Electronic and optical measurements & Terahertz Spectroscopy for functional materials

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Keywords	Optical measurements, Terahertz Spectroscopy, Semiconductors, Superconductors
Technical Support Skills	・Optical measurements of micro displacement and vibration ・Semiconductors crystal growth & process ・Terahertz spectroscopy for functional materials

Research Contents

【My research seeds】

○Optical measurement with laser or the other light sources, which are from visible to infrared

We have several different optical measurement systems for measuring micro-displacement , vibrations, polarized image.

1) Heterodyne interferometer systems with He-Ne laser.
2) Robust interferometer systems with displacement prism
3)Polarized image processing system

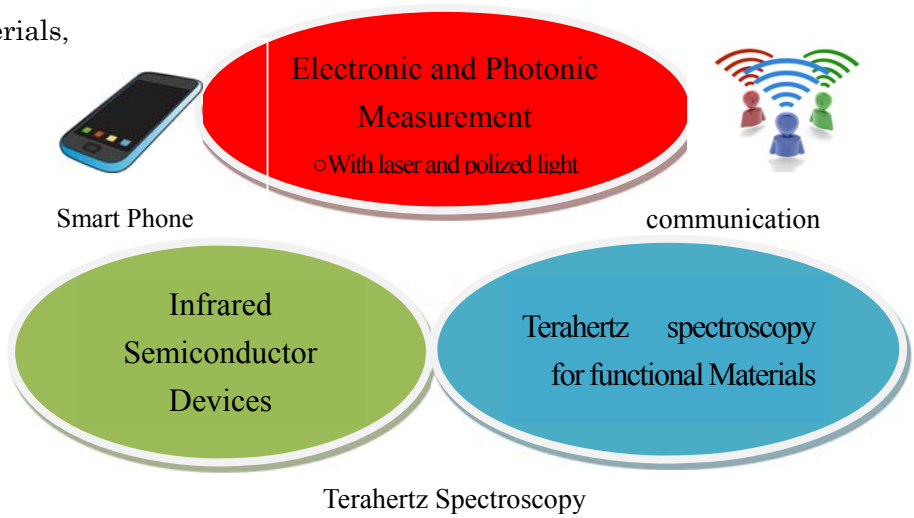
○Semiconductor devices, especially, infrared opt-semiconductors devices（LED, LD, PD）

We have researched PbSnTe systems mid-infrared optical devices long time, and infrared communication with high power near infrared LED

1) PbSnTe systems crystal growth and fabricating devices, its measurement and investigation.
2) IrDA (Infrared Data Association) and its around technology

○Terahertz spectroscopy for functional Materials

We research several functional materials, such as solar cell materials, semiconductors, superconductors with frequency tunable Terahertz spectroscopy.



Available Facilities and Equipment
