

Electronic Supplementary Information (ESI) for:

**Electron transport at the interface of organic semiconductors
and organic hydroxyl-containing dielectrics**

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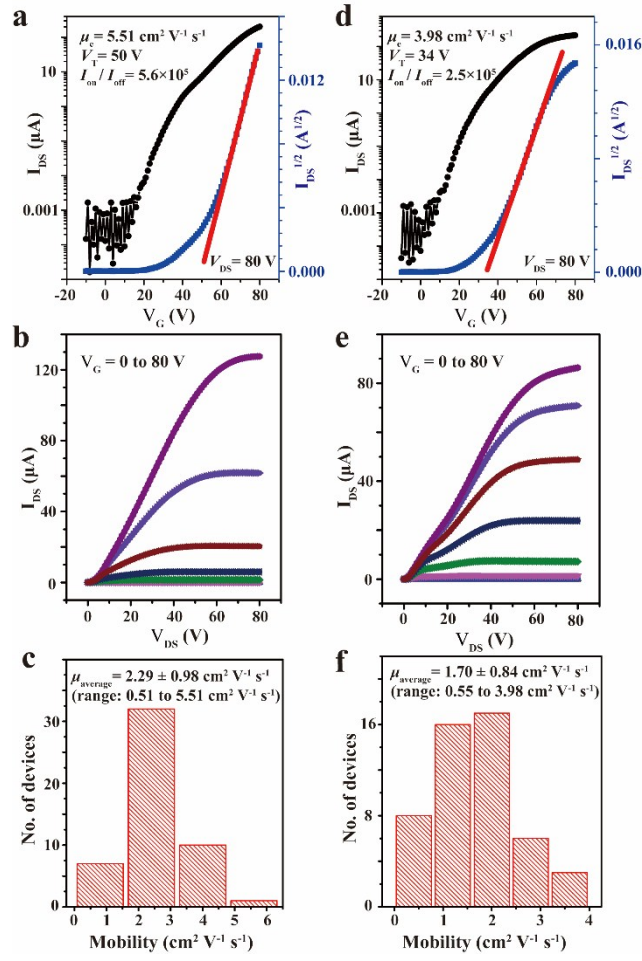


Fig. S1 OFETs characteristics of C_{60} single crystals grown on BCB (a-c) and pristine SiO_2 (d-f), respectively. (a, d) Typical transfer characteristics. (b, e) Typical output characteristics. (c, f) Histogram of electron mobility for 50 devices.

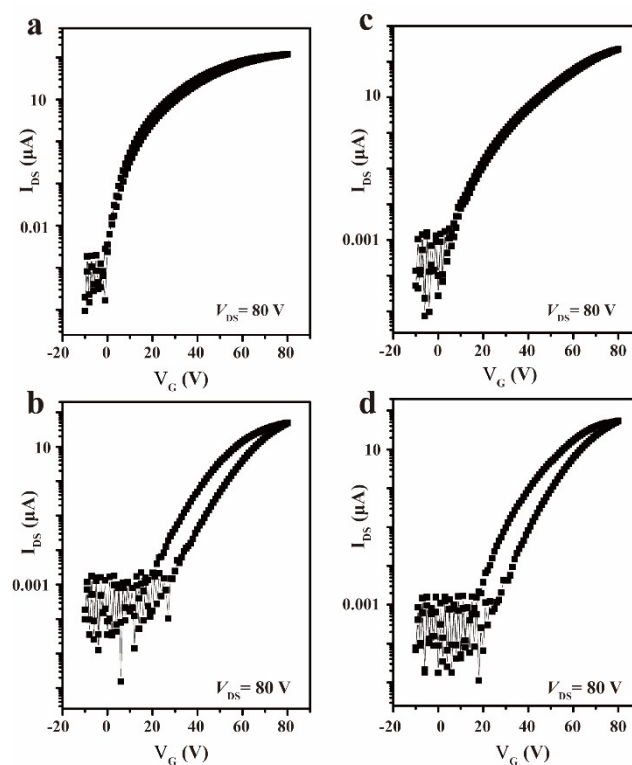


Fig. S2 Transfer characteristics of C_{60} single crystals grown on PVA-80% (a), PVP (b), BCB (c) and SiO_2 (d).

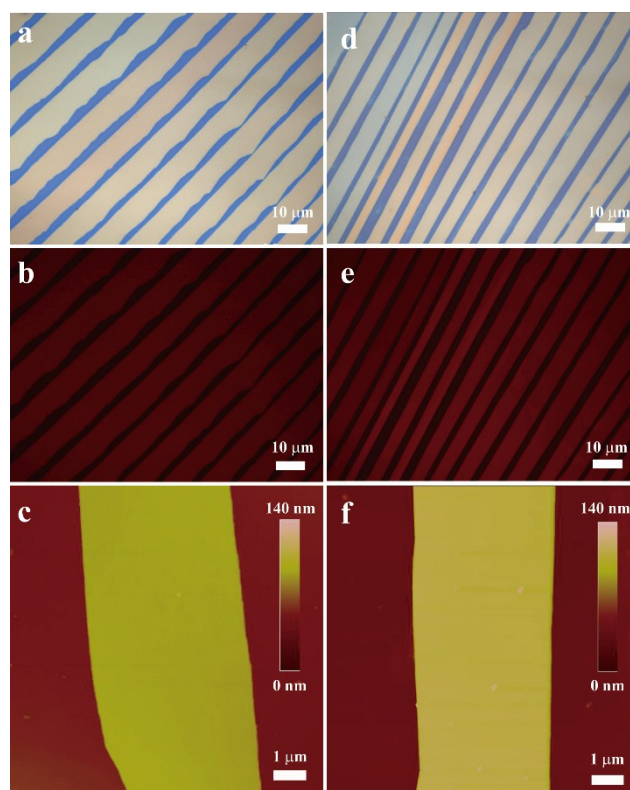


Fig. S3 Morphology of TIPS-pentacene single crystals grown on PVP (a-c) and PVA-80% (d-f), respectively: (a, d) OM images of the crystals; (b, e) OM images of the crystals between

crossed-polarizers; (c, f) AFM images of the crystals.

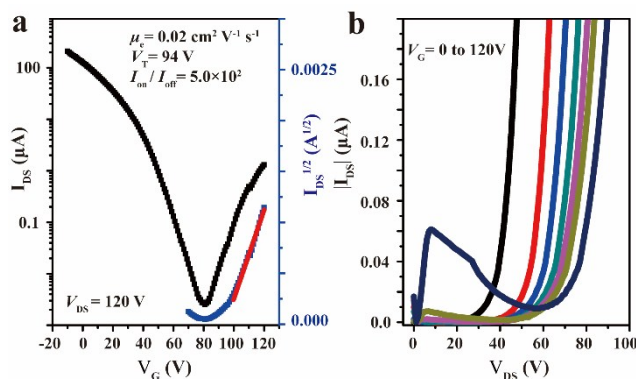


Fig. S4 OFETs characteristics of TIPS-pentacene single crystals grown on PVP, using Au as electrodes. (a) Typical transfer characteristics of the OFETs in n-channel operation mode. (b) Typical output characteristics of the OFETs in n-channel operation mode.

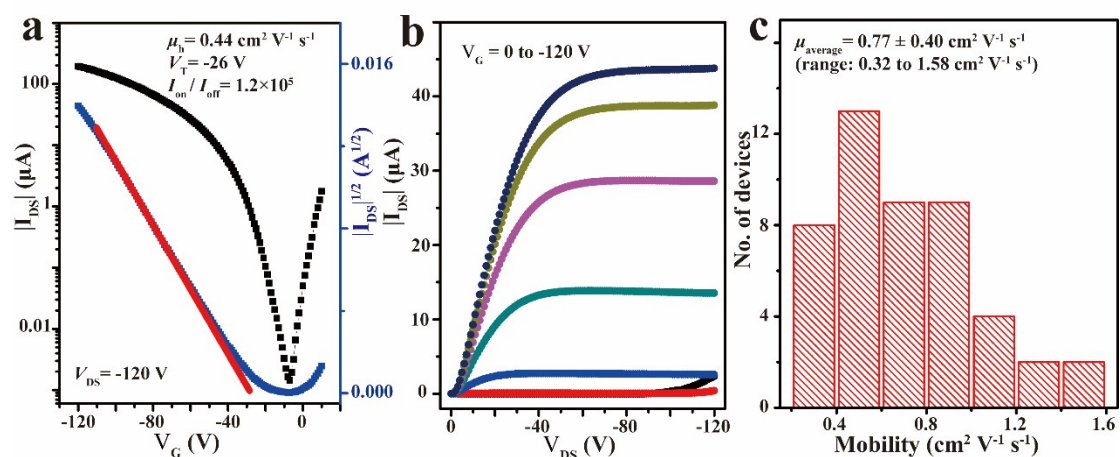


Fig. S5 OFETs characteristics of TIPS-pentacene single crystals grown on PVP, using Ag as electrodes. (a) Typical transfer characteristics of the FETs in p-channel operation mode. (b) Typical output characteristics of the FETs in p-channel operation mode. (c) Histogram of hole mobility of 50 devices.

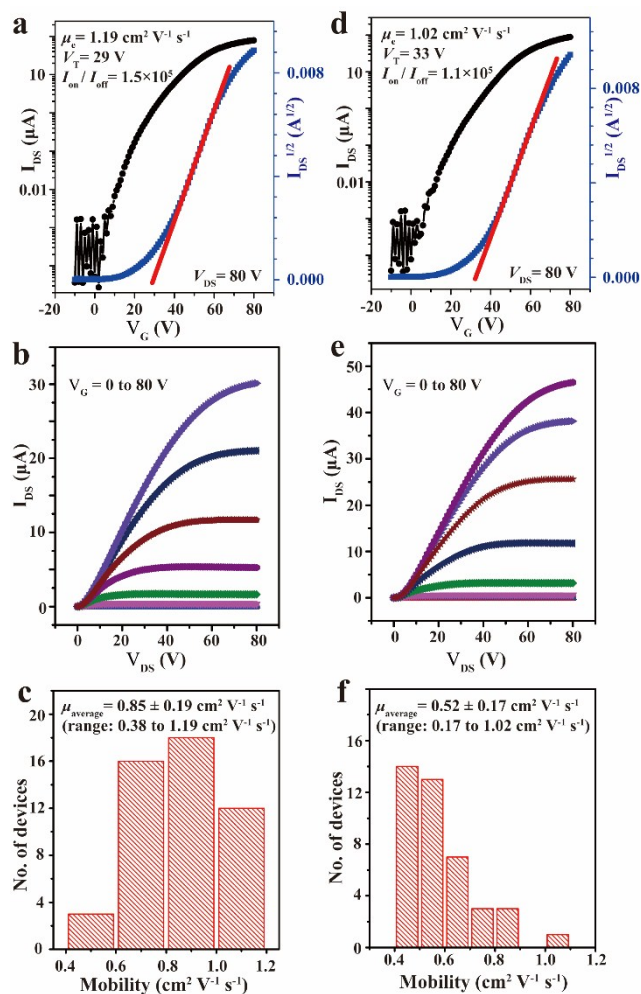


Fig. S6 OFETs characteristics of C_{60} single crystals grown on PVA-87~89% (a-c) and PVA-99% (d-f), respectively. (a, d) Typical transfer characteristics. (b, e) Typical output characteristics. (c, f) Histogram of electron mobility for 50 devices.

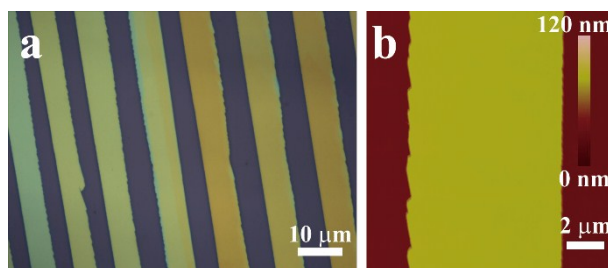


Fig. S7 Morphology of C_{60} single crystals grown on PVA-80% after exposing in the atmosphere with ~40% humidity for 24 h. (a) An OM image of the crystals. (b) An AFM image of the crystal.

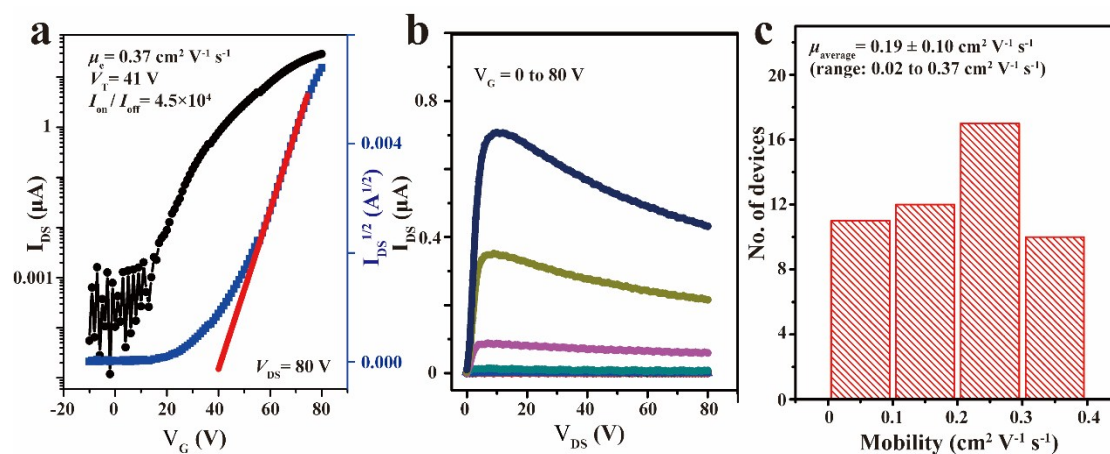


Fig. S8 OFETs characteristics of C_{60} single crystals devices fabricated in air on SiO_2 dielectric. (a) Typical transfer characteristics. (b) Typical output characteristics. (c) Histogram of electron mobility for 50 devices.