Supporting Information

Multifunctional Plasmonic Film for Recording Near-Field Optical Intensity

Brian J. Roxworthy,[†] Abdul M. Bhuiya,[†] V. V. G. Krishna Inavalli,[‡] Hao Chen,[‡] and Kimani C. Toussaint, Jr.[*,‡]

[†] *Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801, USA.*

[‡]*Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801, USA.*

[*] email: ktoussai@illinois.edu

Figures

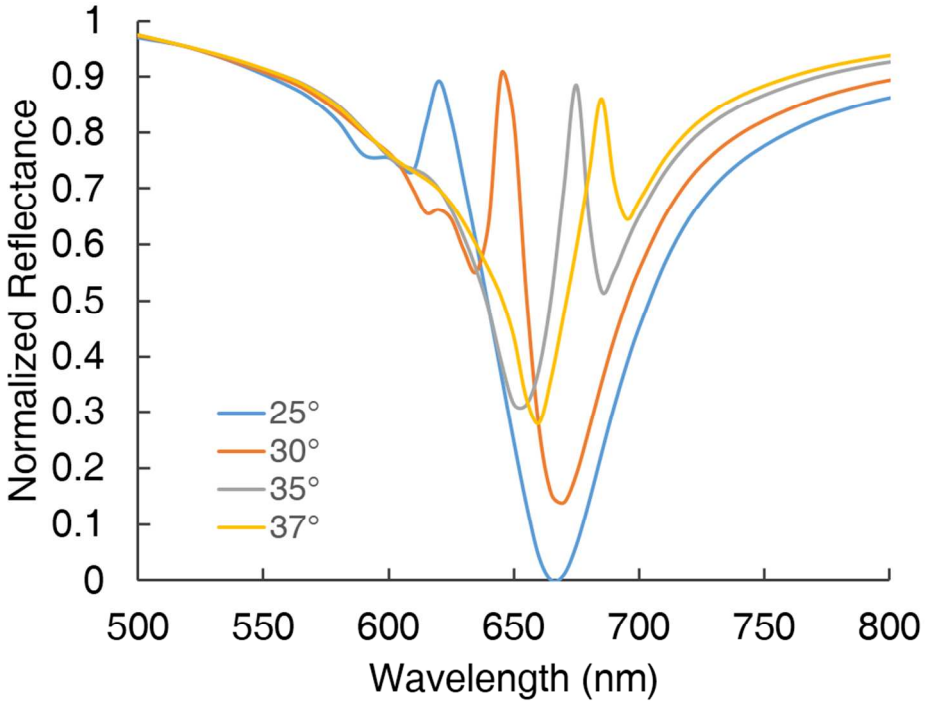

Figure S1: Angle-dependent reflectance spectra. Normalized theoretical reflectance curves calculated as a function of illumination angle of incidence for pBNAs exposed with a dosage of 0.1 mW μm^{-2}. The Rayleigh anomaly causes sharp dips in reflected power, which appear as peaks in the normalized reflectance calculated using Equation 3 in the main text.

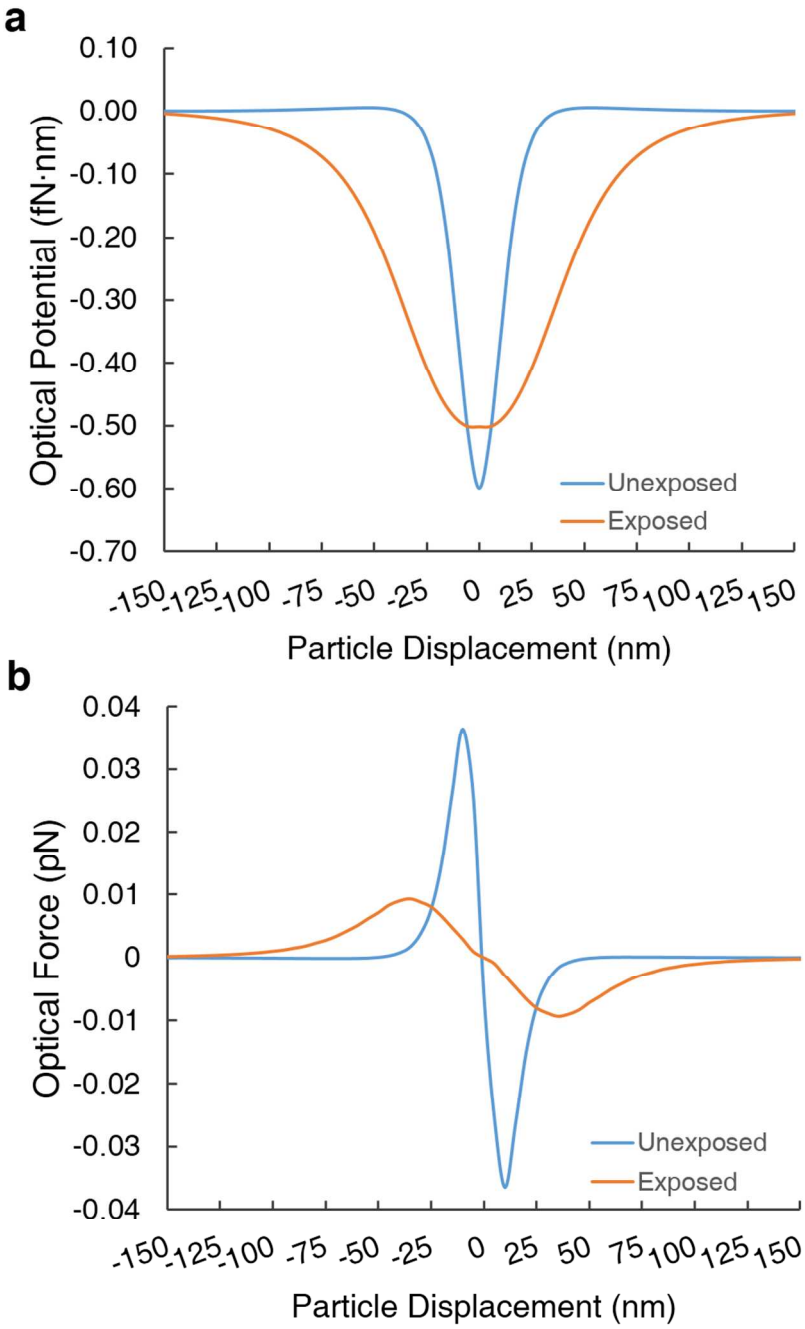

Figure S2: Axial optical forces: (**a**) Optical potential energy determined from the (**b**) optical forces on a 10-nm dielectric sphere (n = 1.59) calculated using the Maxwell stress tensor.