

RESONANT GAS SENSOR

ABSTRACT

A method for detecting an analyte comprises providing a first carbon-based material comprising reactive chemistry additives, providing conductive electrodes connected to the first carbon-based material, exposing the first carbon-based material to an analyte, applying a plurality of alternating currents having a range of frequencies across the conductive electrodes, and measuring the complex impedance of the first carbon-based material using the plurality of alternating currents.

(FIG. 11E)