

Electroceramics Laboratory

Lab Feature

Electroceramics Laboratory focuses on the design, manufacturing and miniaturization of thin film bulk acoustic wave (TFBAR) devices and surface acoustic wave (SAW) devices to promote the high-frequency applications of acoustic wave devices in 5G communications.

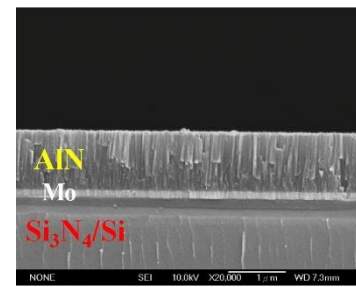
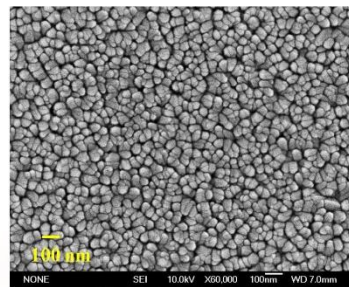
Research Topics

- Design of high frequency wireless communication devices
- Fabrication of piezoelectric thin films (ZnO, AlN, ScAlN and AlGaN)
- Materials and frequency response analysis

Projects

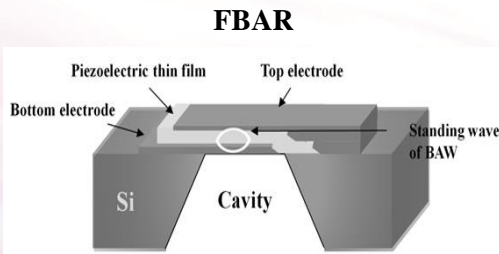
- Thin Film Bulk Acoustic Resonator/Filter Devices
- Surface Acoustic Wave Resonator/Filter Devices

Piezoelectric thin films

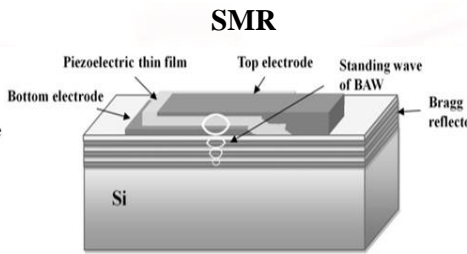


Surface

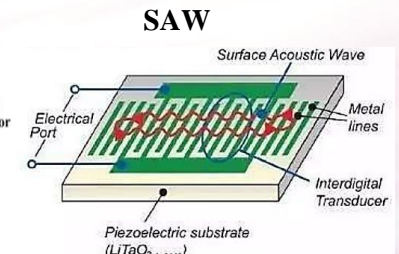
Cross-section



FBAR

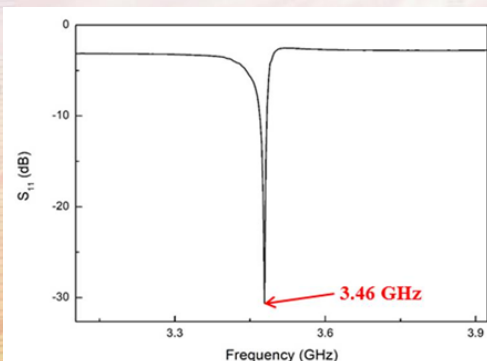


SMR



SAW

Resonator



Filter

