

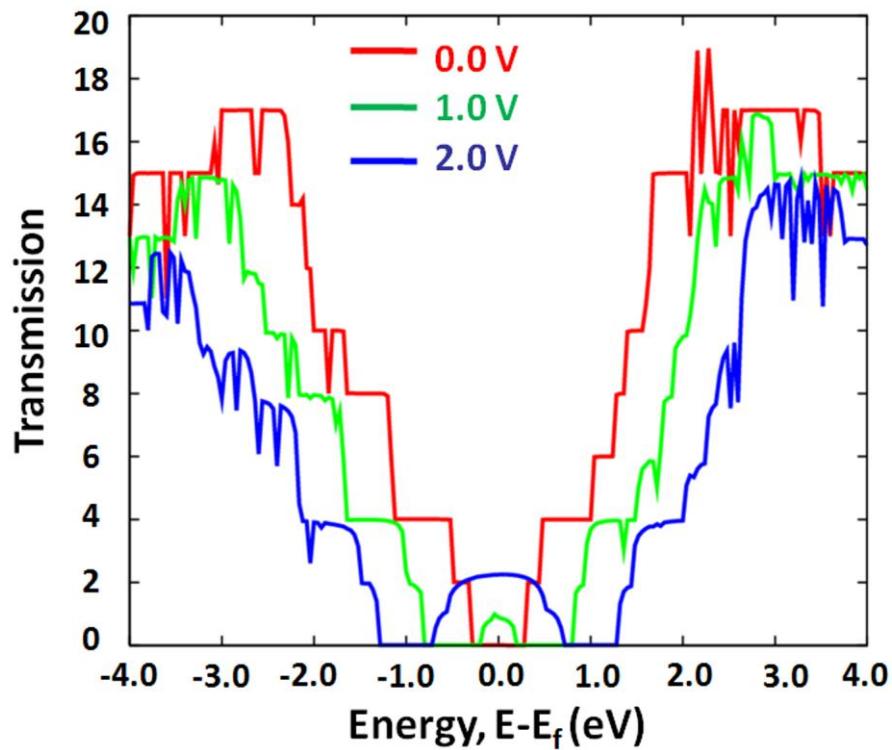
**Supporting Information**

**Electron Transport Characteristics of Organic Molecule  
Encapsulated Carbon Nanotubes**

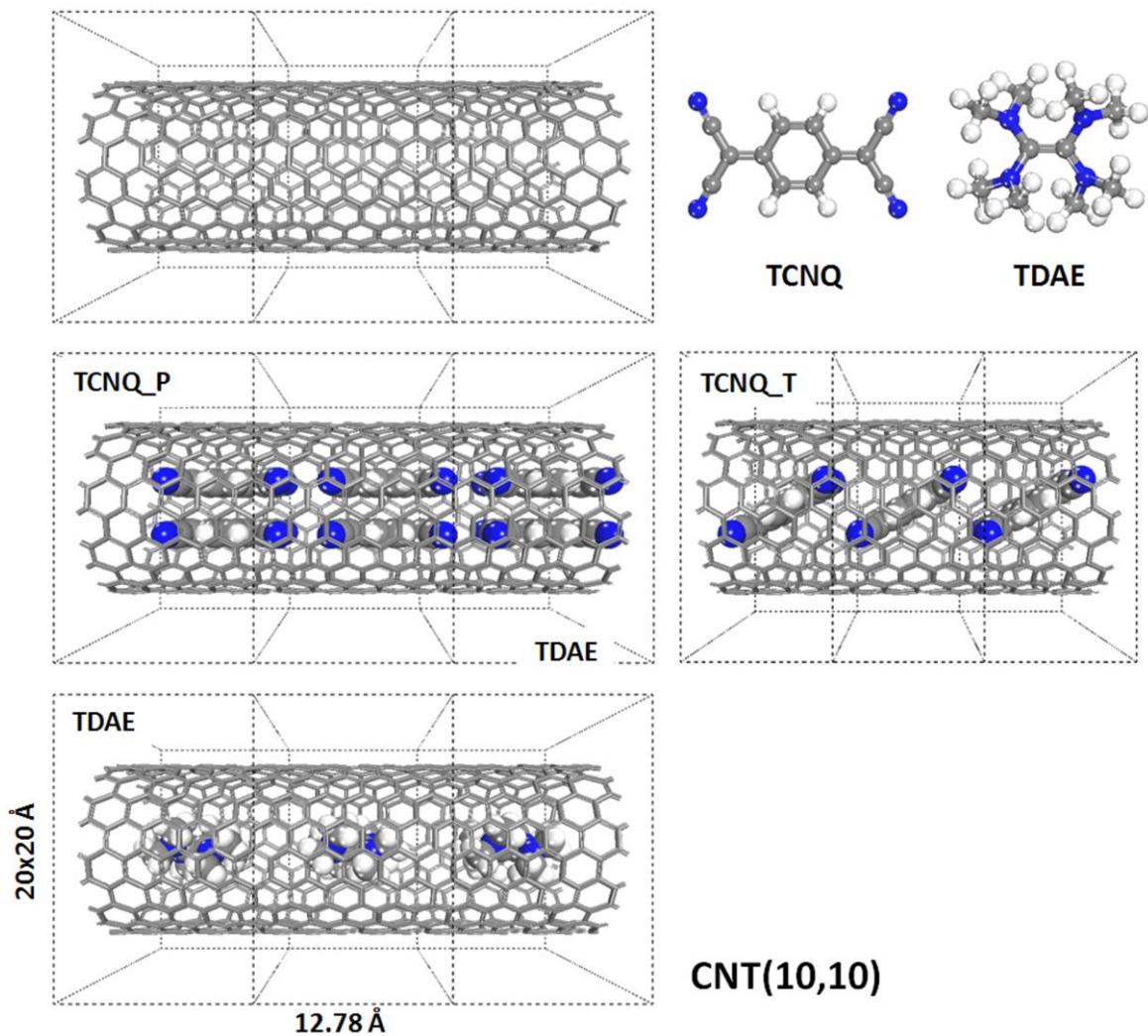
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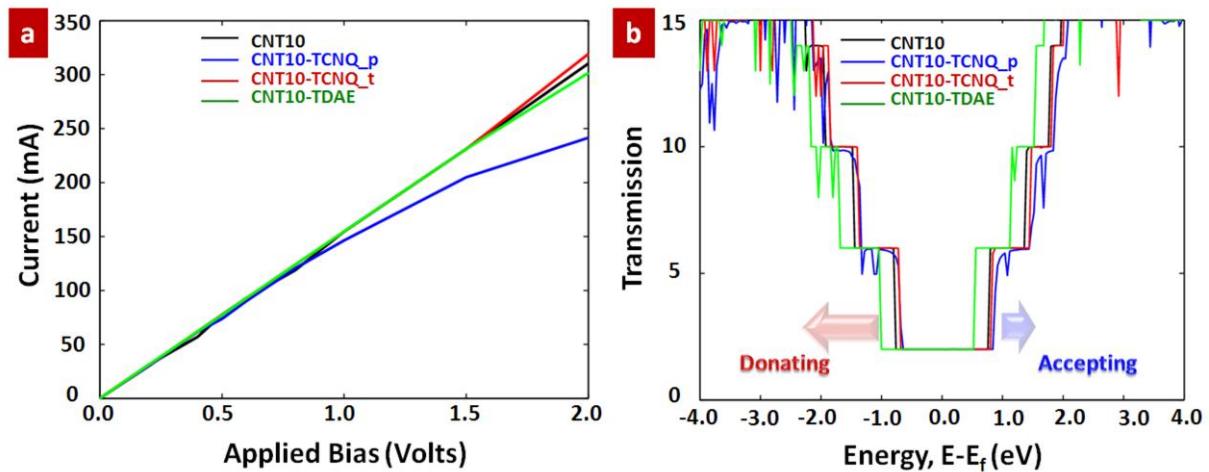
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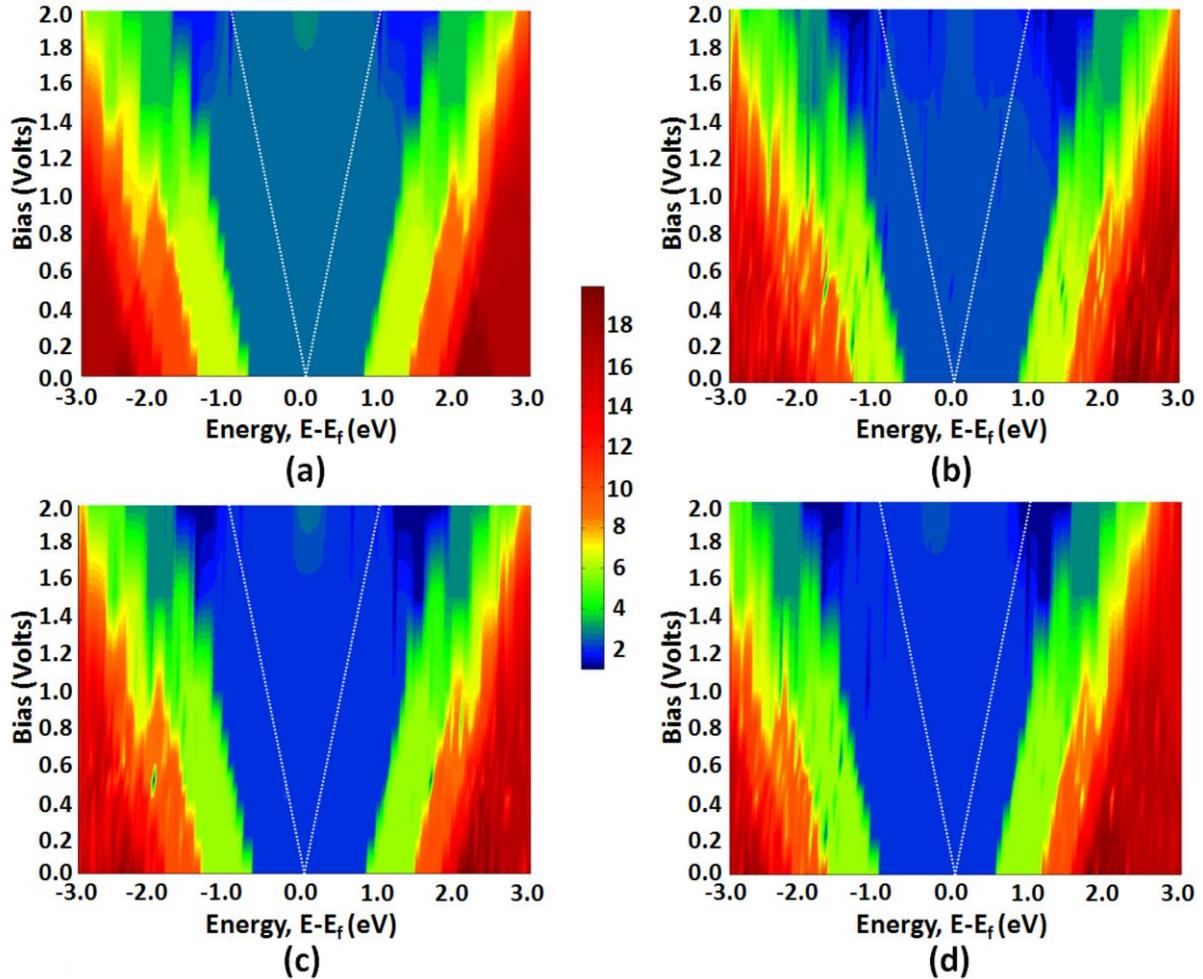
**Figure S1.** The transmission curves of CNT(17,0) under 0.0, 1.0 and 2.0 V.



**Figure S2.** Schematic of (a) TCNQ or (b) TDAE encapsulated carbon nanotubes (10,10). In the case of TCNQ molecule, parallel(P) and tilted(T) stacking patterns are considered.



**Figure S3.** (a)  $I$ – $V$  curves and (b) the transmission curves,  $T(E, V=0)$ , of TCNQ or TDAE encapsulated CNT(10,10)s, “CNTa–b\_c”, where “a”, “b”, and “c” respectively mean the size of CNT, encapsulated organic molecule, and stacking pattern.



**Figure S4.** Bias dependence of the transmission curves,  $T(E, V)$ , calculated at every 0.2 bias voltage for the pure CNT(10,10) and TCNQ or TDAE encapsulated CNT10s, (a) CNT10, (b) CNT10-TCNQ\_P, (c) CNT10-TCNQ\_T, and (d) CNT10-TDAE. Dotted white lines indicate the range of current integration around the Fermi level.