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Transport in high-mobility mesoscale graphitic devices¹ ANDREI GARCIA, FRANCOIS AMET, Applied Physics Department, Stanford University, JAMES WILLIAMS, DAVID GOLDHABER-GORDON, Physics Department, Stanford University — Recent advances in graphene fabrication have allowed for high-mobility structures to be created. We report on the fabrication and measurement of mesoscale devices of graphene on boron-nitride. We present the details by which graphene is transferred on to boron-nitride substrates, where we observed enhanced mobility over similar devices fabricated on silicon dioxide substrates. Transport measurements at low temperature are described with focus given to reconfigurable, mesoscale devices in graphene.

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