

Accepted Manuscript

Interactions of high-order Bessel vortex beam with a multilayered chiral sphere: scattering and orbital angular momentum spectrum analysis

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PII: S0022-4073(18)30110-9
DOI: [10.1016/j.jqsrt.2018.06.014](https://doi.org/10.1016/j.jqsrt.2018.06.014)
Reference: JQSRT 6137



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

Received date: 13 February 2018
Revised date: 25 May 2018
Accepted date: 18 June 2018

Please cite this article as: Tan Qu , Zhensen Wu , Qingchao Shang , Jiaji Wu , Lu Bai , Interactions of high-order Bessel vortex beam with a multilayered chiral sphere: scattering and orbital angular momentum spectrum analysis, *Journal of Quantitative Spectroscopy & Radiative Transfer* (2018), doi: [10.1016/j.jqsrt.2018.06.014](https://doi.org/10.1016/j.jqsrt.2018.06.014)

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Highlights

- The analytical solution to the interactions between an inhomogeneous optically active spherical particle and a high-order Bessel vortex beam are investigated.
- The internal field, near-surface field and scattered field are calculated numerically.
- Results indicate the OAM spectrum spreads significantly with the increase of the incident beam center position shift from the axis.

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