Abstract Submitted
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Scanning Probe Microscopy of Graphene PAMELA TAUTZ, Tucson Unified School District — Scanning tunneling microscopy has been used to study the unusual electronic properties of graphene. In an effort to support the graphene with minimal interaction with the substrate, we used a hexagonal boron nitride (hBN) substrate. To minimize contaminants between the CVD graphene and boron nitride, the graphene samples were cleaned with distilled water and isopropanol prior to transfer to hBN substrate. We have also examined the growth of graphene flakes by chemical vapor deposition. In particular, we examined the relationship between the orientations of the first and second layer of CVD grown graphene. We found the growth mechanism preferentially resulted in rotations of 9° or less indicating flakes with first and second layers aligned.

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