## **Dmitry Petrov**

List of Publications by Year in descending order

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Version: 2024-02-01

|          |                | 567281       | 610901         |
|----------|----------------|--------------|----------------|
| 37       | 613            | 15           | 24             |
| papers   | citations      | h-index      | 24<br>g-index  |
|          |                |              |                |
|          |                |              |                |
| 38       | 38             | 38           | 429            |
| all docs | docs citations | times ranked | citing authors |
|          |                |              |                |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Asteroid (3200) Phaethon: results of polarimetric, photometric, and spectral observations. Monthly Notices of the Royal Astronomical Society, 2022, 514, 4861-4875.                      | 4.4 | 4         |
| 2  | Quasi-rayleigh polarization leap of monodisperse spherical particle as a tool to detect particle radius. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 242, 106806. | 2.3 | 2         |
| 3  | Comet 2P/Encke in apparition of 2017: II. Polarization and color. Icarus, 2020, 348, 113768.   | 2.5 | 6         |
| 4  | Influence of the Spectral Dependence of Refractive Index on the Polarimetric Properties of Ice Particles. Solar System Research, 2020, 54, 70-83.  | 0.7 | 1         |
| 5  | Comet 2P/Encke in apparitions of 2013 and 2017: I. Imaging photometry and long-slit spectroscopy. Icarus, 2020, 348, 113767.   | 2.5 | 10        |
| 6  | Photopolarimetrical properties of coronavirus model particles: Spike proteins number influence. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 248, 107005.          | 2.3 | 17        |
| 7  | Spectral Emission Features of SiO <sub>2</sub> Spheres. Research Notes of the AAS, 2020, 4, 161.   | 0.7 | 1         |
| 8  | Conjugated Gaussian Random Particle Model and Its Applications for Interpreting Cometary Polarimetric Observations. Solar System Research, 2019, 53, 294-305.                            | 0.7 | 9         |
| 9  | Three Nearby K-Giants with Planets: Accurate Determination of Basic Parameters, Including an Analysis of Metallicity Based on Fe I Lines. Astrophysics, 2019, 62, 338-359.               | 0.5 | 3         |
| 10 | Computer simulation of position and maximum of linear polarization of asteroids. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 204, 88-93.                          | 2.3 | 4         |
| 11 | On Errors in Constructing the Polarization Phase Dependences for Solar System Bodies. Solar System Research, 2018, 52, 282-285.  | 0.7 | 3         |
| 12 | Positive branch of asteroid polarization: Observational data and computer modeling. Solar System Research, 2017, 51, 271-276.  | 0.7 | 5         |
| 13 | Analysis of the Non-LTE Lithium Abundance for a Large Sample of F-, G-, and K-Giants and Supergiants. Astrophysics, 2017, 60, 333-347.   | 0.5 | 2         |
| 14 | Response to the comment by B. Hapke on "A critical assessment of the Hapke photometric modelâ€. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 116, 191-195.         | 2.3 | 16        |
| 15 | A critical assessment of the Hapke photometric model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2431-2456.   | 2.3 | 68        |
| 16 | Light scattering by arbitrary shaped particles with rough surfaces: Sh-matrices approach. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2406-2418.             | 2.3 | 30        |
| 17 | Electromagnetic wave scattering from cuboid-like particles using Sh-matrices. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 155-162.                           | 2.3 | 7         |
| 18 | Electromagnetic wave scattering from particles of arbitrary shapes. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1636-1645.                                   | 2.3 | 39        |

| #  | Article   | IF                            | Citations   |
|----|---|-------------------------------|-------------|
| 19 | An analytical solution to the light scattering from cube-like particles using Sh-matrices. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 474-482.   | 2.3                           | 15          |
| 20 | The Sh-matrix method applied to light scattering by two merging spheroids. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1990-1999.   | 2.3                           | 8           |
| 21 | Validity criteria of the discrete dipole approximation. Applied Optics, 2010, 49, 1267.   | 2.1                           | 83          |
| 22 | Light scattering by a finite cylinder containing a spherical cavity using Sh-matrices. Optics Communications, 2009, 282, 156-166.   | 2.1                           | 9           |
| 23 | The Sh-matrices method applied to light scattering by small lenses. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1448-1459.  | 2.3                           | 11          |
| 24 | Influence of corrugation on light-scattering properties of capsule and finite-cylinder particles: Analytic solution using Sh-matrices. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 650-669. | 2.3                           | 17          |
| 25 | Sh-matrices method applied to light scattering by finite circular cylinders. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1474-1495.   | 2.3                           | 21          |
| 26 | Analytic light-scattering solution of two merging spheres using Sh-matrices. Optics Communications, 2008, 281, 2411-2423.   | 2.1                           | 17          |
| 27 | Applications to spore detection of analytic Sh-matrix solution of light scattering from capsule and bi-sphere particles. Proceedings of SPIE, 2007, , .   | 0.8                           | 1           |
| 28 | Optimized matrix inversion technique for the T-matrix method. Optics Letters, 2007, 32, 1168.   | 3.3                           | 20          |
| 29 | Analytical light-scattering solution for Chebyshev particles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 1103.  | 1.5                           | 32          |
| 30 | Analytic T-matrix solution of light scattering from capsule and bi-sphere particles: Applications to spore detection. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 108, 81-105.                   | 2.3                           | 23          |
| 31 | Photopolarimetric properties of analytic models of some biological particles with irregular shape. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 102, 111-120.                                     | 2.3                           | 13          |
| 32 | The T-matrix technique for calculations of scattering properties of ensembles of randomly oriented particles with different size. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 102, 85-110.       | 2.3                           | 53          |
| 33 | Shadow Effect for Ambiguous and Disconnected Random Surfaces. Optics and Spectroscopy (English) Tj ETQq1  | 1 0.78431 <sup>,</sup><br>0.6 | 4 rgBT /Ove |
| 34 | Discrete dipole approximation simulations of scattering by particles with hierarchical structure. Applied Optics, 2005, 44, 6479.   | 2.1                           | 31          |
| 35 | The Area of Cold Traps on the Lunar Surface. Solar System Research, 2003, 37, 260-265.  | 0.7                           | 7           |
| 36 | Classical photometry of prefractal surfaces. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 2081.   | 1.5                           | 21          |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Estimation of the Area of the Perpetually Shaded Lunar Surface. Solar System Research, 2001, 35, 452-457. | 0.7 | 3         |