

Electronic nose

Versatile gas sensors capable of detecting specific volatile analytes

Technology

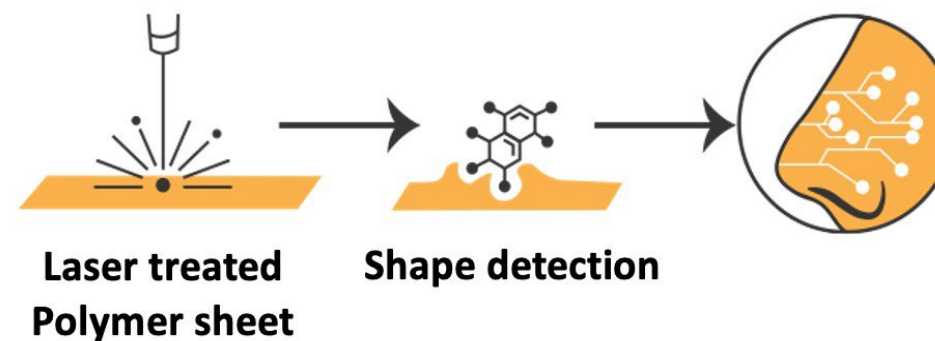
A heterogeneous distribution of conductive regions on the surface of a sensor result in a shape-dependent affinity for volatile molecules.

Benefits

- Allows discrimination of challenging and structurally similar molecules, providing a precise chemical profile over a range of airborne molecules.
- Lightweight and compact form factor.
- Exceptionally low-cost sensors, supported by remote monitoring.
- Robust, durable and reliable due to innovative fouling resistance.

Commercial applications

- Detection of biomarkers for medical diagnostics – for example, identifying early stages of jaundice in the breath of BAME neonates where yellowing of skin is an unreliable method/
- Monitoring the first signs of food spoilage during storage and transportation.
- Ensuring safety, pollution and air quality in natural and industrial environments.



Sensor surface comprises a lightweight and flexible polymer sheet with laser-fabricated nanoscale islands of conductive graphene

Opportunity

Investors and experts in the prototyping and manufacturing of sensors are sought to help launch a spinout company to commercialise this technology.

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