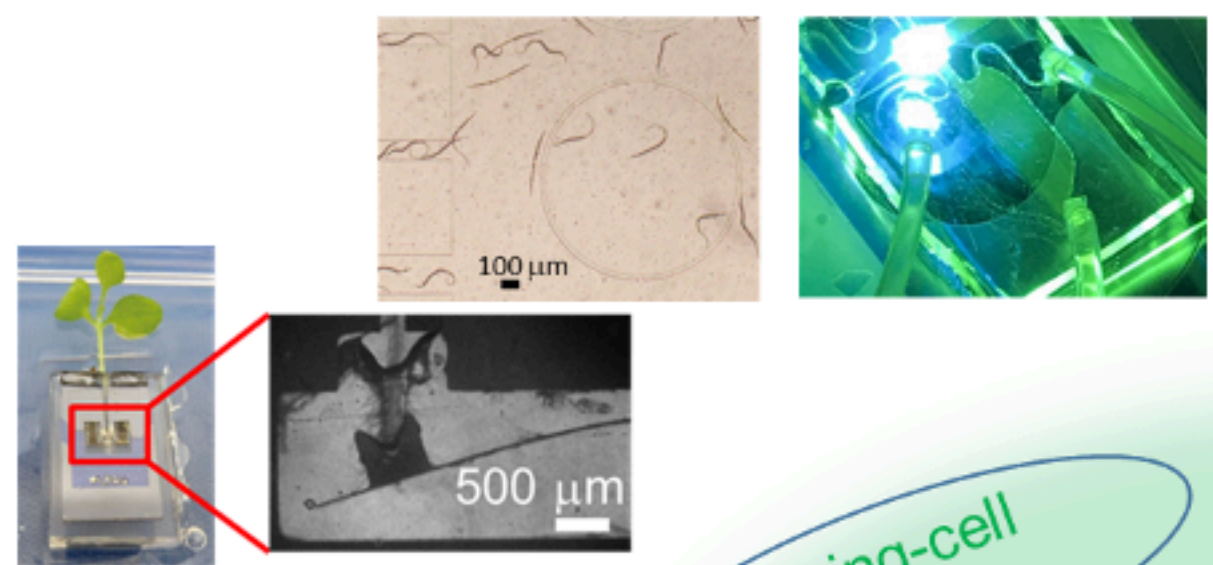
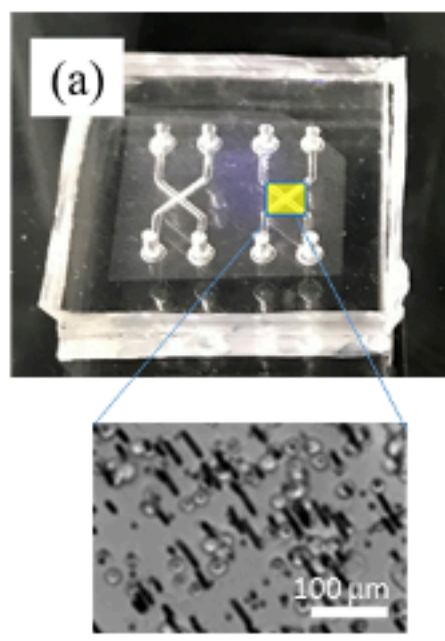
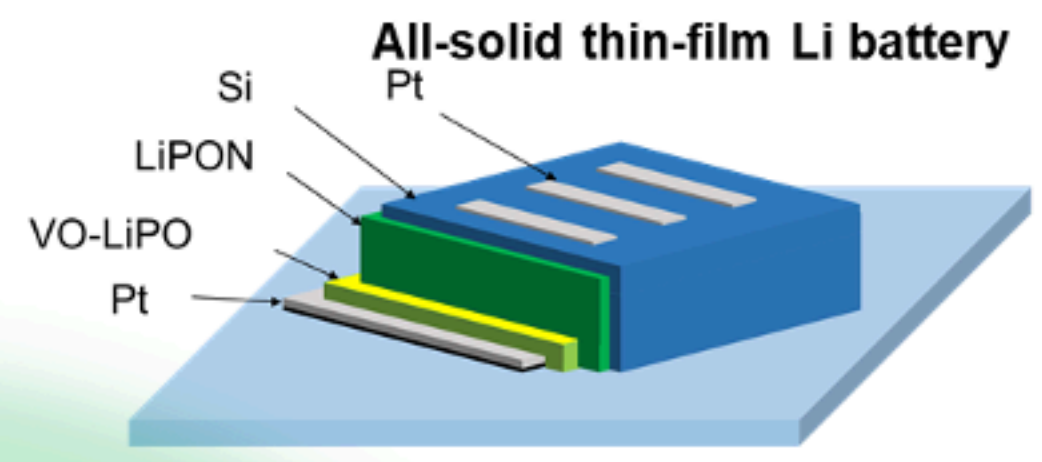


MA-2: Sensing Device Laboratory

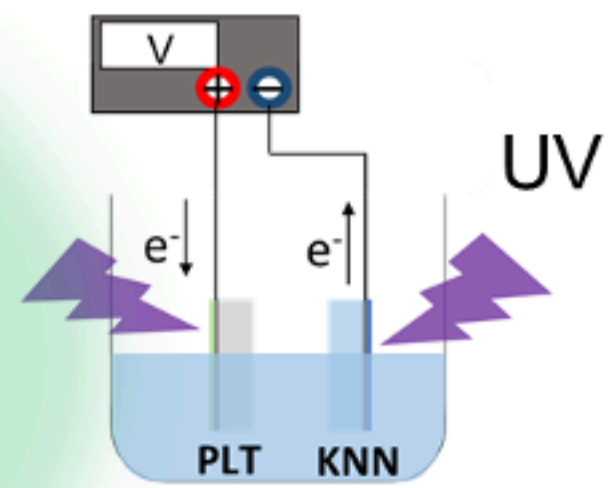
Membrane potential measurement device



Physiological analysis of plant/microbe



IoT



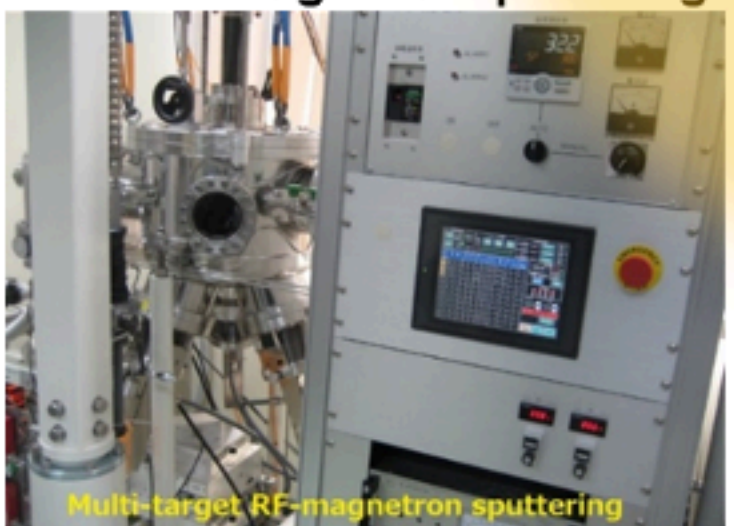
Ferroelectric thin-film photocatalyst



Multilayer PZT thin film

547 nm	PZT	SRO
582 nm	PZT	SRO
497 nm	PZT	SRO
524 nm	PZT	SRO
421 nm	PZT	SRO
	SRO/PVDF	Si

3-target RF sputtering



Multi-target RF-magnetron sputtering

Functional thin films

Piezo-MEMS
Ferroelectric thin films

Photo catalyst

Sensors
Actuators

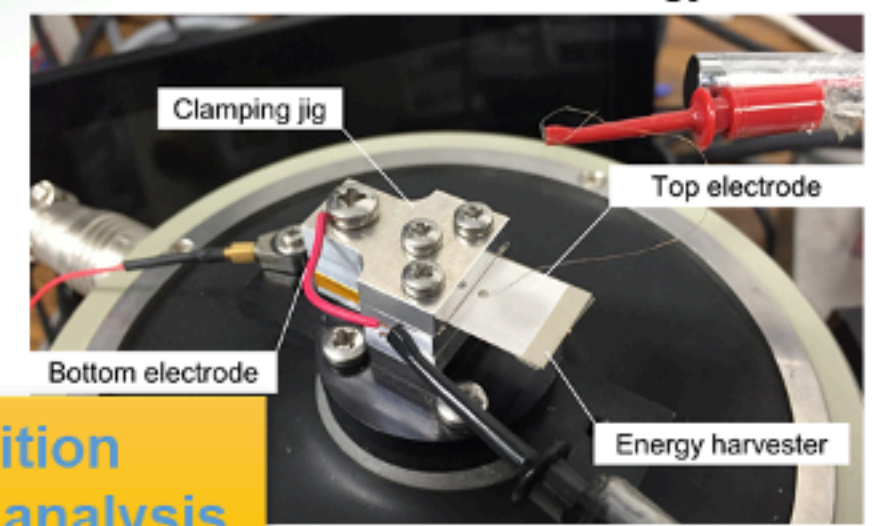
Living-cell devices

Plant sensing

Energy harvesting

All-solid Li thin-film batteries

Piezoelectric thin-film energy harvester



- Sputtering deposition
- Crystal structure analysis
- Microfabrication
- Metrology
- Device design