

Supplemental Material

Nanoscale Friction on MoS₂/graphene Heterostructures

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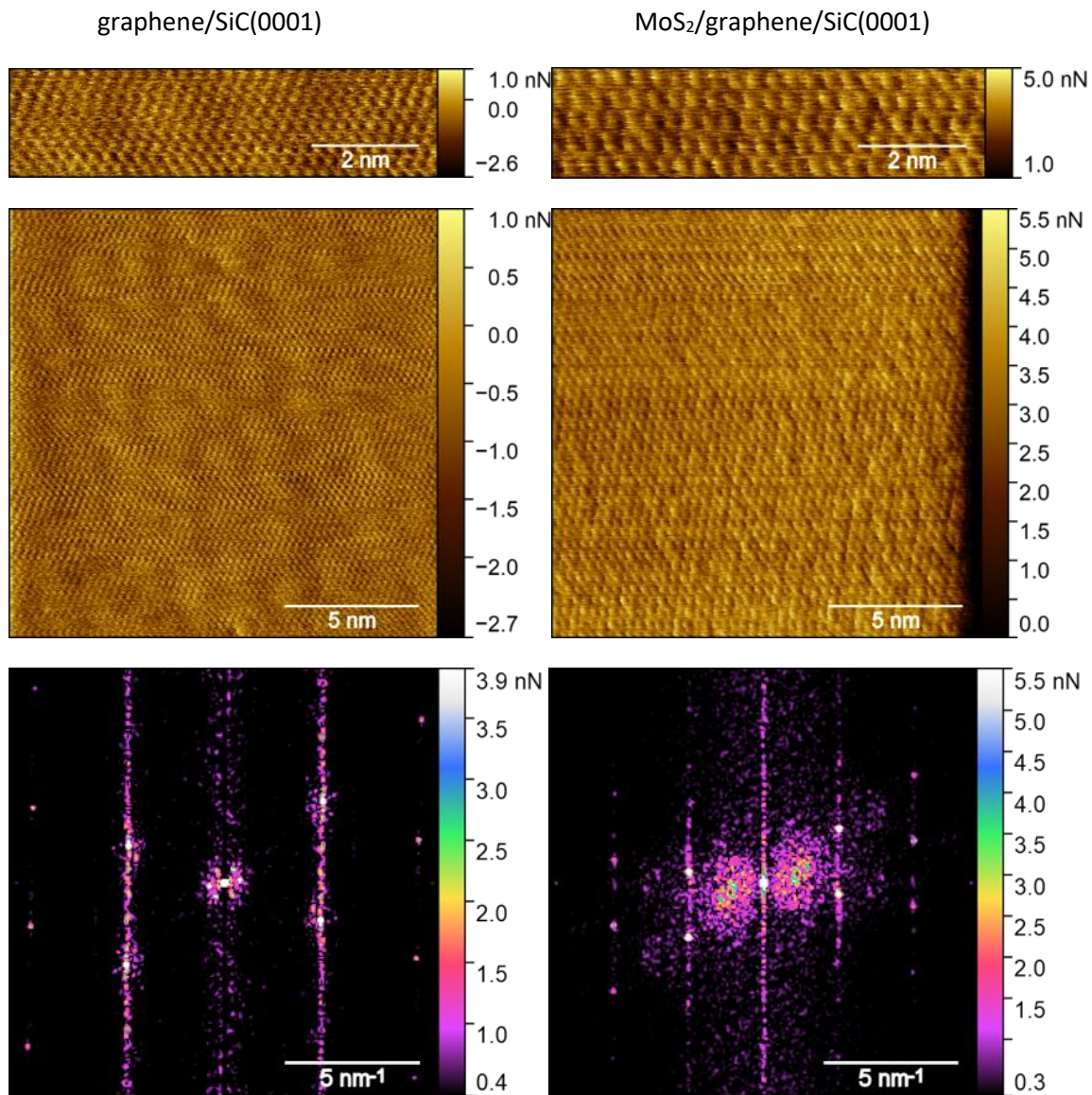
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Friction force maps recorded on an area of epitaxial graphene/SiC(0001) without MoS₂ coverage and on a monolayer of MoS₂/graphene/SiC(0001). a) High-resolution friction maps showing the atomic stick-slip pattern and the aligned orientation of MoS₂ and graphene. b) Overview friction maps revealing the well-known Moiré pattern on the epitaxial graphene/SiC(0001) surface and the weak and irregular Moiré structure which originates from the overlay of the underlying Moiré pattern and the lattice mismatch between graphene and MoS₂. c) Fourier transformation of the friction maps in b). While the spatial frequency of the Moiré pattern for the epitaxial graphene/SiC(0001) is well distinguished, a broad distribution of shorter wave vectors is found for the MoS₂/graphene/SiC(0001) island.