Olivia Venot

List of Publications by Year
in descending order

49 papers	2,875 citations	147801 31 h-index	197818 49 g-index
52 all docs	52 docs citations	52 times ranked	2068 citing authors

#	Article	IF	Citations
1	A chemical survey of exoplanets with ARIEL. Experimental Astronomy, 2018, 46, 135-209.	3.7	249
2	DETECTION OF AN ATMOSPHERE AROUND THE SUPER-EARTH 55 CANCRI E. Astrophysical Journal, 2016, 820, 99.	4.5	202
3	A chemical model for the atmosphere of hot Jupiters. Astronomy and Astrophysics, 2012, 546, A43.	5.1	181
4	FINGERING CONVECTION AND CLOUDLESS MODELS FOR COOL BROWN DWARF ATMOSPHERES. Astrophysical Journal Letters, 2015, 804, L17.	8.3	164
5	CLOUDLESS ATMOSPHERES FOR L/T DWARFS AND EXTRASOLARÂGIANT PLANETS. Astrophysical Journal Letters, 2016, 817, L19.	8.3	123
6	The neutral photochemistry of nitriles, amines and imines in the atmosphere of Titan. Icarus, 2015, 247, 218-247.	2.5	118
7	The effects of consistent chemical kinetics calculations on the pressure-temperature profiles and emission spectra of hot Jupiters. Astronomy and Astrophysics, 2016, 594, A69.	5.1	113
8	Pseudo 2D chemical model of hot-Jupiter atmospheres: application to HD 209458b and HD 189733b. Astronomy and Astrophysics, 2014, 564, A73.	5.1	110
9	The Transiting Exoplanet Community Early Release Science Program for JWST. Publications of the Astronomical Society of the Pacific, 2018, 130, 114402.	3.1	100
10	EXPLORING BIASES OF ATMOSPHERIC RETRIEVALS IN SIMULATED JWST TRANSMISSION SPECTRA OF HOT JUPITERS. Astrophysical Journal, 2016, 833, 120.	4.5	79
11	INFLUENCE OF STELLAR FLARES ON THE CHEMICAL COMPOSITION OF EXOPLANETS AND SPECTRA. Astrophysical Journal, 2016, 830, 77.	4.5	71
12	THE PUZZLING CHEMICAL COMPOSITION OF GJ 436B'S ATMOSPHERE: INFLUENCE OF TIDAL HEATING ON THE CHEMISTRY. Astrophysical Journal, 2014, 781, 68.	4.5	69
13	Scientific rationale for Uranus and Neptune in situ explorations. Planetary and Space Science, 2018, 155, 12-40.	1.7	69
14	Toward the Analysis of JWST Exoplanet Spectra: Identifying Troublesome Model Parameters. Astrophysical Journal, 2017, 850, 150.	4.5	66
15	The impact of atmospheric circulation on the chemistry of the hot Jupiter HDÂ209458b. Astronomy and Astrophysics, 2012, 548, A73.	5.1	64
16	New chemical scheme for studying carbon-rich exoplanet atmospheres. Astronomy and Astrophysics, 2015, 577, A33.	5.1	64
17	Implications of three-dimensional chemical transport in hot Jupiter atmospheres: Results from a consistently coupled chemistry-radiation-hydrodynamics model. Astronomy and Astrophysics, 2020, 636, A68.	5.1	60
18	The science of ARIEL (Atmospheric Remote-sensing Infrared Exoplanet Large-survey). Proceedings of SPIE, 2016, , .	0.8	56

#	Article	IF	Citations
19	ARES I: WASP-76 b, A Tale of Two HST Spectra*. Astronomical Journal, 2020, 160, 8.	4.7	56
20	Global Chemistry and Thermal Structure Models for the Hot Jupiter WASP-43b and Predictions for JWST. Astrophysical Journal, 2020, 890, 176.	4.5	53
21	The first submillimeter observation of CO in the stratosphere of Uranus. Astronomy and Astrophysics, 2014, 562, A33.	5.1	52
22	ARES. II. Characterizing the Hot Jupiters WASP-127 b, WASP-79 b, and WASP-62b with the Hubble Space Telescope*. Astronomical Journal, 2020, 160, 109.	4.7	52
23	Equatorial retrograde flow in WASP-43b elicited by deep wind jets?. Monthly Notices of the Royal Astronomical Society, 2020, 496, 3582-3614.	4.4	50
24	Scientific rationale for Saturn×³s in situ exploration. Planetary and Space Science, 2014, 104, 29-47.	1.7	49
25	The atmospheric chemistry of the warm Neptune GJ 3470b: Influence of metallicity and temperature on the CH₄/CO ratio. Astronomy and Astrophysics, 2014, 562, A51.	5.1	47
26	High-temperature measurements of VUV-absorption cross sections of CO₂and their application to exoplanets. Astronomy and Astrophysics, 2013, 551, A131.	5.1	45
27	ARES.* V. No Evidence For Molecular Absorption in the HST WFC3 Spectrum of GJ 1132 b. Astronomical Journal, 2021, 161, 284.	4.7	40
28	Thermochemistry and vertical mixing in the tropospheres of Uranus and Neptune: How convection inhibition can affect the derivation of deep oxygen abundances. Icarus, 2017, 291, 1-16.	2.5	39
29	VUV-absorption cross section of carbon dioxide from 150 to 800 K and applications to warm exoplanetary atmospheres. Astronomy and Astrophysics, 2018, 609, A34.	5.1	35
30	New chemical scheme for giant planet thermochemistry. Astronomy and Astrophysics, 2020, 634, A78.	5.1	34
31	ARES. III. Unveiling the Two Faces of KELT-7 b with HST WFC3*. Astronomical Journal, 2020, 160, 112.	4.7	33
32	Five Key Exoplanet Questions Answered via the Analysis of 25 Hot-Jupiter Atmospheres in Eclipse. Astrophysical Journal, Supplement Series, 2022, 260, 3.	7.7	33
33	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
34	Grid of pseudo-2D chemistry models for tidally locked exoplanets â€“ I. The role of vertical and horizontal mixing. Monthly Notices of the Royal Astronomical Society, 2021, 505, 5603-5653.	4.4	27
35	Reduced chemical scheme for modelling warm to hot hydrogen-dominated atmospheres. Astronomy and Astrophysics, 2019, 624, A58.	5.1	26
36	Chemical variation with altitude and longitude on exo-Neptunes: Predictions for Ariel phase-curve observations. Experimental Astronomy, 2022, 53, 279-322.	3.7	25

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37	ARES IV: Probing the Atmospheres of the Two Warm Small Planets HD 106315c and HD 3167c with the HST/WFC3 Camera*. Astronomical Journal, 2021, 161, 19.	4.7	25
38	Relationship Between the Ozone and Water Vapor Columns on Mars as Observed by SPICAM and Calculated by a Global Climate Model. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006838.	3.6	19
39	A Comparison of Chemical Models of Exoplanet Atmospheres Enabled by TauREx 3.1. Astrophysical Journal, 2022, 932, 123.	4.5	19
40	A better characterization of the chemical composition of exoplanets atmospheres with ARIEL. Experimental Astronomy, 2018, 46, 101-134.	3.7	18
41	WASP-117 b: An Eccentric Hot Saturn as a Future Complex Chemistry Laboratory. Astronomical Journal, 2020, 160, 233.	4.7	17
42	The Deep Composition of Uranus and Neptune from In Situ Exploration and Thermochemical Modeling. Space Science Reviews, 2020, 216, 1.	8.1	16
43	Ions in the Thermosphere of Exoplanets: Observable Constraints Revealed by Innovative Laboratory Experiments. Astrophysical Journal, 2020, 895, 77.	4.5	16
44	Indications for very high metallicity and absence of methane in the eccentric exo-Saturn WASP-117b. Astronomy and Astrophysics, 2021, 646, A168.	5.1	15
45	Grid of pseudo-2D chemistry models for tidally locked exoplanets â€“ II. The role of photochemistry. Monthly Notices of the Royal Astronomical Society, 2022, 512, 4877-4892.	4.4	15
46	Chemical modeling of exoplanet atmospheres. Experimental Astronomy, 2015, 40, 469-480.	3.7	13
47	The ARIEL space mission. , 2018, , .		10
48	Ion-driven organic chemistry for Titan-like atmospheres: Implications for N-dominated super-Earth exoplanets. Astronomy and Astrophysics, 2021, 654, A171.	5.1	3
49	VUV-absorption cross section of CO₂at high temperatures and impact on exoplanet atmospheres. BIO Web of Conferences, 2014, 2, 01002.	0.2	1