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Thin-Film Transistors for Biomedical and Chemical Sensing

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Message from the Guest Editor

With the rapid research progress in biological elements, there is a strong demand for low-cost biochips with the capability of massive parallel detection for the prognosis of disease and drug discovery, etc. The modern development of electronic and optoelectronic devices further enables people to develop real-time high-sensitivity sensor arrays. Among those devices, field effect transistor biosensors (FET biosensors) have attracted great attention because they can detect tiny electrical charge difference from biomolecules using very high sensitivity current or voltage meters. The transistor can also be used for signal readout thanks to its transconductance properties. Thin-film transistor (TFT) arrays have already been widely employed in the flat-panel display industry, making the mass-production of TFT sensors available for bio-medical applications.

This Special Issue aims to cover developments in TFT sensors for bio-medical and chemical detection. You are invited to submit manuscripts illustrating newly developed TFT sensors, as well as manuscripts describing novel applications of TFT sensors in solving real life analytical problems.



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Special Issue



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Message from the Editor-in-Chief

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