Alexander V Rodin

List of Publications by Year in descending order

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48 papers

1,822 citations

304743 22 h-index 254184 43 g-index

48 all docs 48 docs citations

48 times ranked

1148 citing authors

#	Article	IF	CITATIONS
1	A warm layer in Venus' cryosphere and high-altitude measurements of HF, HCl, H2O and HDO. Nature, 2007, 450, 646-649.	27.8	161
2	SPICAV on Venus Express: Three spectrometers to study the global structure and composition of the Venus atmosphere. Planetary and Space Science, 2007, 55, 1673-1700.	1.7	160
3	Vertical Structure of Martian Dust Measured by Solar Infrared Occultations from the Phobos Spacecraft. Icarus, 1993, 102, 76-87.	2.5	118
4	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	27.8	111
5	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	27.8	107
6	Solar infrared occultation observations by SPICAM experiment on Mars-Express: Simultaneous measurements of the vertical distributions of H2O, CO2 and aerosol. Icarus, 2009, 200, 96-117.	2.5	98
7	The 1.10- and 1.18- \hat{l} 4m nightside windows of Venus observed by SPICAV-IR aboard Venus Express. Icarus, 2011, 216, 173-183.	2.5	96
8	Mars' water vapor mapping by the SPICAM IR spectrometer: Five martian years of observations. Icarus, 2015, 251, 50-64.	2.5	90
9	Evidence for a bimodal size distribution for the suspended aerosol particles on Mars. Icarus, 2014, 231, 239-260.	2.5	82
10	Water ice clouds in the Martian atmosphere: General circulation model experiments with a simple cloud scheme. Journal of Geophysical Research, 2002, 107, 2-1.	3.3	81
11	Mars water vapor abundance from SPICAM IR spectrometer: Seasonal and geographic distributions. Journal of Geophysical Research, 2006, 111 , .	3.3	76
12	Vertical Distribution of Water in the Near-Equatorial Troposphere of Mars: Water Vapor and Clouds. Icarus, 1997, 125, 212-229.	2.5	65
13	The study of the martian atmosphere from top to bottom with SPICAM light on mars express. Planetary and Space Science, 2000, 48, 1303-1320.	1.7	61
14	Observation of O21.27 \hat{l} 4m dayglow by SPICAM IR: Seasonal distribution for the first Martian year of Mars Express. Journal of Geophysical Research, 2006, 111, .	3.3	57
15	High resolution heterodyne spectroscopy of the atmospheric methane NIR absorption. Optics Express, 2014, 22, 13825.	3.4	55
16	Seasonal Water "Pump―in the Atmosphere of Mars: Vertical Transport to the Thermosphere. Geophysical Research Letters, 2019, 46, 4161-4169.	4.0	50
17	An AOTF-based spectrometer for the studies of Mars atmosphere for Mars Express ESA mission. Advances in Space Research, 2002, 29, 143-150.	2.6	37
18	Tentative identification of formaldehyde in the Martian atmosphere. Planetary and Space Science, 1993, 41, 441-451.	1.7	36

#	Article	IF	Citations
19	The thermal structure of the Venus atmosphere: Intercomparison of Venus Express and ground based observations of vertical temperature and density profiles. Icarus, 2017, 294, 124-155.	2.5	34
20	Optical properties of dust and the opacity of the Martian atmosphere. Advances in Space Research, 2005, 35, 21-30.	2.6	33
21	Microresonator and Laser Parameter Definition via Self-Injection Locking. Physical Review Applied, 2020, 14, .	3.8	24
22	Title is missing!. Solar System Research, 2003, 37, 1-19.	0.7	23
23	The RUSALKA device for measuring the carbon dioxide and methane concentration in the atmosphere from on board the International Space Station. Journal of Optical Technology (A Translation of) Tj ETQq $1\ 1\ 0.78^2$	13 1 044*gBT	/Overlock 10
24	European Venus Explorer: An in-situ mission to Venus using a balloon platform. Advances in Space Research, 2009, 44, 106-115.	2.6	16
25	Modeling the Hydrological Cycle in the Atmosphere of Mars: Influence of a Bimodal Size Distribution of Aerosol Nucleation Particles. Journal of Geophysical Research E: Planets, 2018, 123, 508-526.	3.6	14
26	Heterodyne detection at near-infrared wavelengths with a superconducting NbN hot-electron bolometer mixer. Optics Letters, 2014, 39, 1429.	3.3	13
27	AOST: Fourier spectrometer for studying mars and phobos. Solar System Research, 2012, 46, 31-40.	0.7	11
28	Common-path achromatic rotational-shearing coronagraph. Optics Letters, 2011, 36, 1972.	3.3	10
29	Martian Dust Storms and Gravity Waves: Disentangling Water Transport to the Upper Atmosphere. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	10
30	European Venus Explorer (EVE): an in-situ mission to Venus. Experimental Astronomy, 2009, 23, 741-760.	3.7	9
31	Global structure and composition of the martian atmosphere with SPICAM on Mars express. Advances in Space Research, 2005, 35, 31-36.	2.6	8
32	NbN Hot-Electron-Bolometer Mixer for Operation in the Near-IR Frequency Range. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.7	8
33	Vertical wind profiling from the troposphere to the lower mesosphere based on high-resolution heterodyne near-infrared spectroradiometry. Atmospheric Measurement Techniques, 2020, 13, 2299-2308.	3.1	8
34	MEP (Mars Environment Package): toward a package for studying environmental conditions at the surface of Mars from future lander/rover missions. Advances in Space Research, 2004, 34, 1702-1709.	2.6	7
35	Exploration of Mars in SPICAM-IR experiment onboard the Mars-Express spacecraft: 1. Acousto-optic spectrometer SPICAM-IR. Cosmic Research, 2006, 44, 278-293.	0.6	7
36	A Concept of 2U Spaceborne Multichannel Heterodyne Spectroradiometer for Greenhouse Gases Remote Sensing. Remote Sensing, 2021, 13, 2235.	4.0	7

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37	Exploration of Mars in the SPICAM-IR experiment onboard the Mars-Express spacecraft: 2. Nadir observations: Simultaneous observations of water vapor and O2 glow in the Martian atmosphere. Cosmic Research, 2006, 44, 294-304.	0.6	4
38	Improvement of dark signal evaluation and signal-to-noise ratio of multichannel receivers in NIR heterodyne spectroscopy application for simultaneous $CO < sub > 2 < / sub > and CH < sub > 4 < / sub > atmospheric measurements. OSA Continuum, 2020, 3, 1801.$	1.8	4
39	Studies of the planetary atmospheres in Russia (2007–2010). Izvestiya - Atmospheric and Oceanic Physics, 2012, 48, 309-331.	0.9	3
40	Martian Multichannel Diode Laser Spectrometer (M-DLS) for In-Situ Atmospheric Composition Measurements on Mars Onboard ExoMars-2022 Landing Platform. Applied Sciences (Switzerland), 2020, 10, 8805.	2.5	3
41	New in the physics of planetary atmosphere. Izvestiya - Atmospheric and Oceanic Physics, 2009, 45, 503-516.	0.9	2
42	MIRA: Review of inputs from updated results of the PHOBOS mission. Advances in Space Research, 1999, 23, 1591-1602.	2.6	1
43	A study of the bound water, water ice, and frost distribution over the Martian surface: Treatment and correcting of the data of observations with the OMEGA spectrometer onboard Mars Express. Solar System Research, 2009, 43, 373-391.	0.7	1
44	Stellar coronagraph using the principle of achromatic null-interferometer. Cosmic Research, 2011, 49, 99-109.	0.6	1
45	M-DLS laser and heterodyne IR spectrometer for studies of the Đœartian atmosphere from ExoMars-2018 landing platform. , 2015, , .		1
46	Portable multichannel heterodyne spectroradiometer for simultaneous atmospheric CO2 and CH4 precision column measurement in the near-infrared range. , 2020, , .		1
47	Identification of planetary wave patterns associated with ice seasonal sublimation/condensation dynamics in the polar regions of mars, based on IR mapping spectrometer OMEGA onboard Mars Express. Cosmic Research, 2010, 48, 150-156.	0.6	0
48	Show Venus Some Love. Scientific American, 2016, 314, 11-11.	1.0	0