The Nano-Fabrication Center

The Nano-Fabrication Center at Ben-Gurion University of the Negev is a facility serving the academy, industry, and government. The Nano-Fabrication Center has been operating since February 2005, when Fab1 was opened. Today it includes three fabrication areas and two nanolabs.


Equipment and Infrastructure

The Nano-Fabrication Center consists of three independent clean room sub-areas (Fab1, Fab2, Fab3) with class 100 to 10000 and two Nanolabs: the Electrical and Optical Characterization of Devices NanoLab and the Packaging NanoLab (including wafer/chip bonding, wire bonding, die saw and more).

The advanced cutting-edge nano-fabrication equipment used in all our labs and Fabs, enables us to offer comprehensive services, including: Thin film deposition; etching; lithography; bonding; baking; dicing and polishing; mask fabrication and wafers cleaning; and devices analysis and characterization.

The Nano-Fabrication Center also provides the unique possibility of HAR etching on sapphire, glass, silicone and other substrates; making line/space and holes with a diameter less than 10nm; producing nanowires; design and fabrication of reflective and antireflective surface structures and coating, blazed grating and plasmonic structures, and high quality optical micro disk/ring structures; precision nanolithography, and more.
Our Services
• Process design
• Process development
• Process integration
• Process characterization
• Full high-resolution litho service (with resolution of less than 10nm)
• Small volume production service (from concept to final product)
• Optic, thermal, and electrical simulations and tolerance analysis

Advantages and added value of working with BGU Nano-Fabrication
• Accumulated knowledge and experience: We have the know-how, accumulated through experience and many successful projects in multidisciplinary fields
• Flexibility: Operational flexibility and variability in the development and fabrication process
• Time-to-Market: Short cycle timeframe from concept to production
• Interactivity: A collaborative and transparent working process at all stages

Selected clients
Defense: Elbit Systems – Elop, Rafael Defense Systems
Other: Qlight Nanotech, SanDisk, Thales CMT Medical Technologies, KiloLambda, Acktar