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Local nanoscale frictional variations of graphene investigated with lateral force microscopy<sup>1</sup> PATRICK HUNLEY, TYLER FLYNN, TOM DODSON, ABHISHEK SUNDARARAJAN, DOUGLAS STRACHAN, University of Kentucky — Lateral force microscopy is used to investigate the local nanoscale frictional variations on single- and multi-layered graphene films. Employing novel calibration methods, quantitative frictional measurements are taken for a range of normal loads. The coverage of specific high-friction regions with a single layer of graphene shows a significant reduction in the frictional characteristics.

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