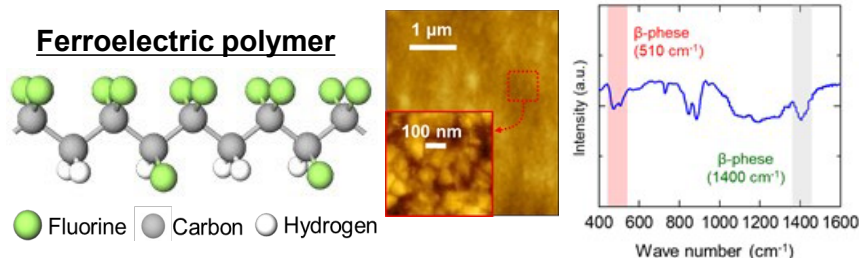


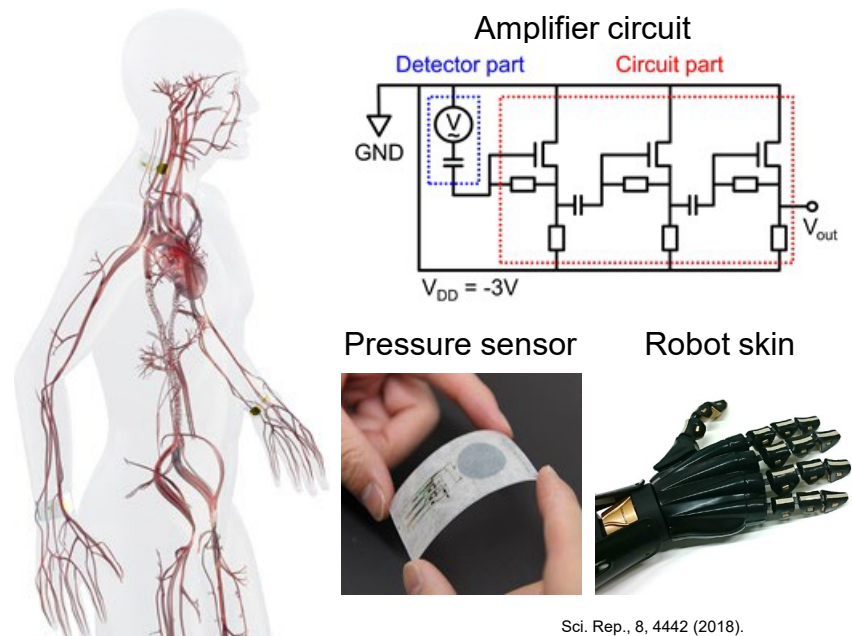
Development of Smart Material Systems for Organic Thin-Film Devices

Associate Professor Tomohito Sekine

Development of smart material systems



Fabrication of highly sensitive flexible sensors



Sci. Rep., 8, 4442 (2018).
ACS Appl. Electron. Mater., 1, 246 (2019).

Content:

The research of our group address development of smart material systems with functionalized polymers and semiconducting materials. One of our research field is fabrication of organic thin-film electric devices such physical sensors, actuators, and transistors. The key technologies for the research are the use of systematic ferroelectric polymers with functional carbon materials and solution processes such printing methods. In recent years, a new approach utilizing the concept of thin-film and flexible sensors for an artificial skin has been proposed where smart materials are fabricated on a plastic substrate adaptable to wearable sensors. This concept has advantages as high pressure sensitivity and fast response time compared with previous. Other applications for human interaction such as biomimetic electronics and robot skins are also our research interest.

Appealing point:

- Promotion of the research collaboration
- Development of functionalized devices with smart materials

Yamagata University Graduate School of Science and Engineering
Research Interest : Material science,
Organic electronics

E-mail : tomohito@yz.yamagata-u.ac.jp
Tel : +81-238-26-3387
Fax : +81-238-26-3788
HP: <https://tokitolabo.yz.yamagata-u.ac.jp>

