

Abstract Submitted
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Probing impurity states on graphene/SiC with Scanning Tunneling Microscope JIXIA DAI, KYLE MCELROY, University of Colorado — Graphene has attracted a lot of attention for its unique electronic structure, high electron mobility and hence the unusual transport and spectroscopic properties. Impurities, like adatoms, vacancies, and on-lattice doping, on graphene sheets also generate interesting phenomena and play very important roles in graphene's unusual properties. For example, conducting electrons scattered off by the impurity atoms can have resonance states. These resonance states around the impurity can be probed by Scanning Tunneling Spectroscopy(STS), through imaging the electronic states in real space at different energy levels.

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