

Abstract Submitted
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Quantum capacitance measurement in high performance graphene field-effect devices ZHIHONG CHEN, IBM T.J. Watson, JOERG AP-PENZELLER, Electrical Engineering, Purdue University — We demonstrate first quantum capacitance measurements on single-layer graphene devices and elucidate on their relevance for the extraction of mobility for scaled graphene FETs. We also show experimentally that multi-layer graphene devices can be easily distinguished from single-layer graphene within our capacitance measurement approach, a previously unnoticed fact.

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