

Abstract Submitted
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Analysis of subphase gas/fluid effects on longitudinal flow over unidirectional superhydrophobic surfaces¹ DARREN CROWDY, Imperial College London — An analysis of the slip properties associated with longitudinal shear flow over a unidirectional superhydrophobic surface comprising periodic rectangular grooves of arbitrary geometry is described. We produce analytical expressions for the hydrodynamic slip lengths (in various perturbative limits) when the effects of a subphase viscous fluid occupying the grooves is taken into account.

¹EPSRC

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