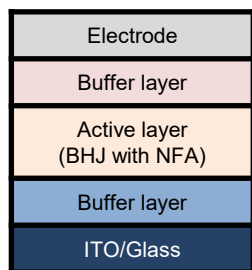
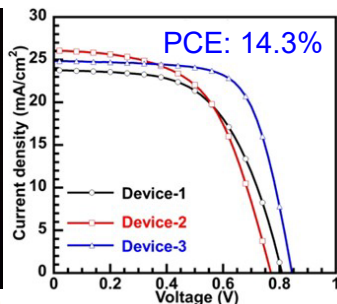
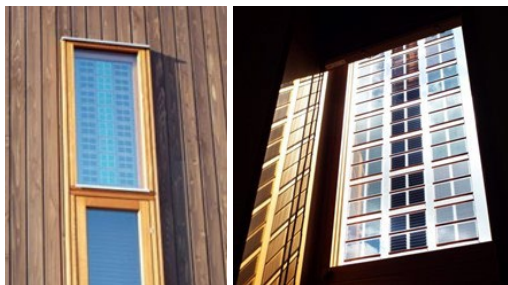


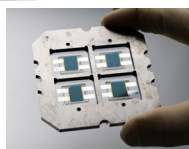
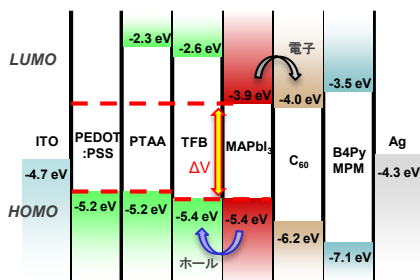
# Development of Organic Solar Cells and Perovskite Solar Cells

Prof. Takeshi Sano

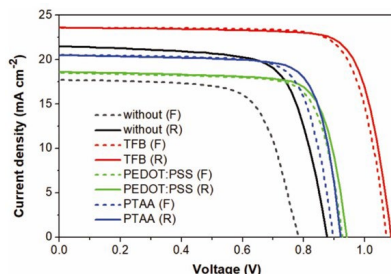
## Organic Photovoltaic Solar Cells (OPVs)



## Perovskite Solar Cells (PVSCs)



PCE: 20.2%



## Content:

1. Development of organic photovoltaic solar cells (OPVs)
  - See-through solar cells for “power-generating windows”. (ACS Appl. Mater. Interfaces, 2018, 10, 31, 26465-26472.)
  - Energy-harvesting solar cells for indoor use, such as IoT devices and sensor applications.
2. Development of perovskite solar cells (PVSCs)
  - Development of inverted perovskite solar cells that can be fabricated at low temperature process, have high efficiency (>20%), and have a long life. (Adv. Funct. Mater. 2019, 29, 1807556.)
  - Development of fundamental technology for fabrication of perovskite top cells in perovskite-silicon tandem solar cells.

## Appealing point:

Actively engage in research and development through industry-academia collaboration and projects, aiming to build innovative technologies and implement them in society.

Yamagata University, Innovation Center for Organic Electronics

Research Interest : Organic Solar Cells (OPVs),

Perovskite Solar Cells (PVSCs), Organic LEDs

E-mail : [takeshi.sano@yz.yamagata-u.ac.jp](mailto:takeshi.sano@yz.yamagata-u.ac.jp)

Tel : +81-238-26-3586, +81-238-29-0566

Fax : +81-238-29-0567

HP : <https://inoel.yz.yamagata-u.ac.jp/en/>

<https://yucoi.yz.yamagata-u.ac.jp/en/>

