

MATSUHISA LAB.

Redesigning Electronics from Softness



Department of Informatics and Electronics
Daicel: Electronics for Human Interaction
Centre for Interdisciplinary Research on Micro-Nano Methods (CIRMM)
LIMMS/CNRS-IIS (IRL2820) International Collaborative Research Center

Department of Electrical Engineering and Information Systems,
Department of Advanced Interdisciplinary Studies,
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Interactive Electronic Devices

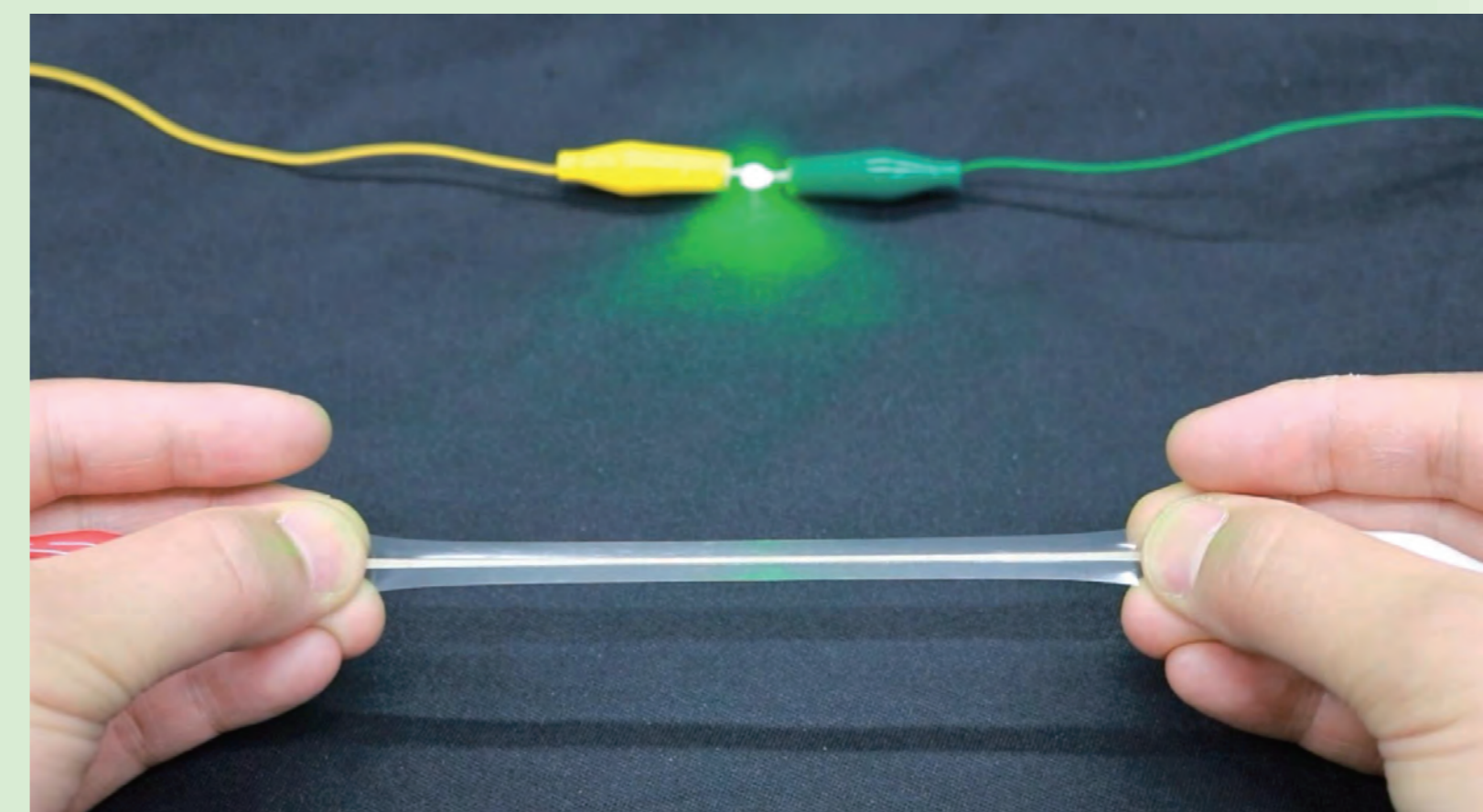
<https://www.naojimatsuhisa.com/>

Soft electronic materials enable human-interactive electronics

Electronics constructed from soft and stretchable electronic materials exhibit mechanical properties comparable to those of biological tissues, enabling excellent conformity to skin wrinkles and movements. This allows the realization of next-generation wearable devices with superior comfort. Our laboratory develops stretchable electronic materials as a foundation and consistently advances research from stretchable sensors and displays to their integration into functional systems. By leveraging softness as a core design principle, we aim to open new application domains for electronics. Taking advantage of the unique environment of the Komaba Research Campus, we promote internationally collaborative and interdisciplinary research.

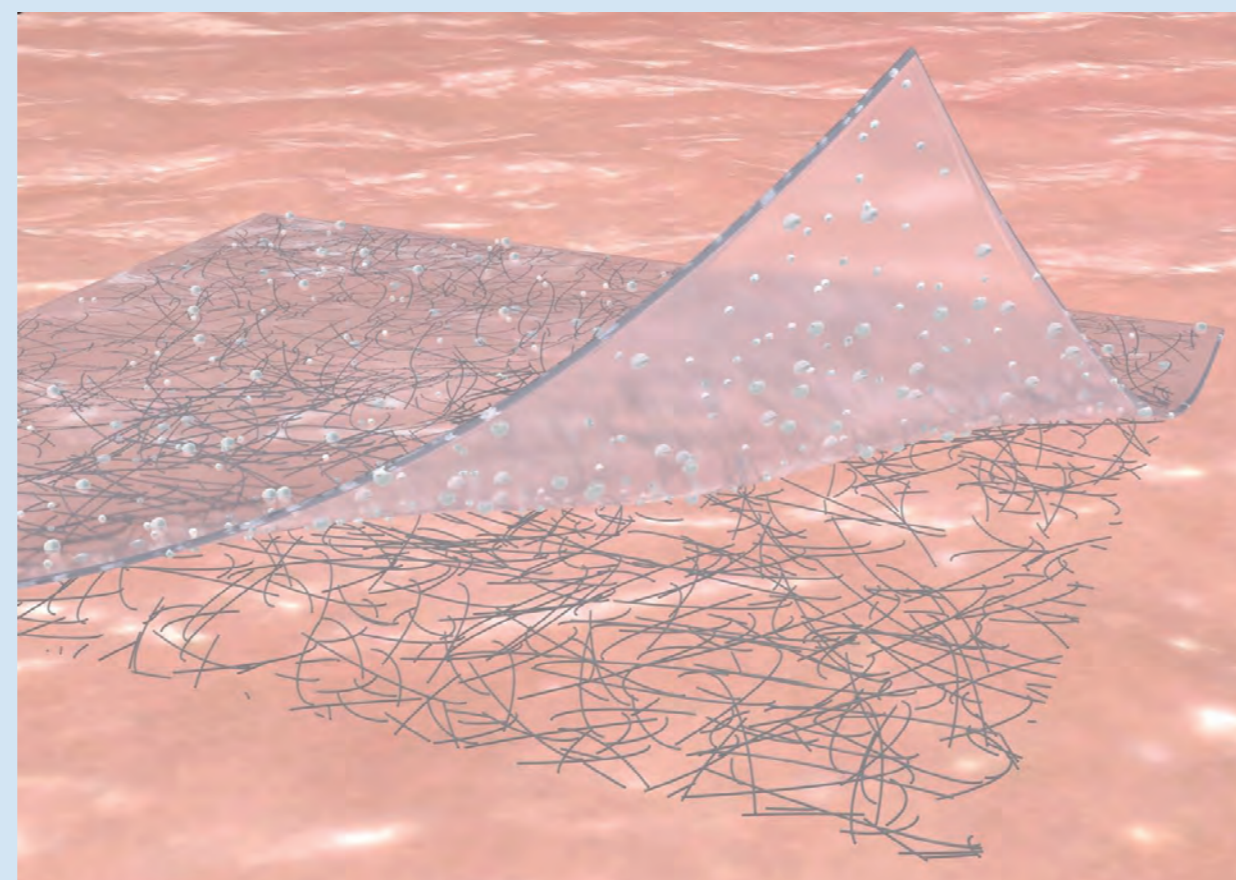
Materials

- Conductors
- Semiconductors
- Dielectrics



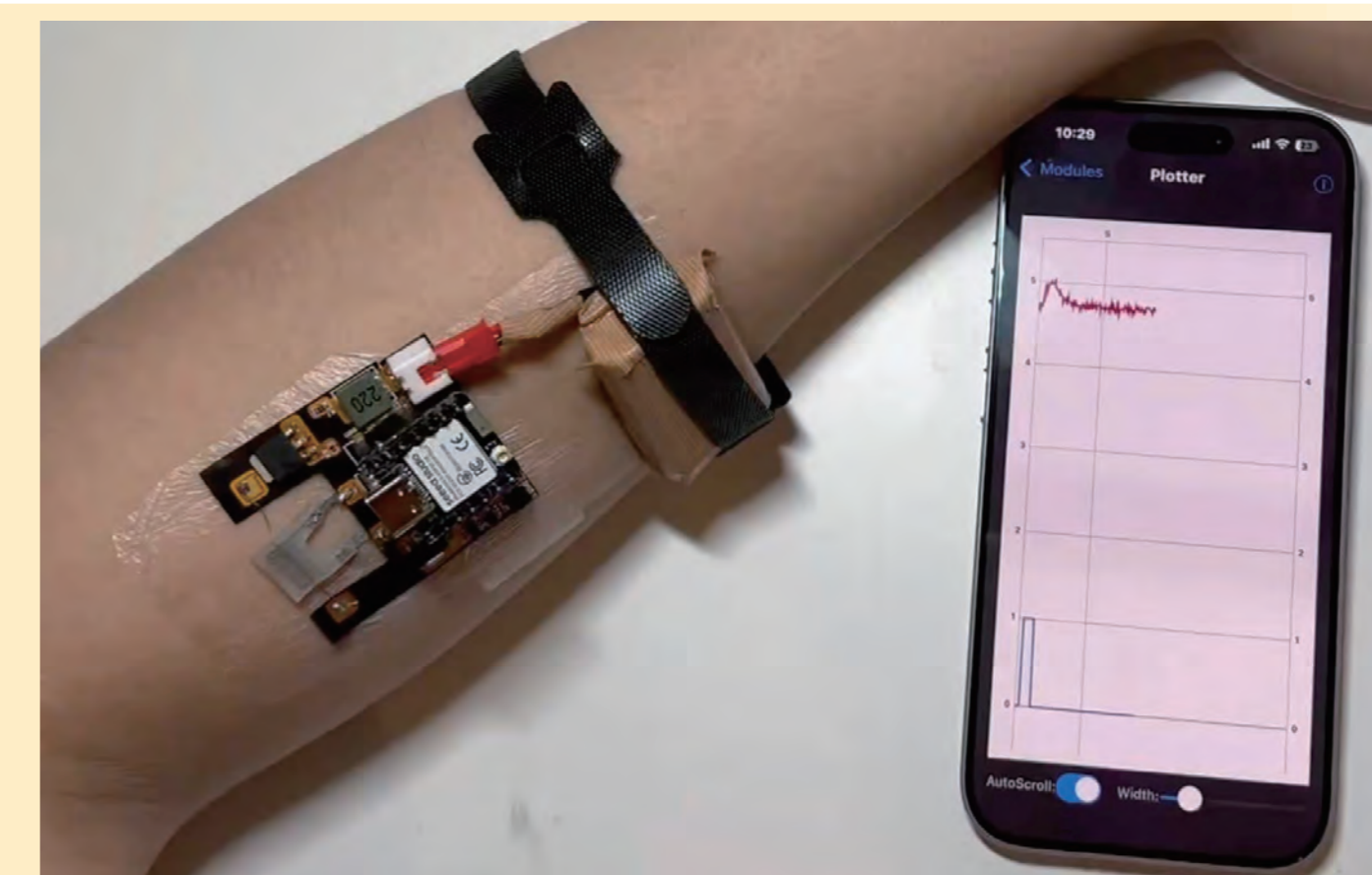
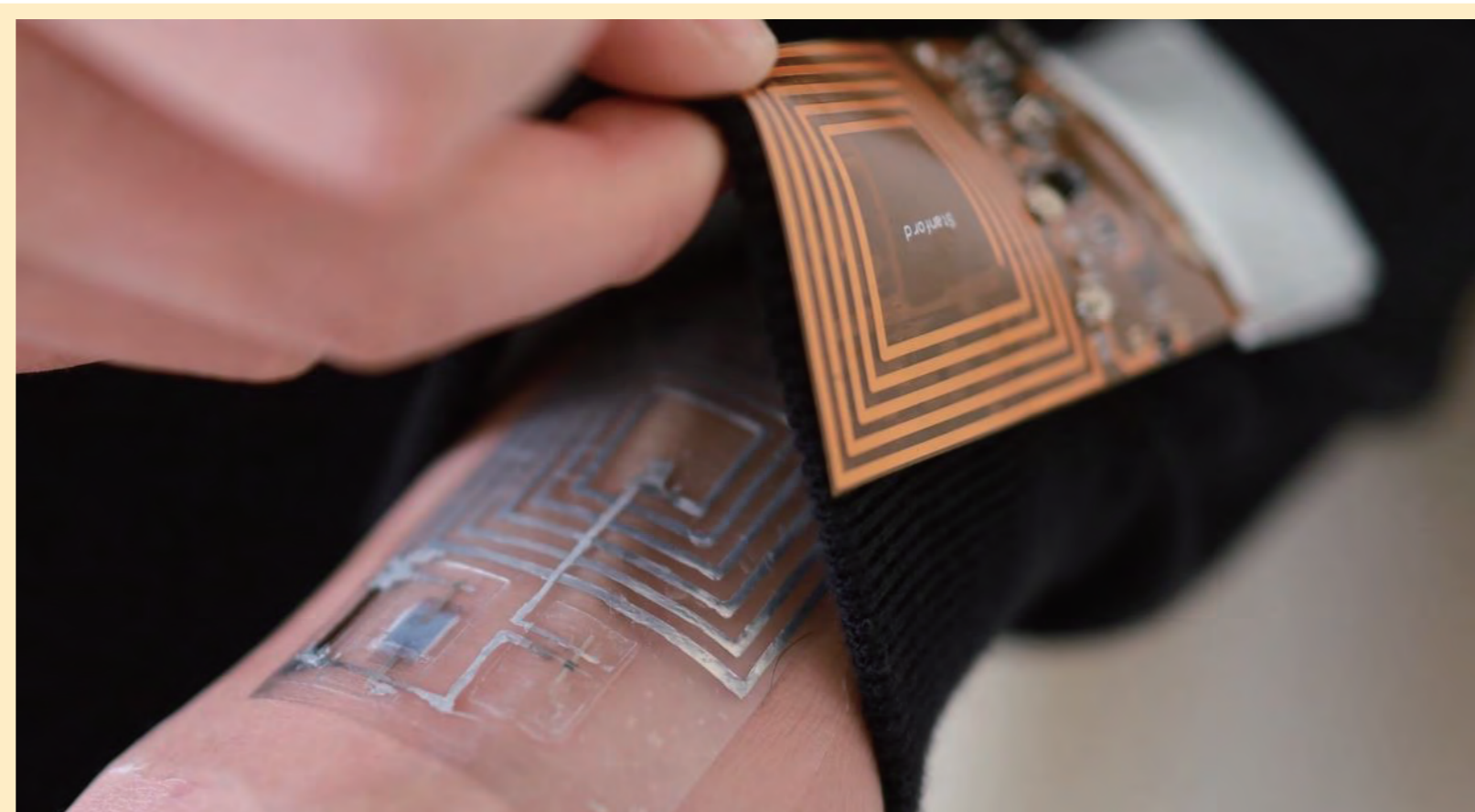
Devices

- Sensors
- Displays
- Transistors



System

- ICs
- Power
- Network
- Communication



Applications

- Healthcare
- Human computer interfaces

