Microelectronic Processing and Fabrication



Łukasiewicz

Institute of Microelectronics and Photonics



ELECTRON BEAM LITHOGRAPHY DUV PHOTOLITHOGRAPHY DIRECT LASER WRITING LITHOGRAPHY NANOIMPRINT PLASMA ETCHING

- Performing individual technological steps or process sequences to fabricate microelectronic, optoelectronic and photonic devices
- Lithography, plasma etching, thin film deposition ion implantation, RTP (rapid thermal processing)
- Master and working stamp fabrication
- Performing UV-NIL (ultraviolet nanoimprint litography) and Hot Embossing processes
- Photolithography mask: design and fabrication

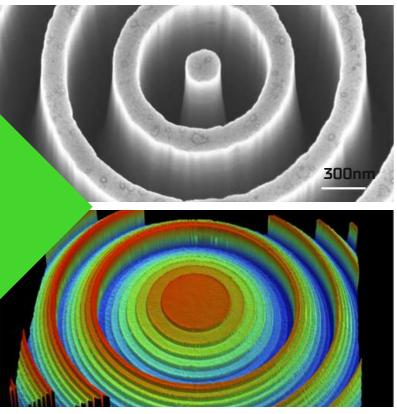


Optoelectronic and photonic devices: LED, LD, VCSEL, optical fiber sensors

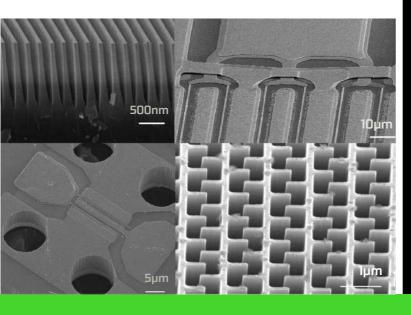


Microelectronic devices: Transistors (HEMTs, MOSFET) and Diodes (Schottky) Grow Up Your Business With Us

Micro- and nano-3D structures

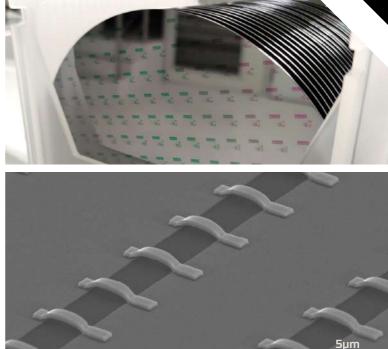


Photonic crystals for LED technology T-gate, air bridge, via holes for HEMTs





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Diffractive optical elements

- Single microlens and arrays
 (spherical, cylindrical, elliptical)
- Diffraction gratings,
 fan-out elements
 - Computer generated holograms
 - Apodised diffractive elements





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