Elena V Petrova

List of Publications by Year
in descending order

24 papers	476 citations	840585 11 h-index	677027 22 g-index
24 all docs	24 docs citations	24 times ranked	274 citing authors

#	Article	IF	Citations
1	Optical properties of aggregate particles comparable in size to the wavelength. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 86, 241-265.	1.1	74
2	Scattering of electromagnetic waves by ensembles of particles and discrete random media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2095-2127.	1.1	74
3	Polarization of Light Scattered by Solar System Bodies and the Aggregate Model of Dust Particles. Solar System Research, 2004, 38, 309-324.	0.3	66
4	Modeling of opposition effects with ensembles of clusters: Interplay of various scattering mechanisms. Icarus, 2007, 188, 233-245.	1.1	61
5	Glory on Venus and selection among the unknown UV absorbers. Icarus, 2018, 306, 163-170.	1.1	30
6	The VMC/VEx photometry at small phase angles: Glory and the physical properties of particles in the upper cloud layer of Venus. Planetary and Space Science, 2015, 113-114, 120-134.	0.9	21
7	Coherent backscattering by discrete random media composed of clusters of spherical particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 127, 192-206.	1.1	19
8	Light scattering by morphologically complex objects and opposition effects (a review). Solar System Research, 2011, 45, 304-322.	0.3	14
9	Light scattering by densely packed systems of particles: near-field effects. , 2013, , 3-36.		14
10	UV contrasts and microphysical properties of the upper clouds of Venus from the UV and NIR VMC/VEx images. Icarus, 2015, 260, 190-204.	1.1	11
11	On applicability of the far-field approximation to the analysis of light scattering by particulate media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 24-34.	1.1	11
12	Aerosol properties in the upper clouds of Venus from glory observations by the Venus Monitoring Camera (Venus Express mission). Icarus, 2018, 299, 272-293.	1.1	11
13	Interaction of particles in the near field and opposition effects in regolith-like surfaces. Solar System Research, 2009, 43, 100-115.	0.3	10
14	Light scattering by aggregates of varying porosity and the opposition phenomena observed in the low-albedo particulate media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2226-2233.	1.1	10
15	Earth-Based Visible and Near-IR Imaging of Mercury. Space Science Reviews, 2007, 132, 351-397.	3.7	8
16	Rebuttal to comment on â€œModeling of opposition effects with ensembles of clusters: Interplay of various scattering mechanismsâ€•by Elena V. Petrova, Victor P. Tishkovets, Klaus Jockers, 2007 [Icarus 188, 233â€"245]. Icarus, 2008, 194, 853-856.	1.1	7
17	Mars aerosol optical thickness retrieved from measurements of the polarization inversion angle and the shape of dust particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 63, 667-676.	1.1	6
18	Simultaneous sublimation activity of primitive asteroids including (24) Themis and (449) Hamburga: Spectral signs of an exosphere and the solar activity impact. Icarus, 2021, 369, 114634.	1.1	6

#	Article	IF	Citations
19	Reflectance model for densely packed media: Estimates of the surface properties of the high-albedo satellites of Saturn. Solar System Research, 2017, 51, 277-293.	0.3	5
20	Prospects for Estimating the Properties of a Loose Surface from the Phase Profiles of Polarization and Intensity of the Scattered Light. Solar System Research, 2019, 53, 172-180.	0.3	5
21	Interstellar comet 2I/Borisov: dust composition from multiband photometry and modelling. Monthly Notices of the Royal Astronomical Society, 2021, 502, 1882-1894.	1.6	5
22	Spectra of light reflected by aggregate structures of submicron particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 252, 107116.	1.1	4
23	An algorithm and codes for fast computations of the opposition effects in a semi-infinite discrete random medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107252.	1.1	3
24	A Cross-Check of the Reflectance Models to Be Used in Interpretation of Observations of Regolith-Like Surfaces. Frontiers in Remote Sensing, 2022, 3, .	1.3	1