



Research Progress in Flexible Electronic Materials and Devices

Guest Editors:

Prof. Dr. Ming Liu

School of Microelectronics, Xi'an
Jiaotong University, Xi'an 710049,
China

Dr. Lvkang Shen

School of Microelectronics, Xi'an
Jiaotong University, Xi'an, China

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Message from the Guest Editors

Different from the traditional semiconductor silicon integration devices, flexible electronic devices have unique advantages, such as flexibility and ductility. It is necessary to understand the physical properties of flexible single-crystal functional films under different bending states before designing flexible devices, and this has become one of the key scientific problems to be solved. As we all know, functional single-crystal oxide materials have rich physical properties due to the strong interaction between charge, spin, orbit and lattice. By introducing the new physical parameter of mechanical bending deformation/strain, some unique physical phenomena and properties will be produced. Therefore, the effects of bending deformation/strain on the ferromagnetic, ferroelectric, domain-switching and electrical transport properties of flexible materials should be studied, and the mechanism by which mechanical bending induces the change in physical properties will be revealed. Therefore, a series of high-quality prototype flexible devices can further achieve multifunction, miniaturization and integration for future flexible electrics.





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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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