Abstract Submitted
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Trapping of particles in the ray optics regime using DNG materials JOSEPH SHAHBAZIAN, Tufts University — Optical tweezers use to confine and manipulate microscopic objects including living cells and bacteria, with high accuracy. The objective is calibrating the force on targets using DPS-DNG layered structure. Using this layered structure which acts as a tunable optical band-pass filter would assist calibration of the force on the target(s). Here shown that the proposed DNG-DPS structure would help to have highly focused calibrated tweezers without worrying about the polarization of optical wave. Calculation can describe well the experimental results.

Joseph Shahbazian
Tufts University

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