

Abstract Submitted  
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**Pinning of the electronic bands at the graphene and wet contact Ti junction** TOBIAS BOTHWELL, WEI REN, SALVADOR BARRAZA-LOPEZ, University of Arkansas — Pinning of electronic bands has been observed at the junction of graphene and Ti contacts. Density functional theory is used to study this junction by analyzing the electronic bands of two systems. We study graphene atop a BN gate as well as Ti contacts atop the graphene and BN. Varying electric fields are applied in the vertical axis to study how the electronic bands shift. Contributions of each material to the bands are also analyzed. Calculations are performed using the Vienna Ab initio simulation package (VASP).

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