

Accepted Manuscript

Far-infrared Elastic Scattering Proposal for the Avogadro Project's Silicon Spheres

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PII: S0022-4073(17)30606-4
DOI: [10.1016/j.jqsrt.2017.12.023](https://doi.org/10.1016/j.jqsrt.2017.12.023)
Reference: JQSRT 5939



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

Received date: 4 August 2017
Revised date: 23 November 2017
Accepted date: 22 December 2017

Please cite this article as: Muhammad Hamza Humayun , Imran Khan , Farhan Azeem ,
Muhammad Rehan Chaudhry , Ulaş Sabahattin Gökay , Mohammed Sharif Murib ,
Ali Serpengüzel , Far-infrared Elastic Scattering Proposal for the Avogadro Project's Silicon Spheres,
Journal of Quantitative Spectroscopy & Radiative Transfer (2017), doi: [10.1016/j.jqsrt.2017.12.023](https://doi.org/10.1016/j.jqsrt.2017.12.023)

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Highlights

- far-IR spectroscopy for determining the Avogadro constant by using elastic scattering from the 100 mm silicon spheres is proposed,
- near-IR spectroscopy already relates WGMs of the 1 mm silicon spheres diameter of the spheres,
- numerical simulations in the far-IR and the near-IR are presented,
- spatially scaled down elastic scattering measurements in the near-IR are presented,
- diameter measurements of 100 mm silicon spheres with elastic scattering in the far-IR can be an alternative method.

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