

Development of High-Efficiency Organic Solar Cells

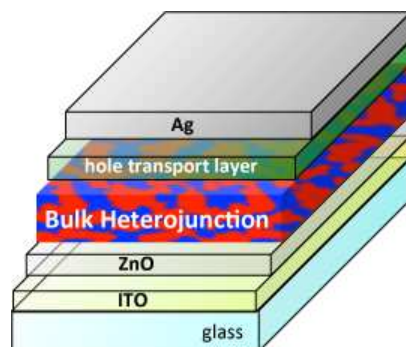
(Prof. Takashi OKUBO, tokubo@kindai.ac.jp)

Research Area

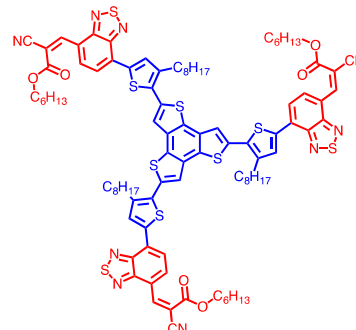
Advantages of Organic Thin-Film Solar Cells

- Low Cost Solar Cells Fabricated by using Printing Process
- Thin, Light Weight and Flexible Semi-Transparent Solar Cells
- Use in Various Places different from Si Solar Cells

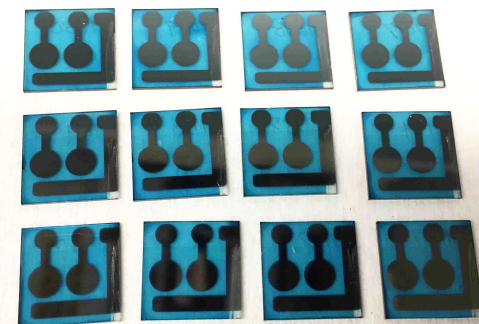
Organic Thin-Film Solar Cells



Synthesis of Organic Thin-Film Solar Cells



Fabrication of Organic Thin-Film Solar Cells



Recent Activities

- Promotion and Mutual Aid Corporation for Private Schools of **Japan**, The Science Research Promotion Fund "Development of High-Efficiency Organic Solar Cells with Non-Fullerene Acceptors (2018–2019: Principal investigator, Takashi Okubo)
- Patent 6633872, 6230051, 5272116
- H. Ando, S. Tanaka, K. Matsumoto, Y. Nakao, "Theoretical study on steric deconjugation of poly(3-hexylthiophene) through bromination", *Chem. Phys. Lett.*, **2017**, 687, 60-65.