

## Supplementary Information

### Molecular Self-Assembly in a Poorly Screened Environment: F<sub>4</sub>TCNQ on graphene/BN

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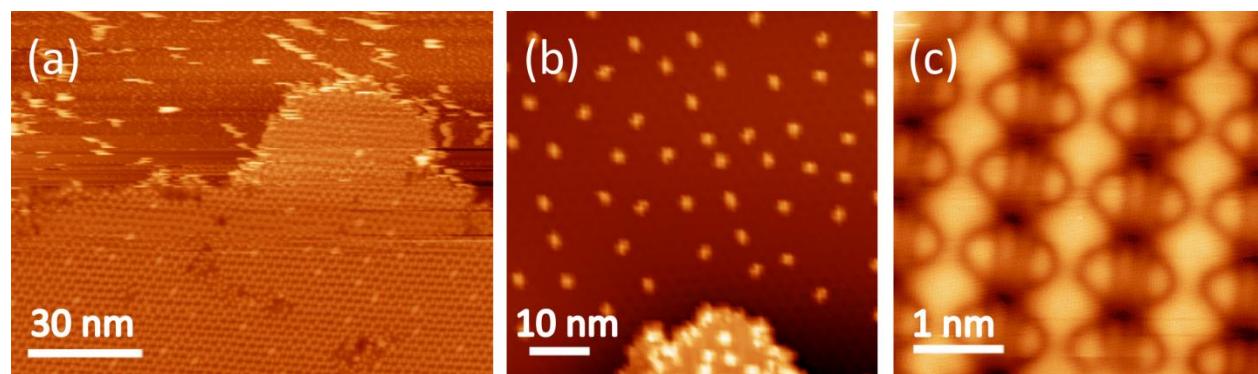
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**Figure S1:** (a) A large scale STM image of F<sub>4</sub>TCNQ/graphene/BN at high molecular coverage ( $V_s = 2$  V,  $I_t = 10$  pA,  $T = 4.5$  K), (b) Single F<sub>4</sub>TCNQ molecules coexisting with a molecular island on graphene/BN ( $V_s = 2$  V,  $I_t = 5$  pA,  $T = 4.5$  K). (c) A zoom-in image of the island in (b) ( $V_s = 2$  V,  $I_t = 5$  pA,  $T = 4.5$  K).