## Ultra-Compact and High-Performance Suspended Aluminum Scandium Nitride Lamb Wave Humidity Sensor with Graphene Oxide Layer

Supplementary Information

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Figure S1: (a)-(i) Frequency response of the sensors versus RH.



Figure S2: (a)-(i) S11 response of the sensors versus RH.



Figure S3: Applications of AlScN Lamb Wave humidity sensor. (a)-(c) Images of test illustration of human respiratory monitoring system and details of sensing mask. (d) Schematic of different breathing ways. Response of the sensor to (e) mouse/nose breath, and (f) normal/deep breath.