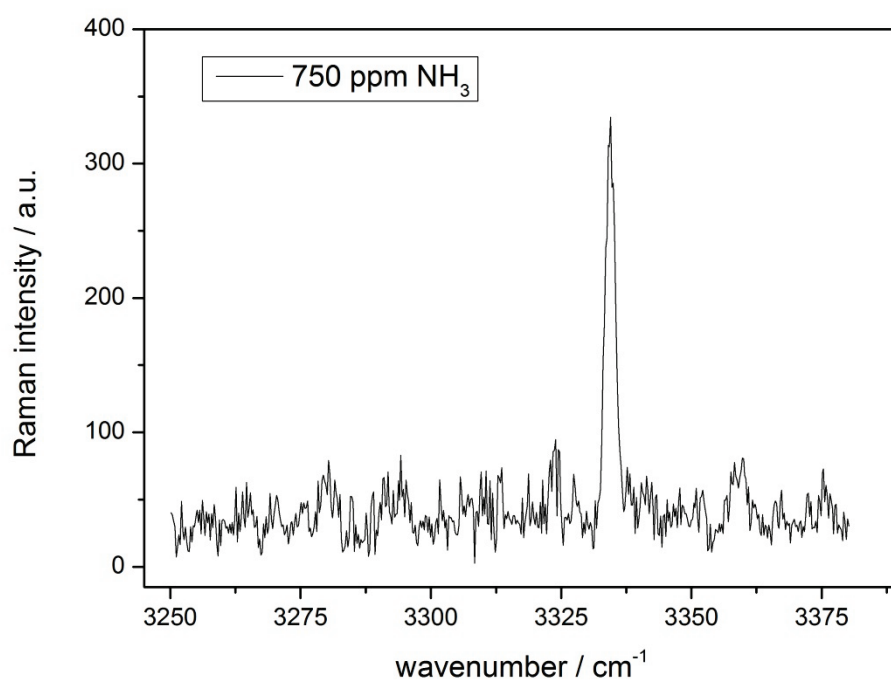


Figure S2: Baseline corrected Raman spectrum of 750 ppm NH₃ in N₂ with the vibrational band at 3334 cm⁻¹. This concentration range indicates possible ammonia leakage and is suited for chemical alarm purposes.