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High performance polymer/oligomer based solar cells

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Date: Wednesday, 20, March. 2019, 11:00-12:30
Venue: Room 232, 3F Faculty of Engineering Bldg. 2

Abstract:
With many unique advantages, polymer/organic photovoltaic has been thought as one of the promising technology to face the increasing energy and environmental issues. In this talk, the design and fabrication of a series of high performance oligomer-like organic molecules and their OPV devices with >17 PCEs will be discussed, together with some future material and device design proposals.

Related Publications:

1. "Organic and solution-processed tandem solar cells with 17.3% efficiency",Lingxian Meng, Yamin Zhang, Xiangjian Wan*, Chenxi Li, Xin Zhang, Yanbo Wang, Xin Ke, Zuo Xiao, Liming Ding*, Ruoxi Xia, Hin-Lap Yip, Yong Cao, Yongsheng Chen*, *Science* , 2018, 361, 1094.
2. "Nonfullerene Tandem Organic Solar Cells with High Performance of 14.11%",Yamin Zhang, Bin Kan, Yanna Sun, Yanbo Wang, Ruoxi Xia, Xin Ke, Yuan-Qiu-Qiang Yi, Chenxi Li, Hin-Lap Yip, Xiangjian Wan, Yong Cao, and Yongsheng Chen *, Adv. Mater.* , 2018, 1707508
3. "Fine-Tuning the Energy Levels of a Nonfullerene Small-Molecule Acceptor to Achieve a High Short-Circuit Current and a Power Conversion Efficiency over 12% in Organic Solar Cells", Bin Kan, Jiangbin Zhang, Feng Liu, Xiangjian Wan, Chenxi Li, Xin Ke, Yunchuang Wang, Huanran Feng, Yamin Zhang, Guankui Long, Richard H. Friend, Artem A. Bakulin, Yongsheng Chen, *Adv. Mater.* , 2017, 1704904

主催: 東京大学大学院工学系研究科専攻間横断型教育プログラム 機械システム・イノベーション（GMSI）
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未来社会空間の創生 国際卓越大学院（WINGS iFS）

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