

## Nanofabrication Nottingham



Facility Size m<sup>2</sup>: 360 No. of Technicians:2

No. of Academic Users: 20

No. of Industry Users:5

Materials: III-V, Si, Glass, 2D materials Key Capabilities: Electron Beam Lithography,

Dry etching, PECVD, ellipsometry, thermal

processing.

Nanofabrication Nottingham is a cross departmental facility that is open to users from across the university and beyond. It is equipped with a wide range of equipment, and we are happy to help with your request no matter your nanofabrication knowledge.

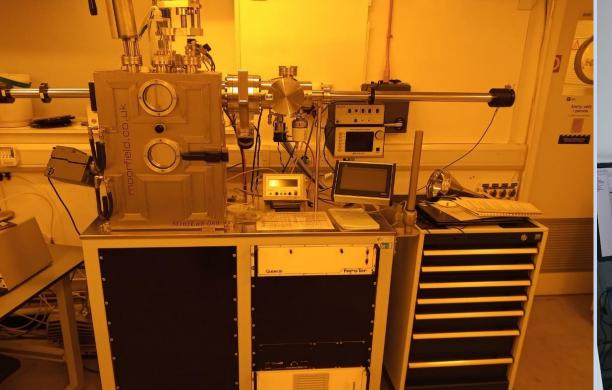




Lithography: Nanobeam nB5, Primo maskless photolithography, 2 suss mask aligners, Stensborg desktop NIL



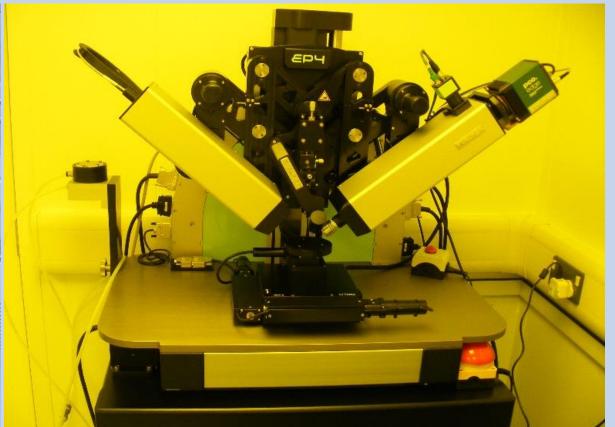
Thermal treatment: Carbolite Gero furnace, rapid thermal annealer, Purged hotplates



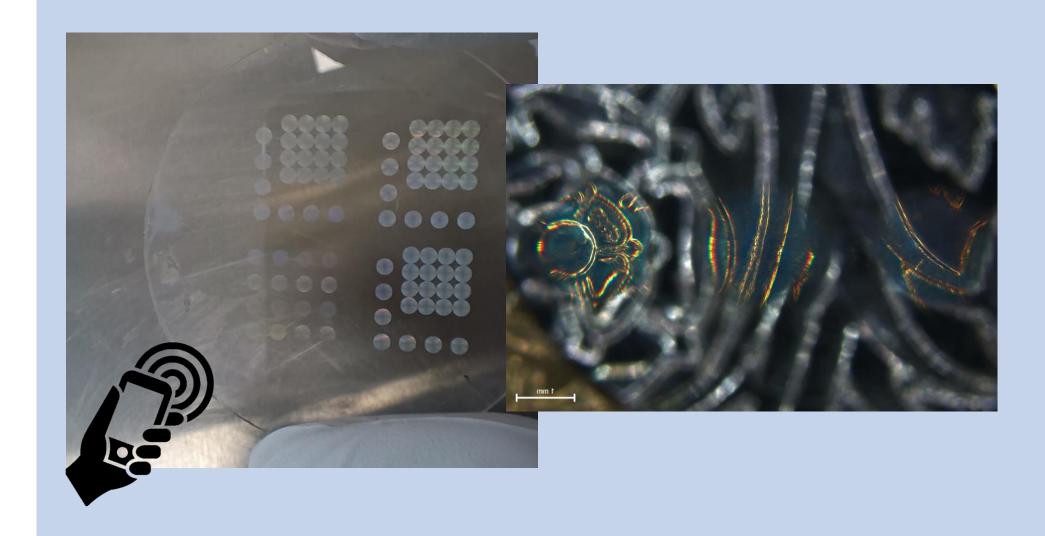
Deposition: Corial PECVD, Moorfields and Edwards thermal evaporators, Moorfield E-beam evaporator



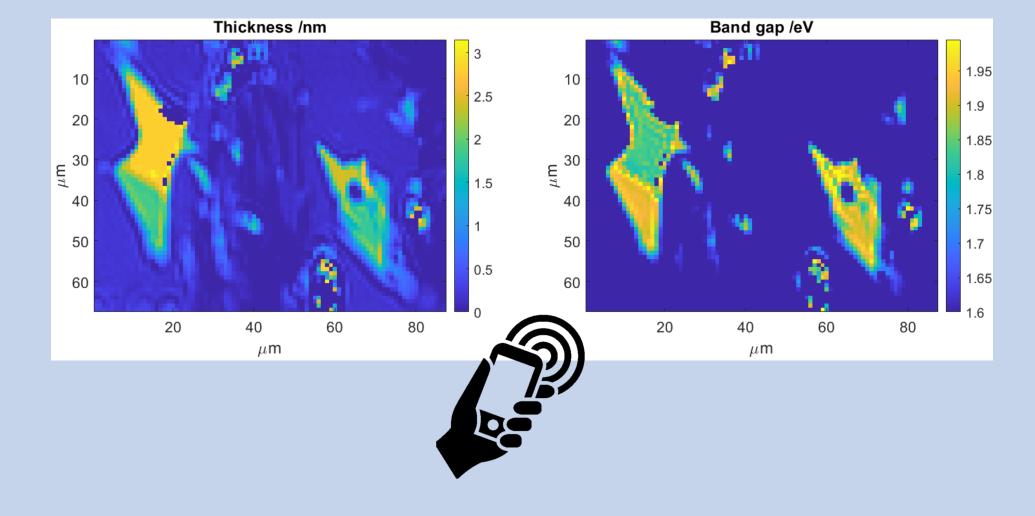
Etching: Corial 200IL RIE etcher, wet etching including HF, Mantis ion miller



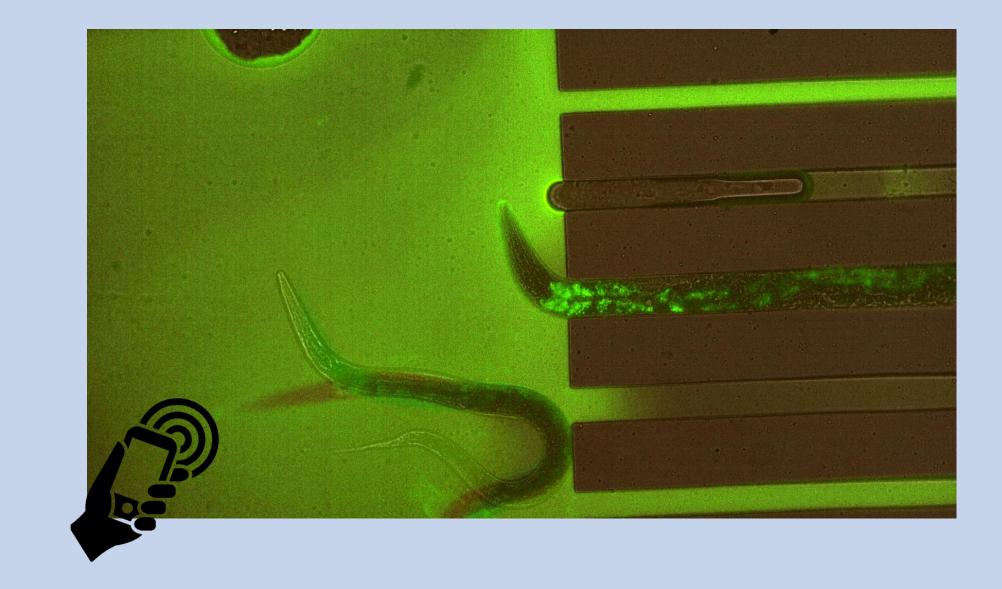
Analysis: Woollam M2000 VASE Accurion ep4 imaging ellipsometer, KLA-Tencor P7 stylus profiler, SEM, FIBs and TEMs



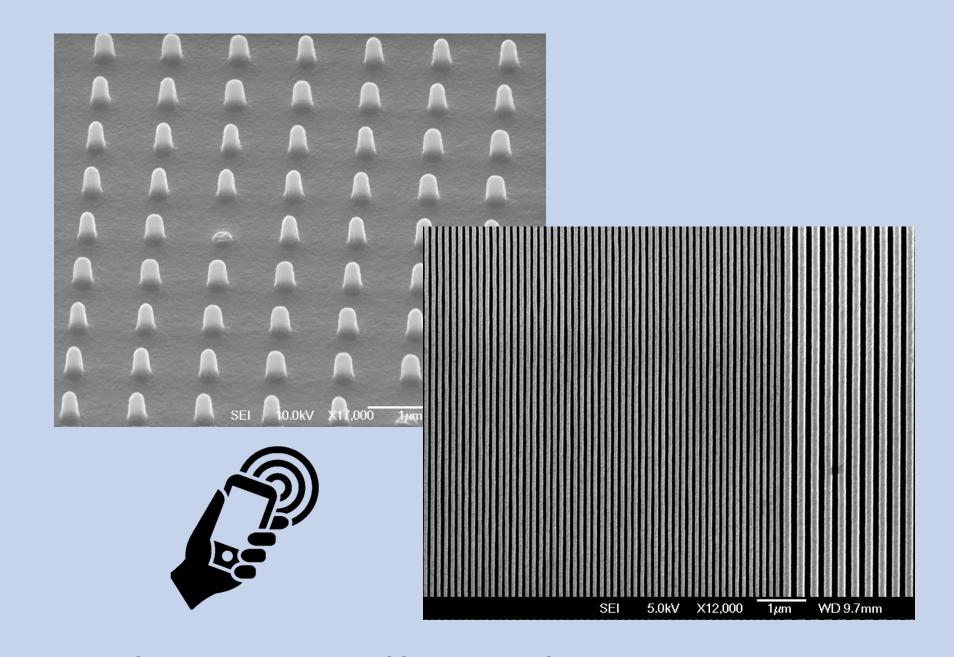
We can fabricate high quality metalenses via a combination of PECVD, EBL, thermal evaporation and dry etching.



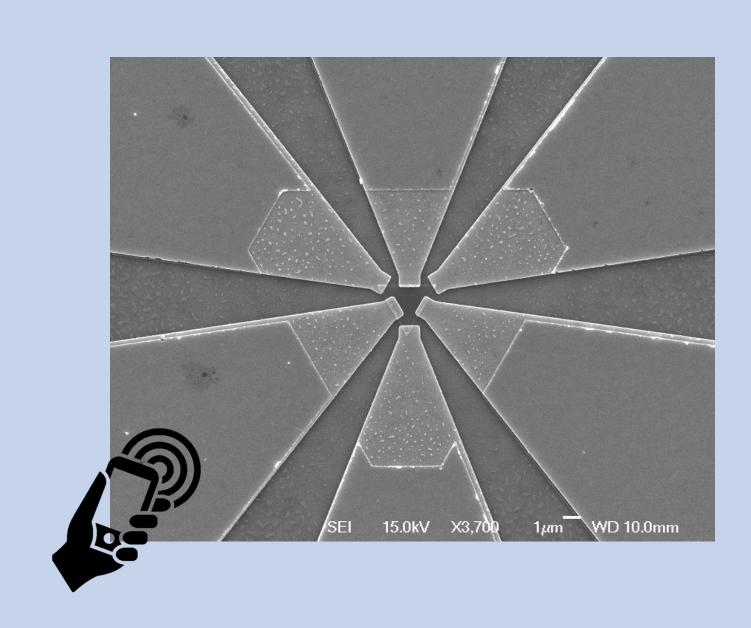
We have one of the few imaging ellipsometers in the country which we use to measure a variety of properties of 2D materials.



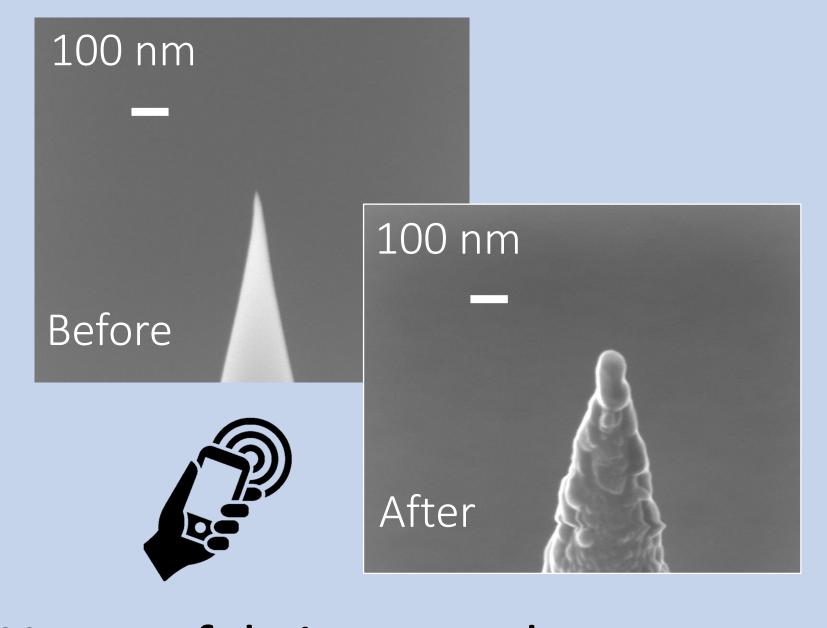
Maskless lithography allows us to rapidly create microfluidic devices, as no mask is needed, we can easily change designs as needed.



We have a roll to plate NIL system that can reproduce patterns from in house masks at a fraction of the cost of EBL/dry etching.



Thanks to our MBE facilities we can grow specialist wafers, these can then be patterned via a combination of EBL and ion milling.



We can fabricate and test our own high quality TERS tips via a combination of Electron beam evaporation and thermal oxidation

## For more information:

- Go www.nottingham.ac.uk/nanofabrication
- Speak to Richard
- Scan the QR code or tap the NFC logo to read the poster later

