

Soft Electronic and Microfluidic Systems for the Skin

Recent advances in materials, mechanics and manufacturing establish the foundations for high performance classes of electronics and other microsystems technologies that have physical properties precisely matched those of the human epidermis. The resulting devices can integrate with the skin in a physically imperceptible fashion, to provide continuous, clinical-quality information on physiological status. This talk summarizes the key ideas and presents specific examples in wireless monitoring for neonatal intensive care, and in capture, storage and biomarker analysis of sweat.