

Research Topics and Keywords

Research Topics	Keywords
A. Growth and Doping	HPHT, CVD, PVD, Homo/hetero epitaxy, Rapid growth, Crystal defects(vacancy, dislocation, etc.), Impurity doping control, Gemological technology, Plasma analysis, etc.
B. Processing and Machining	Etching, Polishing, Planarization, Cutting, Slicing, Beveling, Molding, Grinding, Tools, etc.
C. Electronics	Schottky/Ohmic contacts, PN diodes, MOS capacitors, Transistors(FET, BJT), Solar cell, 1D&2D hetero devices, Thermal interface material, etc.
D. Optics and Photonics	Optical properties(transparency, reflection, etc.), Optical sensors, Information photonics and image engineering, Biomedical measurements and analyses, Biomedical imaging (OCT, optical topography, etc.), Optical driven actuator, Protective coating, etc.

Research Topics	Keywords
E. Mechanical Properties	Coating, Hardness, Young's modules, Piezoresistivity, Gas barrier, Mechanical parts, Tribology, MEMS/NEMS, SAW devices, Tools, etc.
F. Thermal Management	Thermal conductivity, Thermal resistance, Thermal strain, Phonon, Heat sink/spreader, Bonding, etc.
G. Electrochemistry and Biotechnology	Functionalization, Electrolysis, Imaging, (Electro)Chemical sensors, Bio sensors, Biocompatible material, (Bio)Medical devices, Corossion, Microbial fuel cells, Drug delivery system (DDS), etc.
H. Color Centers and Quantum Technology	quantum sensing, qunatum information processing, qunatum optics, quantum communication, NV center, SiV center, etc.
I. Carbon Neutral Technology	CO2 reduction/recycle, Power devices, Battery, Super capacitor, Fuel cell, Power generation, Ultra-low friction, enery consumption, etc.