

Abstract Submitted
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Holographic Imaging of Interfacial Mobility at Emulsion Interfaces SCOTT PARKER, MELINDA SINDORO, STEVE GRANICK, University of Illinois — The difficulty of achieving nm resolution in the vertical direction has limited prior studies of nanoparticle mobility at the oil-water interface. This can be overcome by techniques of holographic imaging, implemented in this study and applied here to this problem. We have studied both homogeneous and Janus particles with emphasis on what determines the dynamics of surface pinning and desorption. Surprising dependence is found on conditions which govern kinetic depinning and the time scale for desorption.

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