Supplementary Information for

High $T_g$ cyclic olefin copolymer/Al$_2$O$_3$ bilayer gate dielectrics for flexible organic complementary circuits with low-voltage and air-stable operation

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Figure S1. The crystallographic packing pattern and molecular axes of PTCDI-C13. The crystallographic information file for PTCDI-C13 was donated by M. Ichikawa.
**Figure S2.** Results of bending experiments on the gate dielectrics. Optical macroscopic images of the COC/Al₂O₃ bilayer gate dielectric without strain (top, left), after 5 repeated tensile strains along the horizontal axis (top, middle), and after 5 consecutively applied tensile strains along the vertical axis (top, right). Optical macroscopic images of the single Al₂O₃ gate dielectric without strain (bottom, left), after 5 repeated tensile strains along the horizontal axis (bottom, middle), and after 5 consecutively applied tensile strains along the vertical axis (bottom, right).
Figure S3. Schematics of the OFET devices on a polyarylate substrate in a flat state (top and left) and in a bent state with a bending radius of R (top and right). A digital camera image of the OFET devices in a bent state during electrical measurement. Three kinds of half-round glass tube with different values of R were used.