Bio-sensors for Biological Systems

A. TIXIER-MITA LAB.

Multi-modal Bio-sensing Micro-devices

Centre for International Research on MicroNano Mechatronics (CIRMM)

Integrated MEMS/NEMS technologies for multi-modal biomedical applications Department of Information and Communication Engineering, GSIST http://toshi.iis.u-tokyo.ac.jp/toshilab/?Members/Agnes+Tixier-Mita

Information in biological systems, like the neuro-cardiac system, is essentially coded in a



multi-modal way through electrical and various bio-molecules signals. For the investigation of that information, multi-modal sensing tools is then needed. Our laboratory is developing **multi-modal bio-sensing platforms**, which integrate different sensing techniques, for in-vitro biological cells and tissue investigations. **We target real-time and high resolution sensing** to study cell culture and cell-cell interactions and communication. The platforms are mainly based on Thin-film-Transistor (TFT) technology to realize integrated array of sensors.



