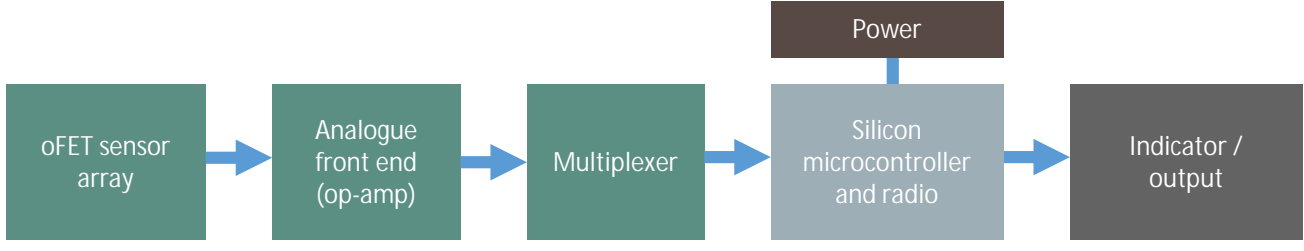


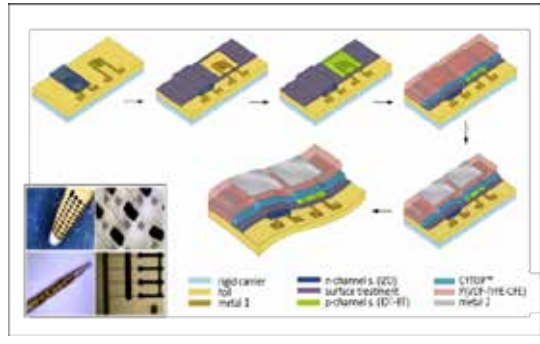
Solution-processed OpAmp and oFET gas sensor smart system

Integration of Printed Electronics with Silicon for Smart Sensors (iPESS)



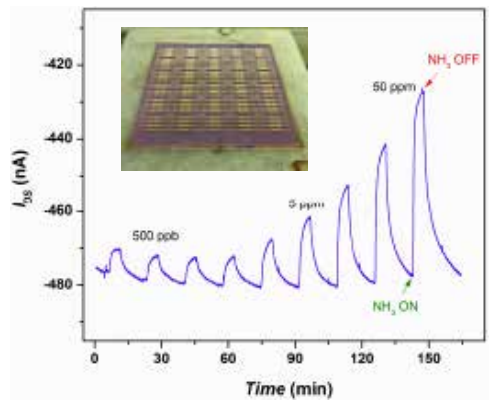
OpAmp

- Fully solution-processable, fully-flexible Organic/Metal-oxide CMOS circuits
- Operationally stable organic TFTs
- Low voltage, low power



oFET gas sensor array

- Solution-processed – possible to customise array
- Low voltage (3V) – for low-power consumption
- Highly sensitive
- Responsive to ammonia, alcohols, esters, ketones etc



Integration Demonstrator

- Will combine sensor array, op-amp, light energy harvester and e-paper display for ethanol sensor system

Project Outputs

- Process to fabricate complementary TFT circuits capable of amplifying nA signals for sensor analog front-end
- Process to fabricate oFET gas sensor arrays customisable during production to sense different gasses
- Energy Autonomous smart sensor system demonstrator

Opportunities

- Collaborate with us to develop or customise these technologies for your application
- License and use our process technologies for your application
- Work with our industrial partners to develop a custom product

