

Accepted Manuscript

Optical Bessel tractor polarized beams on a charged sphere of arbitrary size

Renxian Li, Ping Li, Jiaming Zhang, Chunying Ding, Zhiwei Cui

PII: S0022-4073(18)30551-X
DOI: <https://doi.org/10.1016/j.jqsrt.2018.08.016>
Reference: JQSRT 6188



To appear in: *Journal of Quantitative Spectroscopy & Radiative Transfer*

Received date: 29 July 2018
Revised date: 17 August 2018
Accepted date: 17 August 2018

Please cite this article as: Renxian Li, Ping Li, Jiaming Zhang, Chunying Ding, Zhiwei Cui, Optical Bessel tractor polarized beams on a charged sphere of arbitrary size, *Journal of Quantitative Spectroscopy & Radiative Transfer* (2018), doi: <https://doi.org/10.1016/j.jqsrt.2018.08.016>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- The optical force on a charged sphere by a vector Bessel beam is investigated in the framework of GLMT.
- The emergence of a pulling force and its dependence on α_0 , order, polarization, and ka are discussed.
- The ratios of axial RPCS for charged and neutral spheres are computed to investigate the effect of surface charge.
- The optical forces on a relatively small sphere ($a=10$ nm) are computed, and the effects of α_0 , order, polarization, and ka are discussed.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/11006637>

Download Persian Version:

<https://daneshyari.com/article/11006637>

[Daneshyari.com](https://daneshyari.com)