Special Issue

Recent Advances in Electronic Skins and Self-Powered Flexible Sensors for Wearable Applications

Message from the Guest Editors

A key breakthrough lies in the development of **sensitive materials and mechanisms** that mimic the mechanical and sensory characteristics of human skin. This has led to the production of skin-like wearable sensors capable of monitoring the evolution of pressure, temperature, strain, and various health-related biomarkers in real time. Further, this field has attracted increasing scholarly attention via introducing various **self-powered sensing mechanisms**, which eliminate the need for external batteries and power supplies. For example, triboelectric nanogenerators (TENGs) and piezoelectric materials, such as polyvinylidene fluoride (PVDF), convert mechanical energy from body movements or environmental vibrations into electrical signals, powering sensors in real time. In this Special Issue, we will publish original research and review articles on the recent development of electronic skins and self-powered sensors. Manuscripts addressing innovations in the application of novel materials, custom sensing mechanisms, the design of sensor architectures, breakthroughs in performance, and device functionalities are all welcome.

Guest Editors

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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