

Sandrine Vinatier

List of Publications by Year in descending order

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56
papers

3,457
citations

109321

35
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149698

56
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docs citations

61
times ranked

1628
citing authors

#	ARTICLE	IF	CITATIONS
1	The composition of Titan's stratosphere from Cassini/CIRS mid-infrared spectra. <i>Icarus</i> , 2007, 189, 35-62.	2.5	367
2	Titan's Atmospheric Temperatures, Winds, and Composition. <i>Science</i> , 2005, 308, 975-978.	12.6	318
3	Vertical abundance profiles of hydrocarbons in Titan's atmosphere at 15° S and 80° N retrieved from Cassini/CIRS spectra. <i>Icarus</i> , 2007, 188, 120-138.	2.5	176
4	Analysis of Cassini/CIRS limb spectra of Titan acquired during the nominal mission. <i>Icarus</i> , 2010, 205, 559-570.	2.5	168
5	Titan trace gaseous composition from CIRS at the end of the Cassini-Huygens prime mission. <i>Icarus</i> , 2010, 207, 461-476.	2.5	161
6	Oxygen compounds in Titan's stratosphere as observed by Cassini CIRS. <i>Icarus</i> , 2007, 186, 354-363.	2.5	127
7	Vertical profiles of HCN, HC3N, and C2H2 in Titan's atmosphere derived from Cassini/CIRS data. <i>Icarus</i> , 2007, 186, 364-384.	2.5	121
8	Seasonal variations in Titan's middle atmosphere during the northern spring derived from Cassini/CIRS observations. <i>Icarus</i> , 2015, 250, 95-115.	2.5	99
9	EChO. <i>Experimental Astronomy</i> , 2012, 34, 311-353.	3.7	98
10	ISOTOPIC RATIOS IN TITAN'S METHANE: MEASUREMENTS AND MODELING. <i>Astrophysical Journal</i> , 2012, 749, 159.	4.5	91
11	Heat balance in Titan's atmosphere. <i>Planetary and Space Science</i> , 2008, 56, 648-659.	1.7	84
12	DETECTION OF PROPENE IN TITAN'S STRATOSPHERE. <i>Astrophysical Journal Letters</i> , 2013, 776, L14.	8.3	84
13	Optical constants of Titan's stratospheric aerosols in the 70-1500 cm ⁻¹ spectral range constrained by Cassini/CIRS observations. <i>Icarus</i> , 2012, 219, 5-12.	2.5	82
14	Active upper-atmosphere chemistry and dynamics from polar circulation reversal on Titan. <i>Nature</i> , 2012, 491, 732-735.	27.8	80
15	The Titan 14N/15N and 12C/13C isotopic ratios in HCN from Cassini/CIRS. <i>Icarus</i> , 2007, 191, 712-721.	2.5	75
16	Titan's atmosphere as observed by Cassini/VIMS solar occultations: CH4, CO and evidence for C2H6 absorption. <i>Icarus</i> , 2015, 248, 1-24.	2.5	64
17	Mid- and far-infrared absorption spectroscopy of Titan's aerosols analogues. <i>Icarus</i> , 2012, 221, 320-327.	2.5	63
18	The 12C/13C isotopic ratio in Titan hydrocarbons from Cassini/CIRS infrared spectra. <i>Icarus</i> , 2008, 195, 778-791.	2.5	62

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19	HCN ice in Titan's high-altitude southern polar cloud. <i>Nature</i> , 2014, 514, 65-67.	27.8	59
20	Titan's winter polar vortex structure revealed by chemical tracers. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	58
21	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. <i>Planetary and Space Science</i> , 2014, 104, 122-140.	1.7	56
22	Titan's prolific propane: The Cassini CIRS perspective. <i>Planetary and Space Science</i> , 2009, 57, 1573-1585.	1.7	54
23	EVOLUTION OF THE STRATOSPHERIC TEMPERATURE AND CHEMICAL COMPOSITION OVER ONE TITANIAN YEAR. <i>Astrophysical Journal</i> , 2013, 779, 177.	4.5	47
24	Study of Titan's fall southern stratospheric polar cloud composition with Cassini/CIRS: Detection of benzene ice. <i>Icarus</i> , 2018, 310, 89-104.	2.5	46
25	Analysis of Cassini/CIRS limb spectra of Titan acquired during the nominal mission II: Aerosol extinction profiles in the 600-1420 cm ⁻¹ spectral range. <i>Icarus</i> , 2010, 210, 852-866.	2.5	45
26	Diagnostics of Titan's stratospheric dynamics using Cassini/CIRS data and the 2-dimensional IPSL circulation model. <i>Icarus</i> , 2008, 197, 556-571.	2.5	44
27	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. <i>Experimental Astronomy</i> , 2012, 33, 753-791.	3.7	44
28	Isotopic Ratios in Titan's Atmosphere from Cassini CIRS Limb Sounding: HC ₃ N in the North. <i>Astrophysical Journal</i> , 2008, 681, L109-L111.	4.5	43
29	The distribution of methane in Titan's stratosphere from Cassini/CIRS observations. <i>Icarus</i> , 2014, 231, 323-337.	2.5	43
30	Isotopic Ratios in Titan's Atmosphere from Cassini CIRS Limb Sounding: CO ₂ at Low and Midlatitudes. <i>Astrophysical Journal</i> , 2008, 681, L101-L103.	4.5	42
31	The formation and evolution of Titan's winter polar vortex. <i>Nature Communications</i> , 2017, 8, 1586.	12.8	41
32	Upper limits for undetected trace species in the stratosphere of Titan. <i>Faraday Discussions</i> , 2010, 147, 65.	3.2	40
33	Detection of C ₂ H ₂ and the D/H ratio on Titan. <i>Icarus</i> , 2008, 197, 539-548.	2.5	39
34	Remote sensing of surface pressure on Mars with the Mars Express/OMEGA spectrometer: 1. Retrieval method. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	38
35	Seasonal Evolution of Titan's Stratosphere During the Cassini Mission. <i>Geophysical Research Letters</i> , 2019, 46, 3079-3089.	4.0	37
36	Seasonal evolution of C ₂ N ₂ , C ₃ H ₄ , and C ₄ H ₂ abundances in Titan's lower stratosphere. <i>Astronomy and Astrophysics</i> , 2018, 609, A64.	5.1	32

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37	Remote sensing of surface pressure on Mars with the Mars Express/OMEGA spectrometer: 2. Meteorological maps. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	31
38	SEASONAL DISAPPEARANCE OF FAR-INFRARED HAZE IN TITAN'S STRATOSPHERE. <i>Astrophysical Journal Letters</i> , 2012, 754, L3.	8.3	26
39	THERMAL AND CHEMICAL STRUCTURE VARIATIONS IN TITAN'S STRATOSPHERE DURING THE CASSINI MISSION. <i>Astrophysical Journal</i> , 2012, 760, 144.	4.5	25
40	EVOLUTION OF THE FAR-INFRARED CLOUD AT TITAN'S SOUTH POLE. <i>Astrophysical Journal Letters</i> , 2015, 804, L34.	8.3	22
41	Seasonal changes in the middle atmosphere of Titan from Cassini/CIRS observations: Temperature and trace species abundance profiles from 2004 to 2017. <i>Icarus</i> , 2020, 344, 113547.	2.5	22
42	Seasonal radiative modeling of Titan's stratospheric temperatures at low latitudes. <i>Icarus</i> , 2018, 302, 437-450.	2.5	21
43	Detection of Propadiene on Titan. <i>Astrophysical Journal Letters</i> , 2019, 881, L33.	8.3	21
44	Titan: Earth-like on the Outside, Ocean World on the Inside. <i>Planetary Science Journal</i> , 2021, 2, 112.	3.6	21
45	Sounding of Titan's atmosphere at submillimeter wavelengths from an orbiting spacecraft. <i>Planetary and Space Science</i> , 2010, 58, 1724-1739.	1.7	20
46	Temperature and chemical species distributions in the middle atmosphere observed during Titan's late northern spring to early summer. <i>Astronomy and Astrophysics</i> , 2020, 641, A116.	5.1	20
47	FIRST OBSERVATION IN THE SOUTH OF TITAN'S FAR-INFRARED 220 cm ⁻¹ CLOUD. <i>Astrophysical Journal Letters</i> , 2012, 761, L15.	8.3	19
48	Stratospheric benzene and hydrocarbon aerosols detected in Saturn's auroral regions. <i>Astronomy and Astrophysics</i> , 2015, 580, A89.	5.1	19
49	A tropical haze band in Titan's stratosphere. <i>Icarus</i> , 2010, 207, 485-490.	2.5	16
50	Cassini Composite Infrared Spectrometer (CIRS) Observations of Titan 2004-2017. <i>Astrophysical Journal, Supplement Series</i> , 2019, 244, 14.	7.7	12
51	Haze Seasonal Variations of Titan's Upper Atmosphere during the Cassini Mission. <i>Astrophysical Journal</i> , 2021, 907, 36.	4.5	11
52	On the H ₂ abundance and ortho-to-para ratio in Titan's troposphere. <i>Icarus</i> , 2020, 344, 113261.	2.5	7
53	The science of EChO. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 359-370.	0.0	5
54	Science goals and new mission concepts for future exploration of Titan's atmosphere, geology and habitability: titan POLar scout/orbitEr and in situ lake lander and DrONE explorer (POSEIDON). <i>Experimental Astronomy</i> , 2022, 54, 911-973.	3.7	5

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55	Investigating the Condensation of Benzene (C ₆ H ₆) in Titan's South Polar Cloud System with a Combination of Laboratory, Observational, and Modeling Tools. Planetary Science Journal, 2021, 2, 121.	3.6	4
56	Nitrogen in the Stratosphere of Titan from Cassini CIRS Infrared Spectroscopy. Thirty Years of Astronomical Discovery With UKIRT, 2013, , 123-143.	0.3	2