Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C. This journal is © The Royal Society of Chemistry 2023

## **Supporting Information**

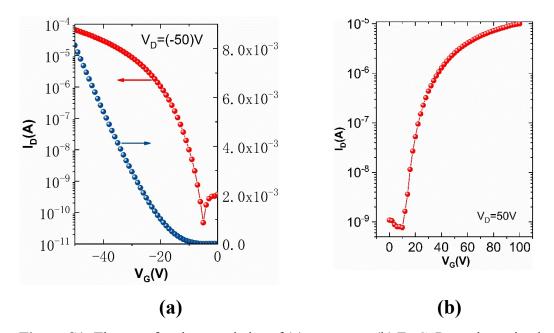
## Antiambipolar, ambipolar, and unipolar charge transport in organic transistors based on a single vertical P-N heterointerface

Guidong Wang, Dong Li, Xinyu Wang, Yu Zhang, Hao Zhang, and Jun Wang\*

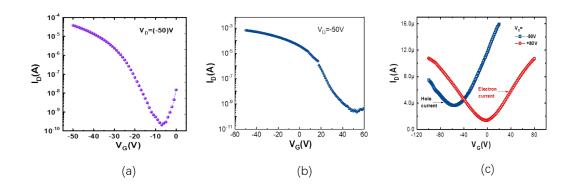
Guidong Wang, Dong Li, Xinyu Wang, and Jun Wang
College of Science, Shanghai Institute of Technology, Shanghai 201418, China
E-mail: wangj@sit.edu.cn

Yu Zhang, Hao Zhang

College of Electronics and Information Science, Fujian Jiangxia University, Fuzhou 350108, China



**Figure S1.** The transfer characteristics of (a) pentacene (b)  $F_{16}$ CuPc as the active layer.



**Figure S2.** The transfer characteristics of OHJT with various pentacene thicknesses (a) >20 nm (b) 5~20nm (c) 1.5-3 nm