

602 有機光電子元件研究室

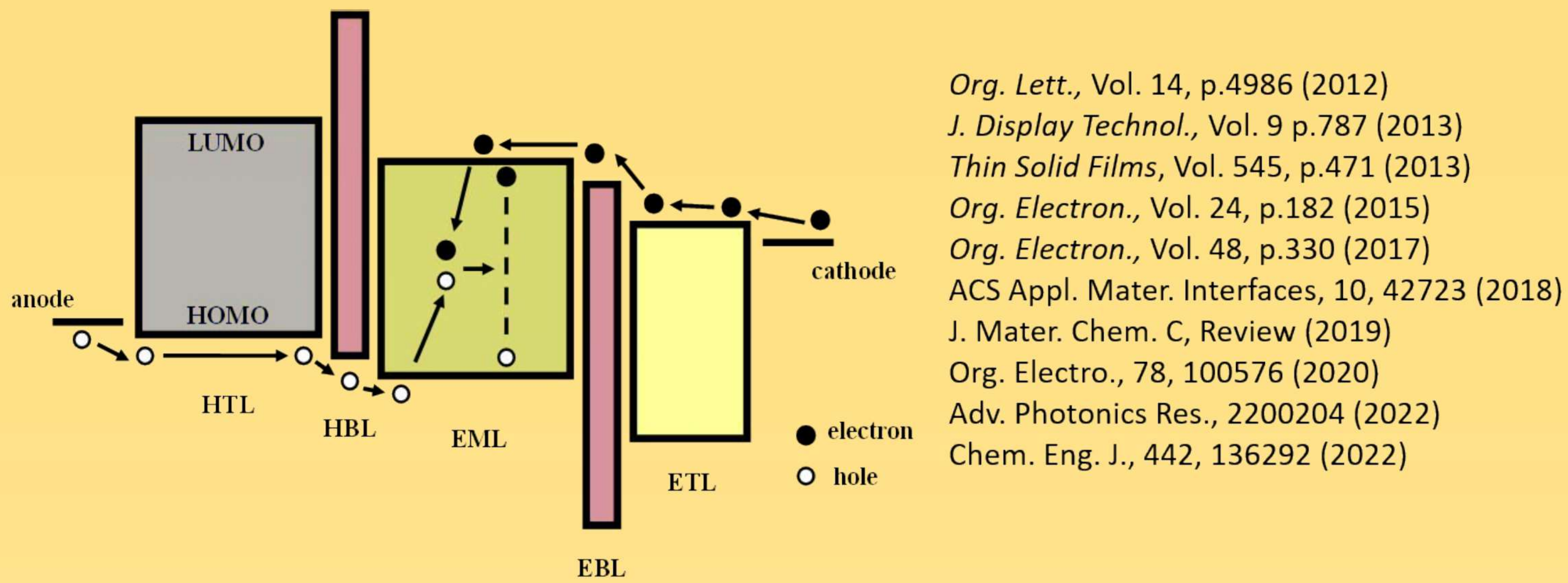
Organic Optoelectronic Devices Lab (OOED Lab)

指導老師：林奇鋒 博士
Dr. Chi-Feng Lin

有機/無機
先進半導體材料的
成長、分析與應用

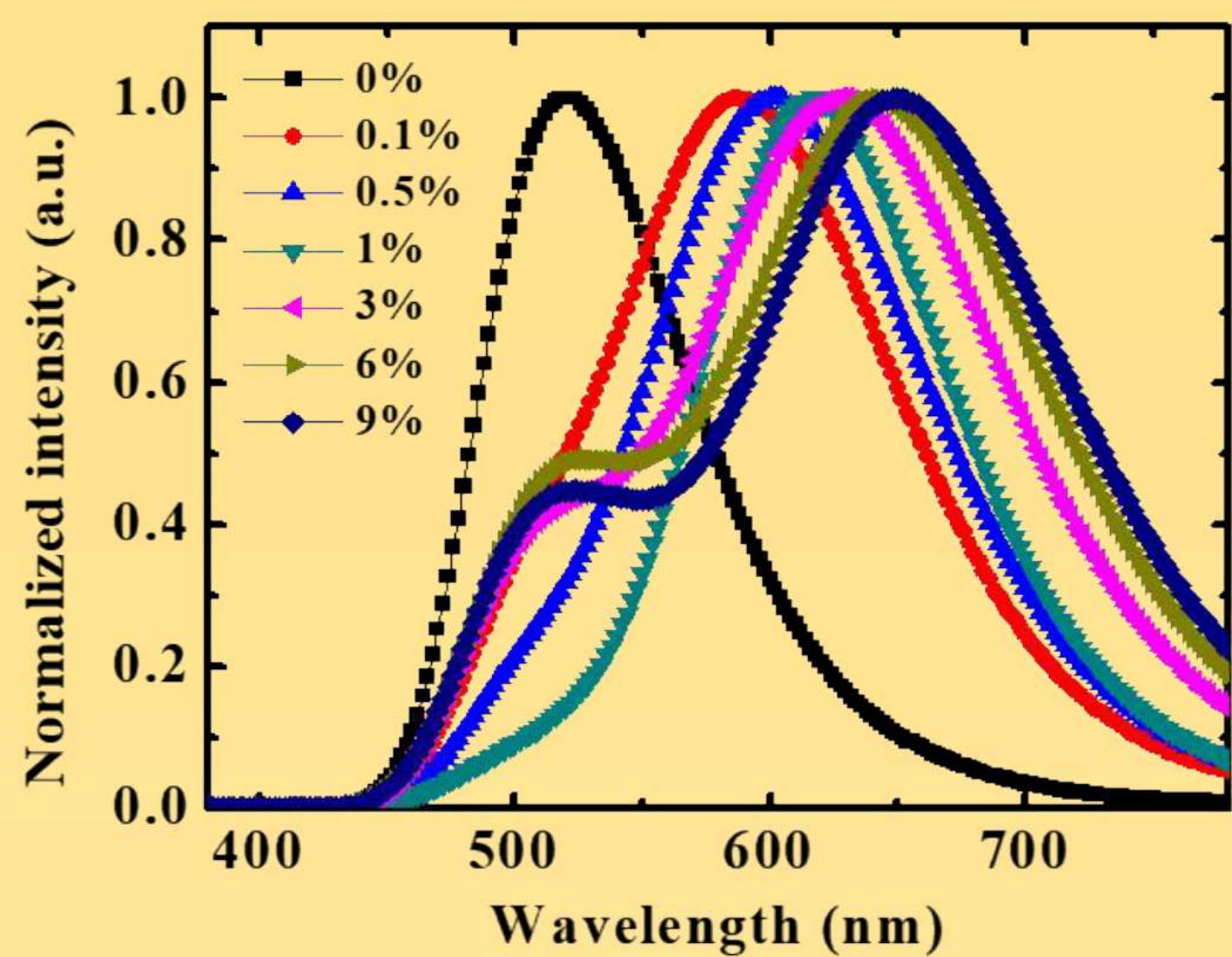
- 1.顯示技術：有機發光二極體(OLED)、量子點發光二極體 (QLED)
- 2.能源技術：有機太陽能電池(OPV)、染料敏化太陽能電池(DSSC)
- 3.感測技術：氣體與生醫感測器
- 4.材料分析：先進半導體材料之成長、分析與應用

High Efficiency OLED Device

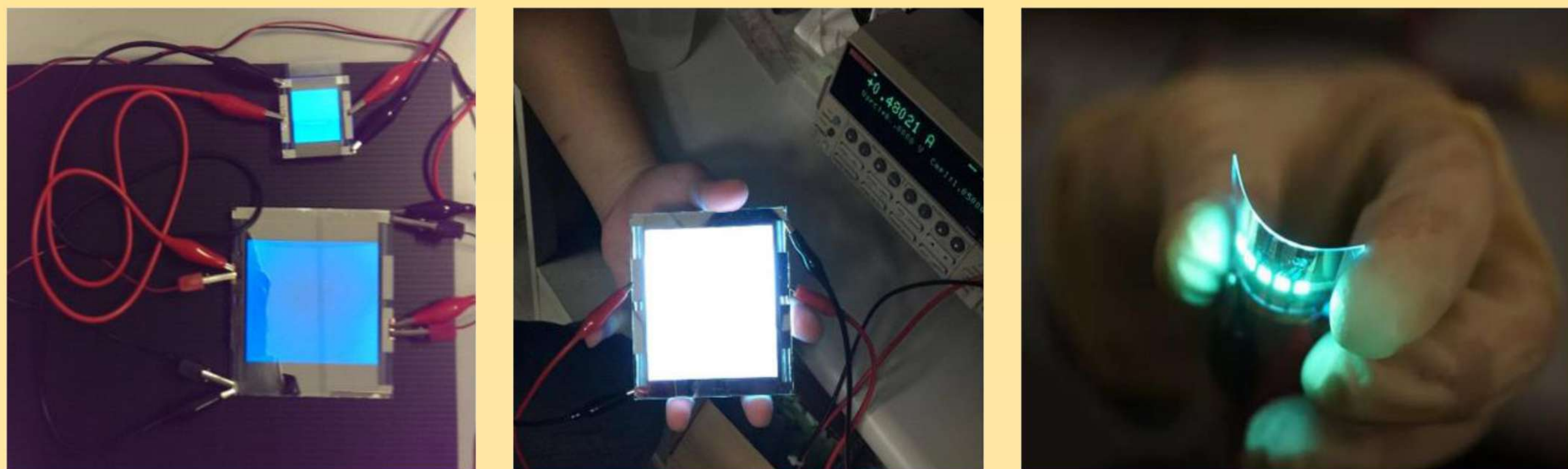
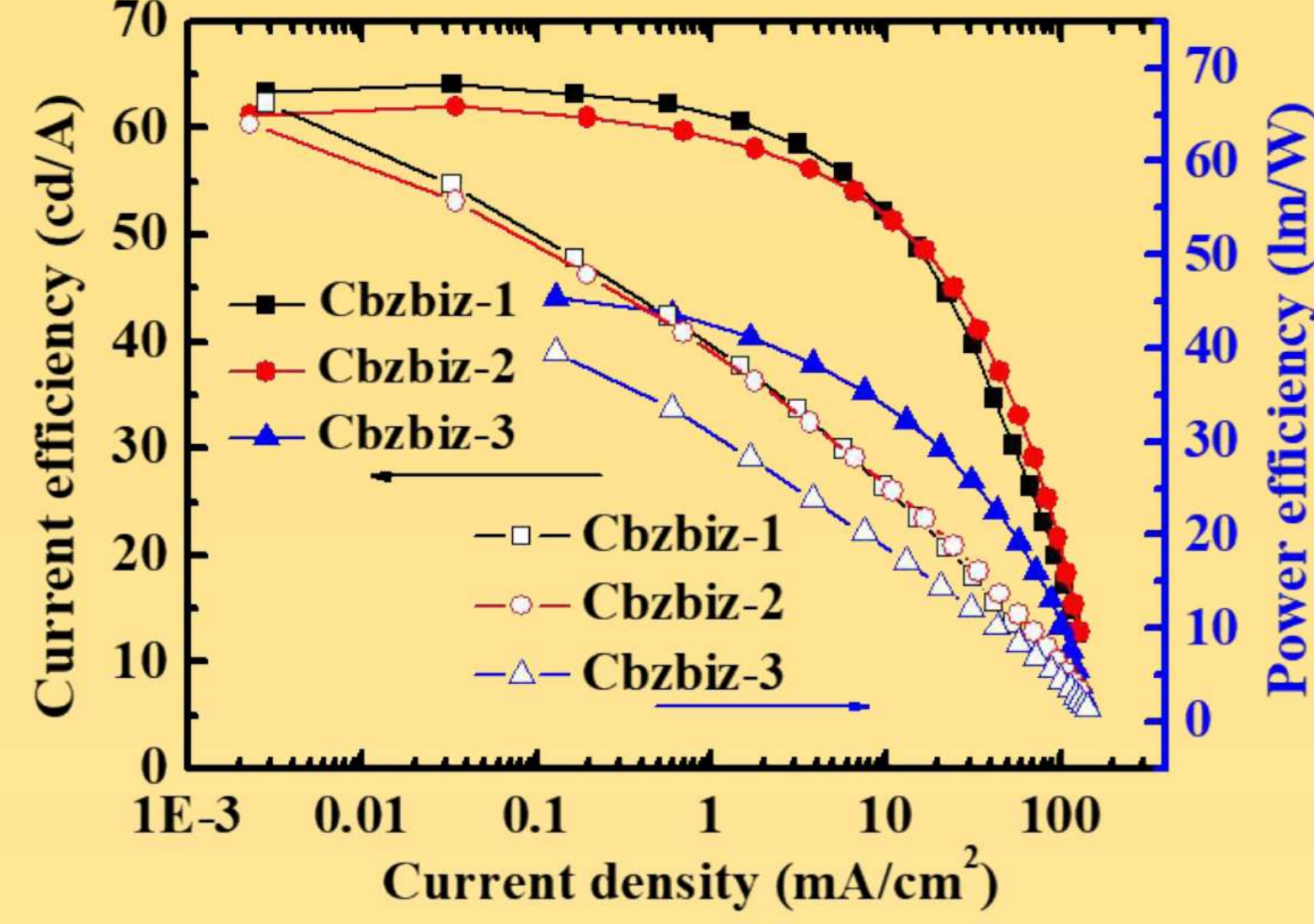


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J. Mater. Chem. C, Review (2019)
Org. Electro., 78, 100576 (2020)
Adv. Photonics Res., 2200204 (2022)
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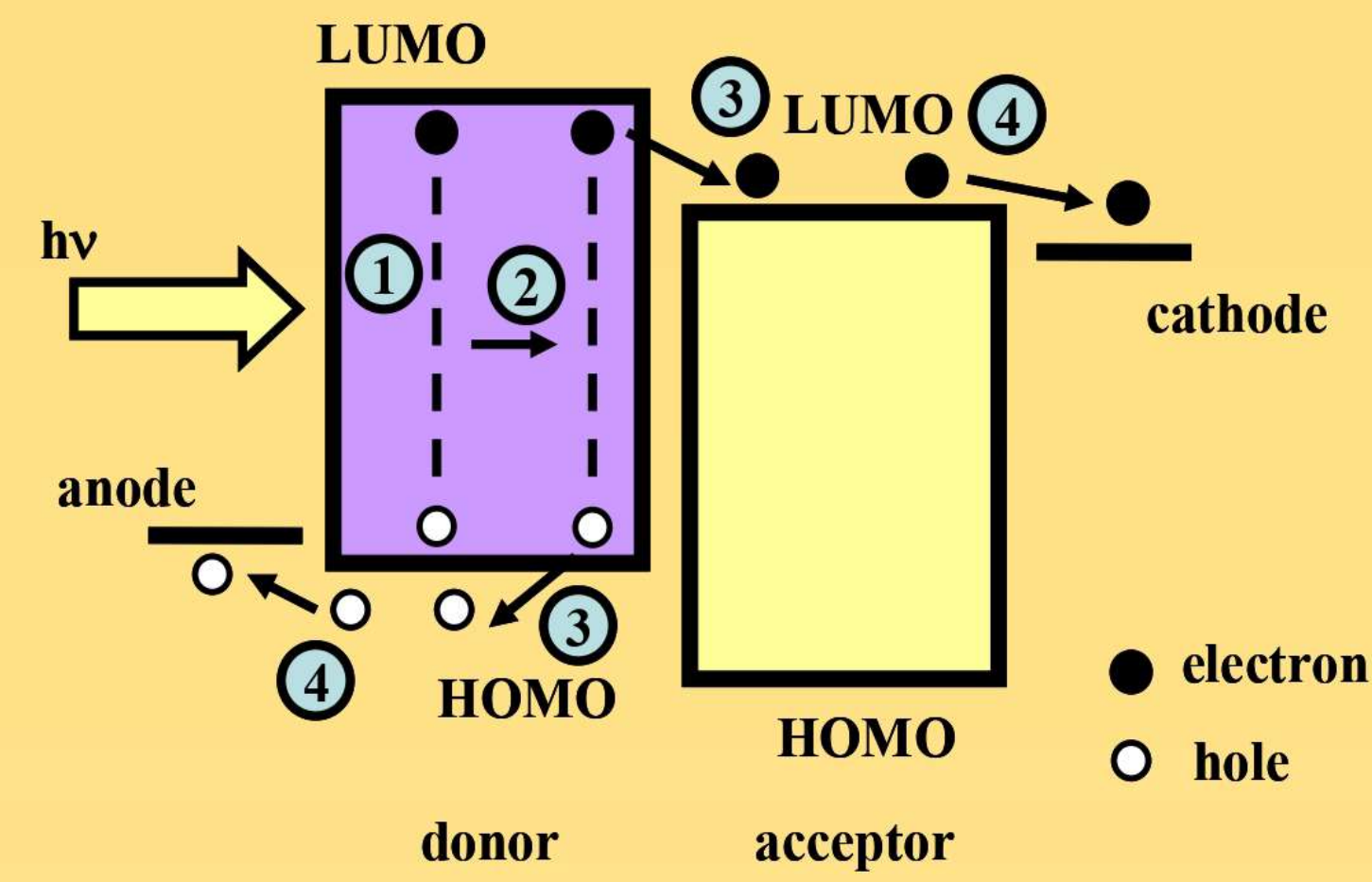
IR OLED



High Efficiency Blue OLEDs

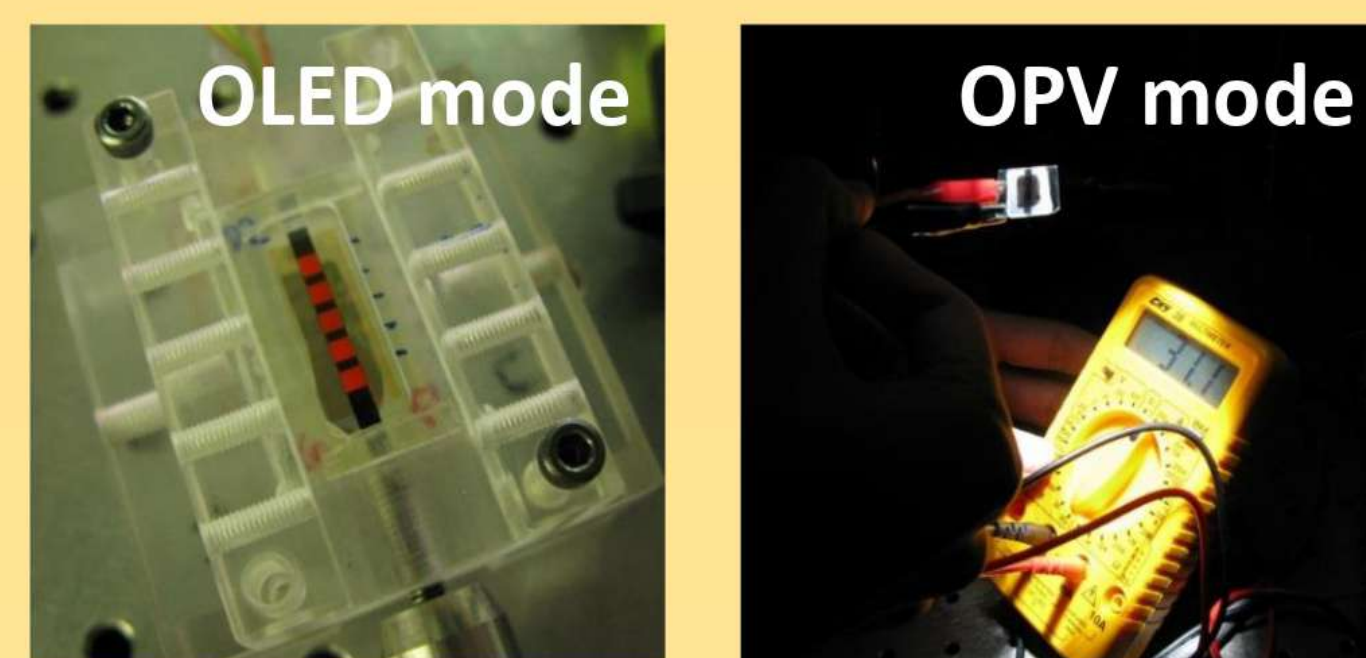


Donor Engineering of OPV Devices

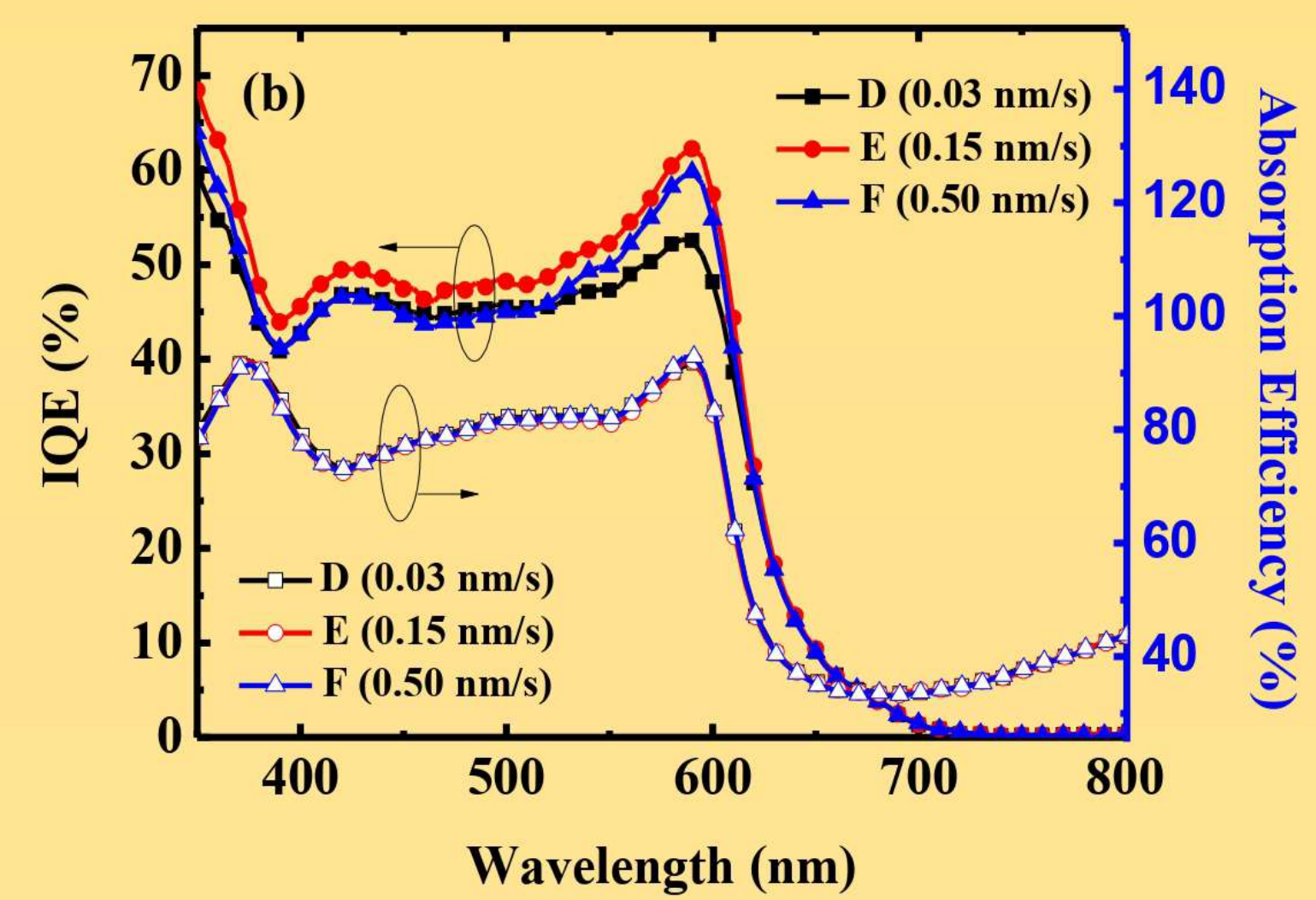
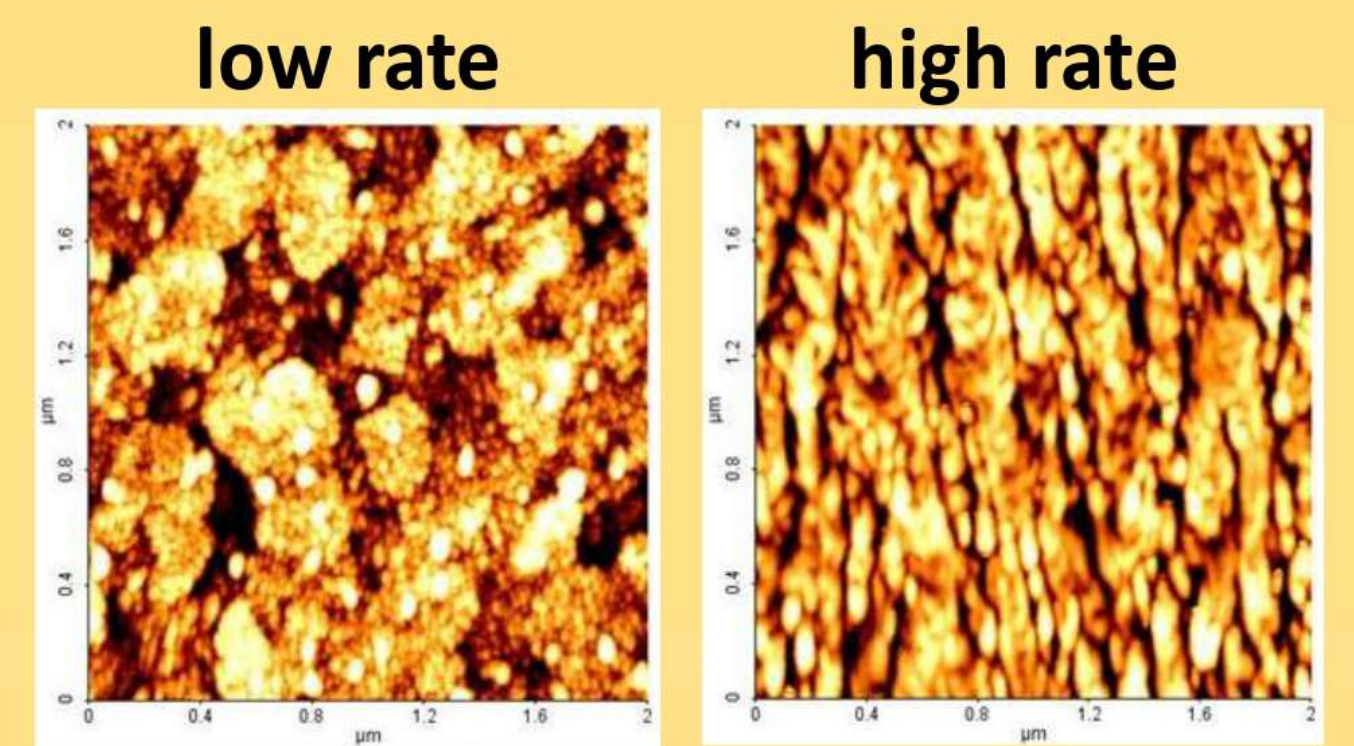


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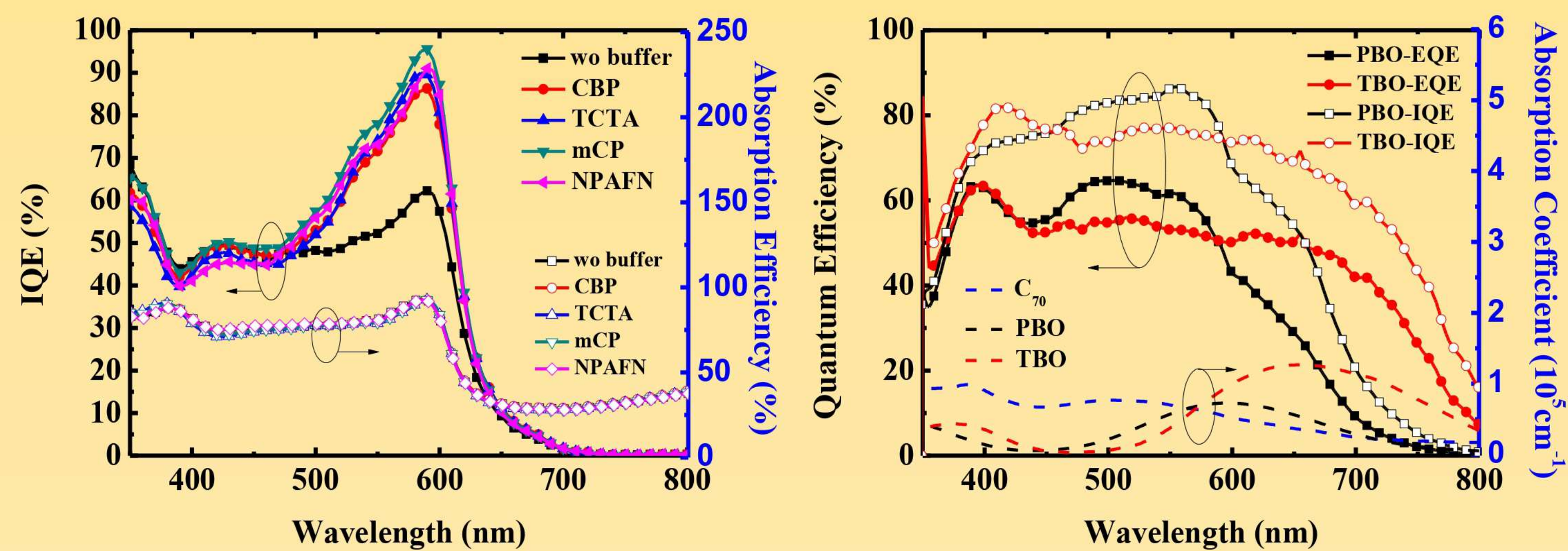
Light Emitting OPV Device



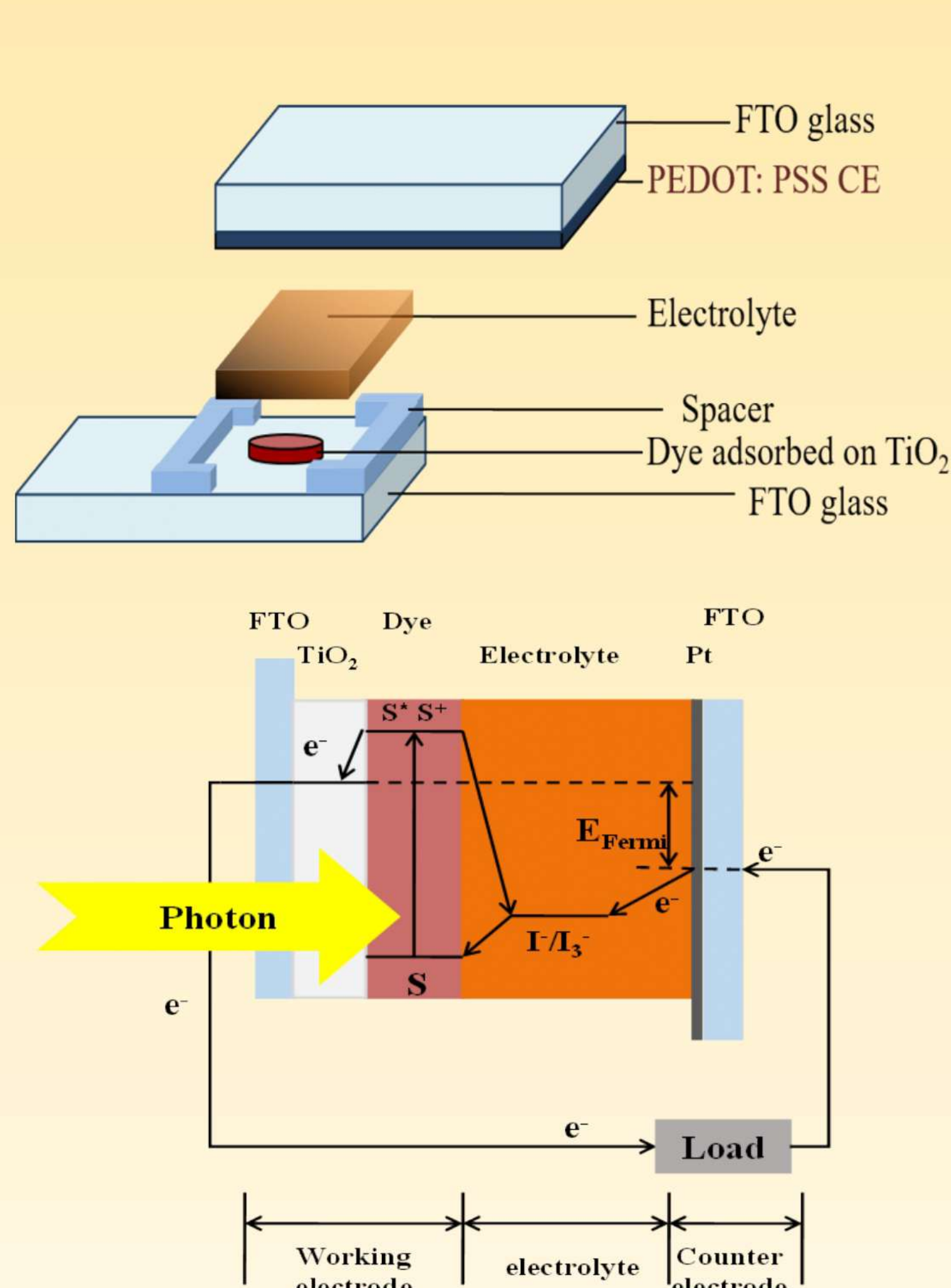
Deposition Rate of Donor Materials



Anodic Buffer & New Type Donor Materials

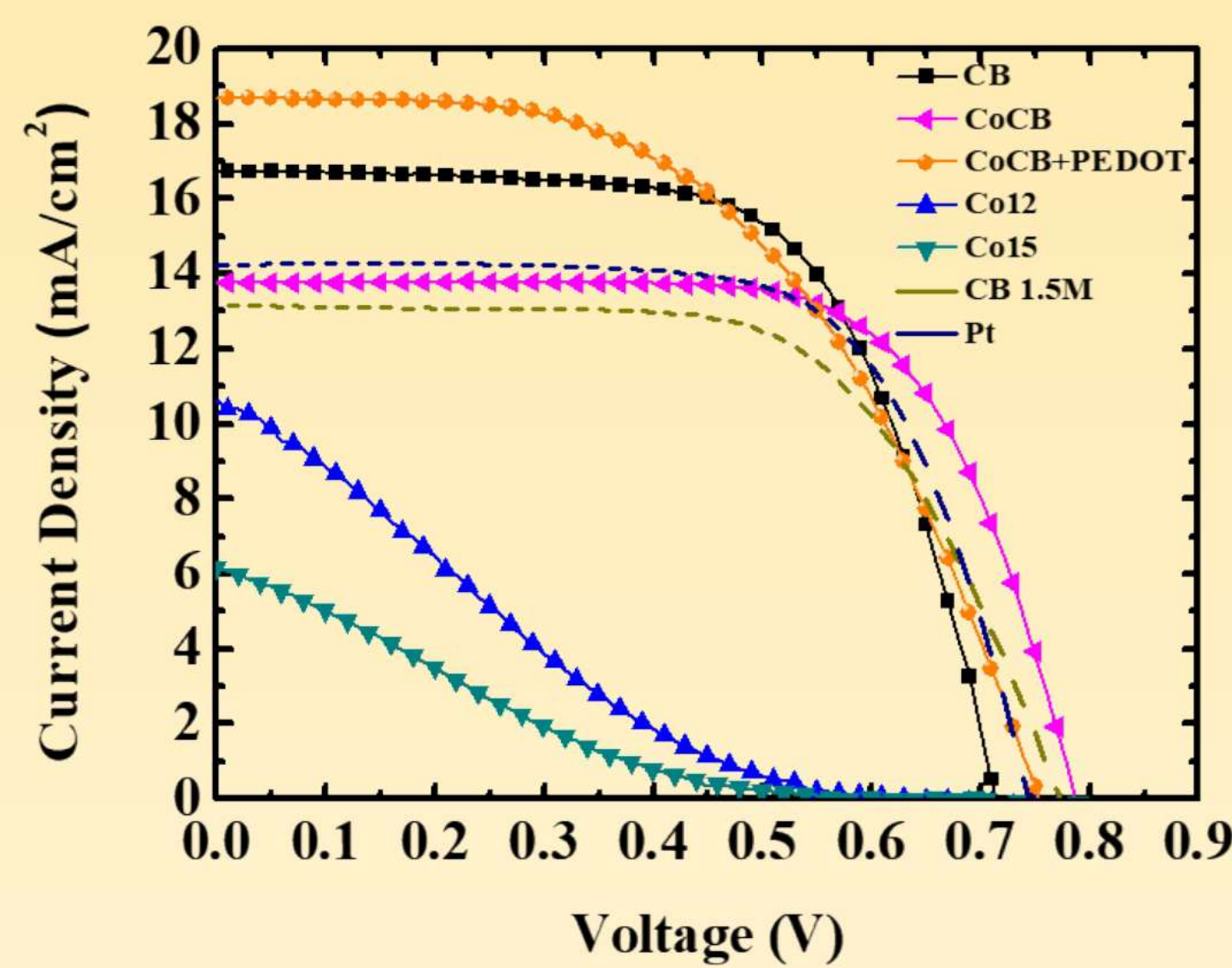


Development of Dye and CE of DSSC

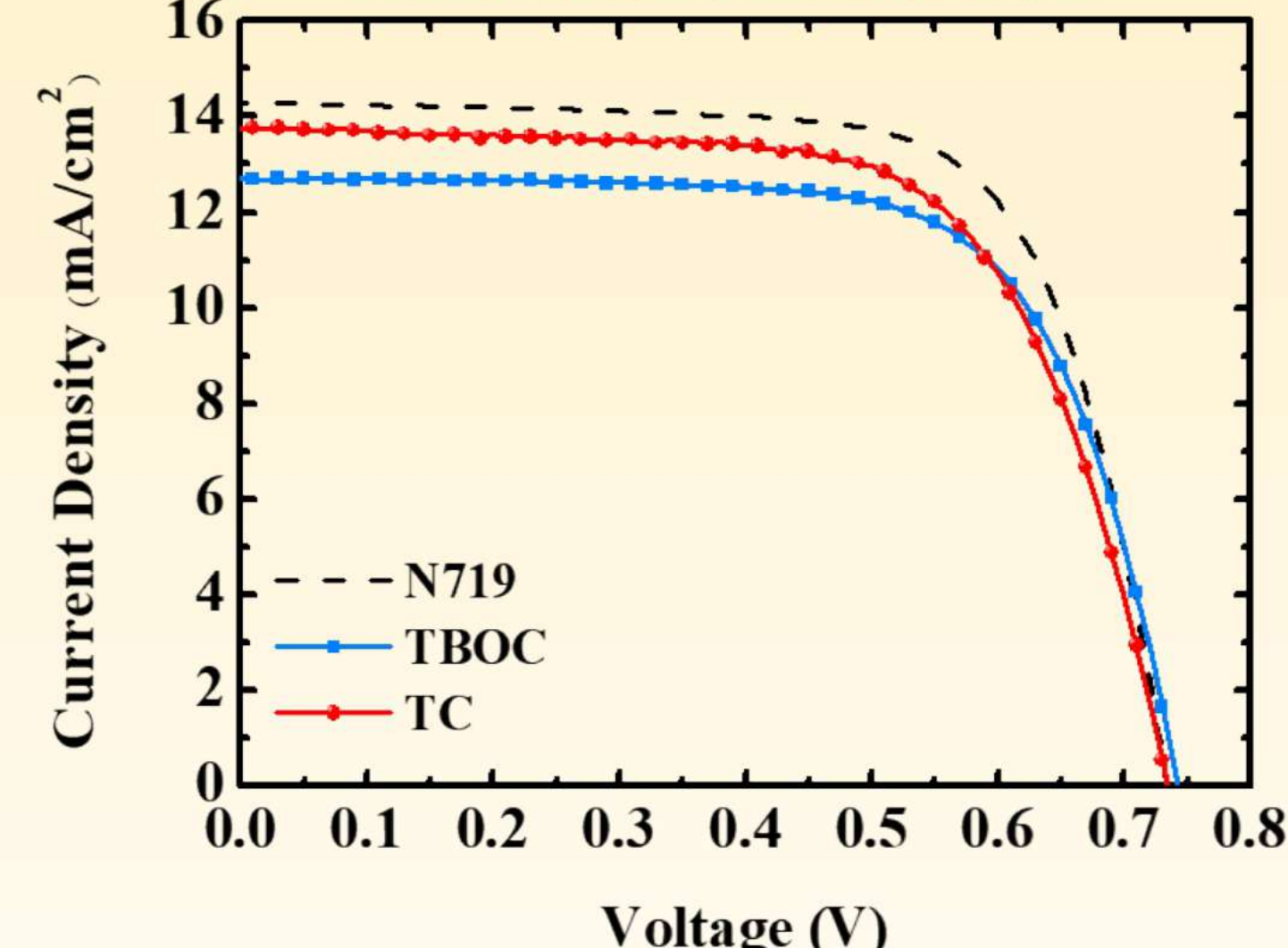


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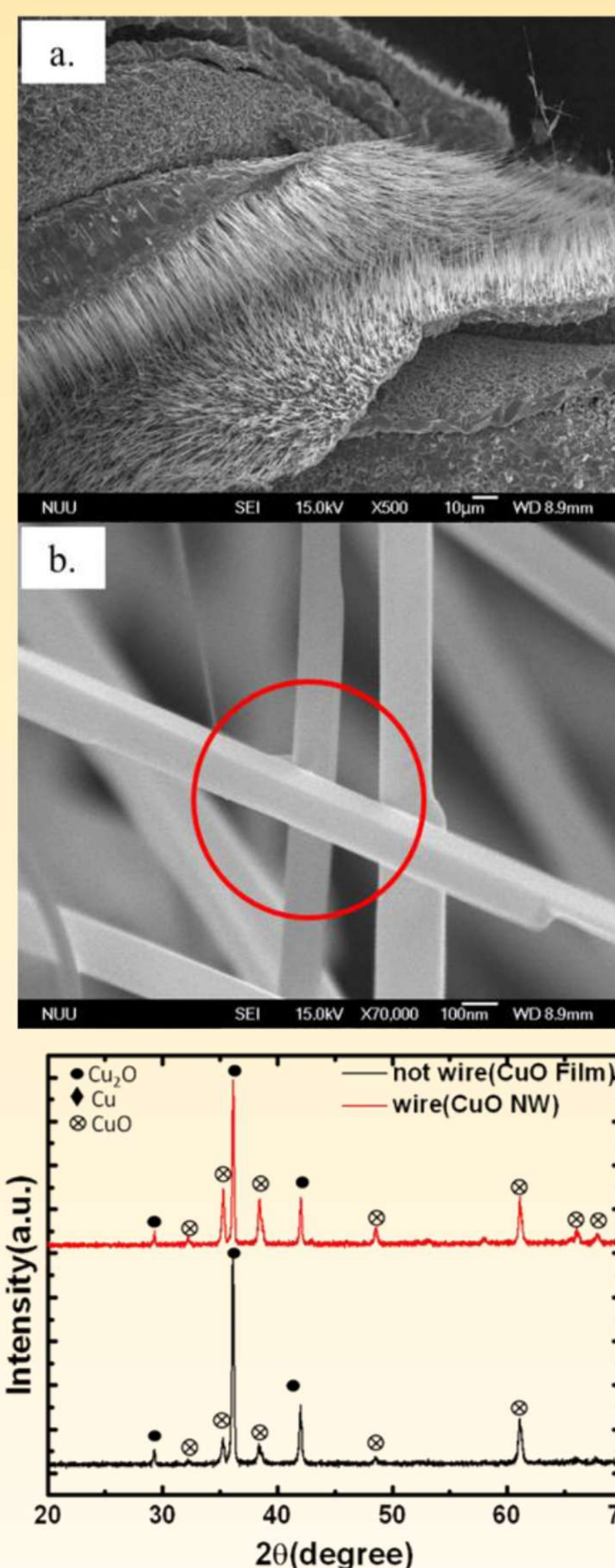
Cobalt and Carbon derivatives CEs



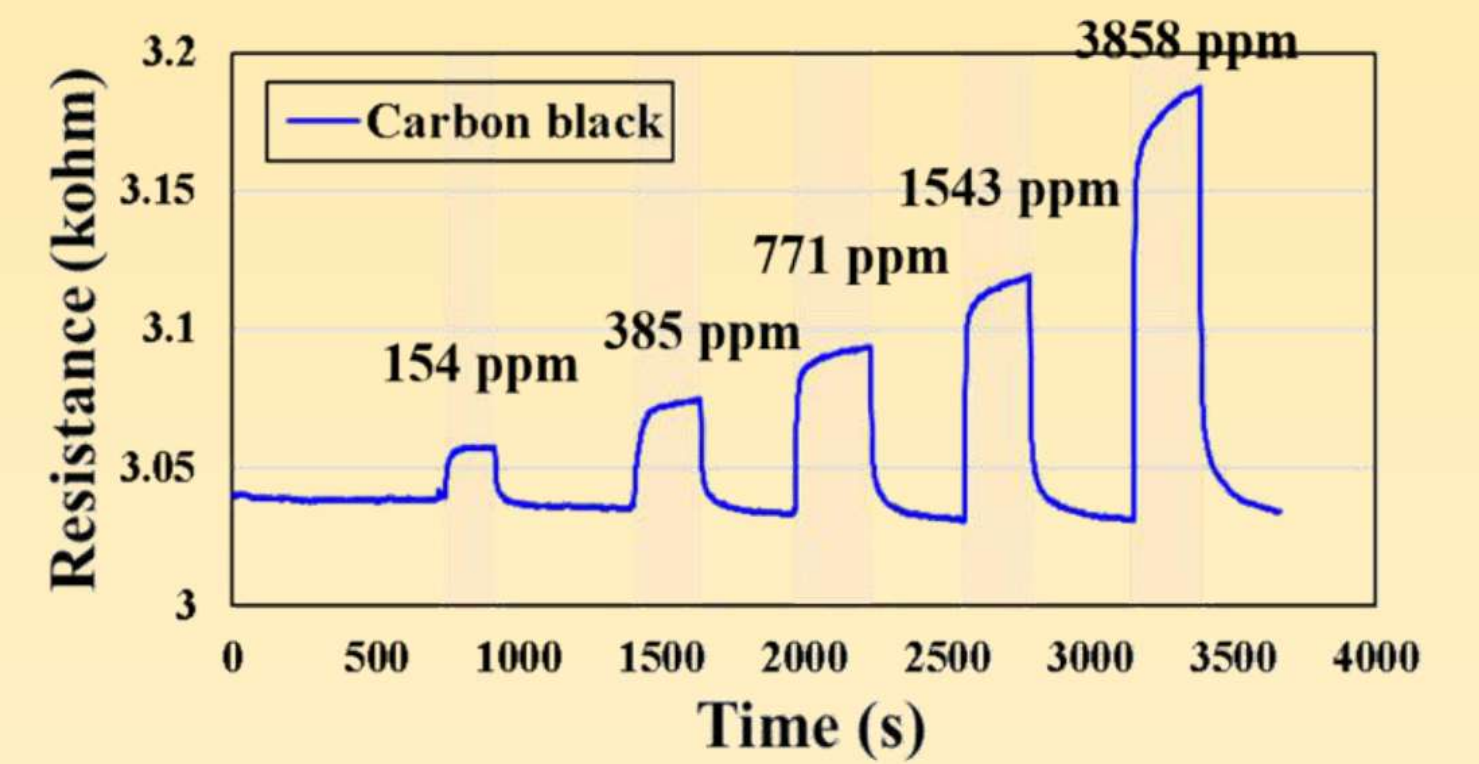
DSSC with Various Dye



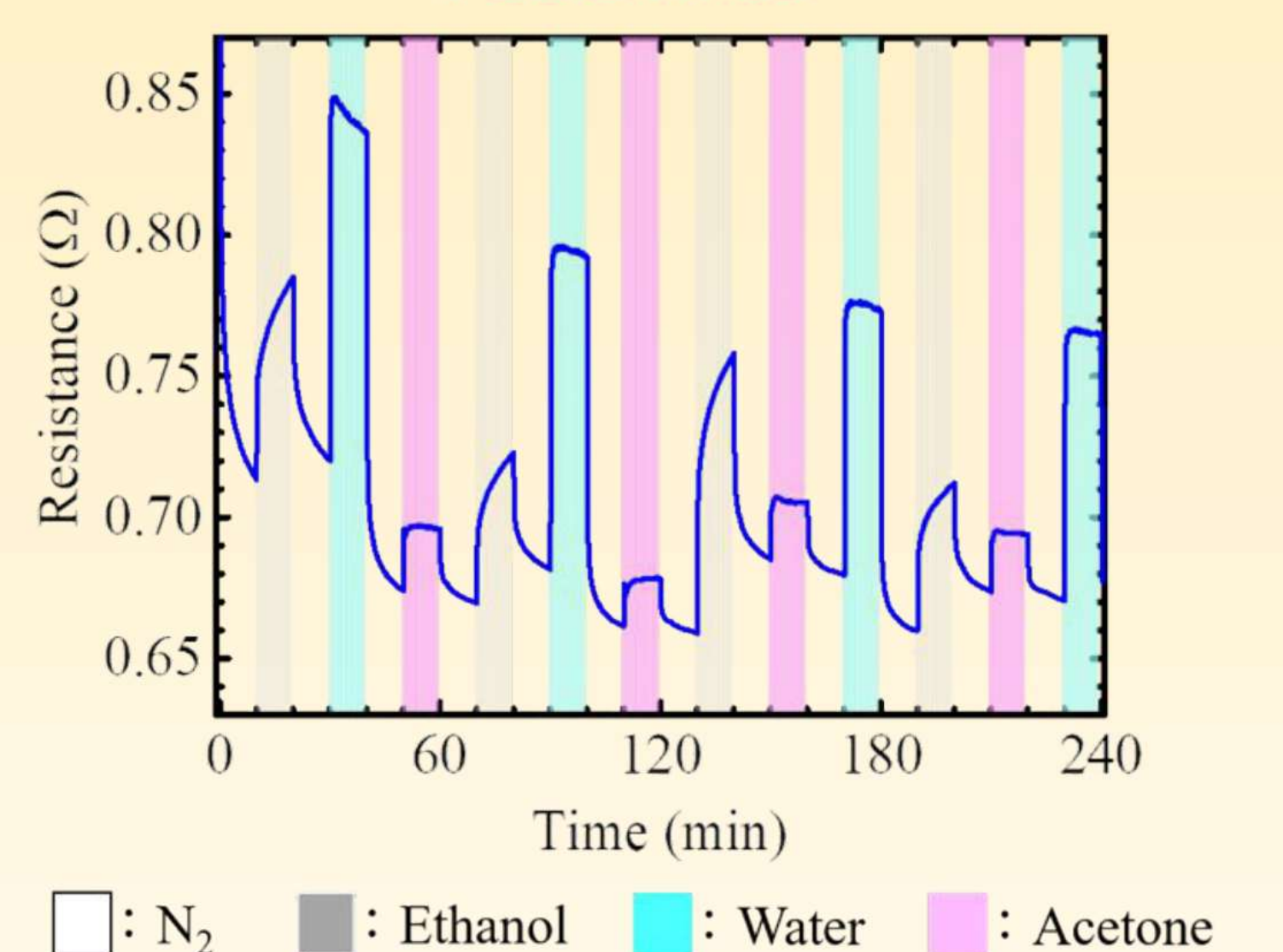
Novel Materials for Gas Sensors



Carbon Black



PEDOT:PSS



合作單位：

