

세미나 초록

발표주제	유연 압력센서 기반 수면상태 감지 시스템 (Flexible Pressure Sensors for Sleep Monitoring System)
발표내용	<p>A prospect of flexible electronics lines with the development of functional devices based on disordered semiconductors, such as organic and soluble inorganic materials. Flexible optoelectronic applications need a wide variety of electronic components of photovoltaics (PVs), organic light emitting diodes (OLEDs), field effect transistors (FETs), and even sensor applications.</p> <p>Those devices are basically composed of two- or three-terminal contacts which have the interfaces of metal/semiconductor (SC), dielectric/SC and SC/SC. Thus, the interfacial engineering is predominant to realize those devices for flexible application. A crucial issue concerning charge injection at the interface of electrode/organic semiconductor is recently rising in order to improve the electrical performance of diodes and FETs for sensory system.</p> <p>This presentation gives an investigation on charge injection via the modification of electrodes with self assembled monolayers (SAMs) in organic electronic devices for self-powered flexible pressure sensor application with self-powered versatility itself and commercialization of these technology into the industry. This is extended to significant use of health monitoring system through smart mattress while detecting human motion closely in real time and will open the era of 24h/7day health care system in our daily life.</p>