

# Sarah Häfner

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,298  
citations

218677

26  
h-index

214800

47  
g-index

64  
all docs

64  
docs citations

64  
times ranked

1963  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy deposition in Saturn's equatorial upper atmosphere. <i>Icarus</i> , 2022, 372, 114724.	2.5	7
2	Science Goals and Mission Architecture of the Europa Lander Mission Concept. <i>Planetary Science Journal</i> , 2022, 3, 22.	3.6	42
3	A Cross-laboratory Comparison Study of Titan Haze Analogs: Surface Energy. <i>Planetary Science Journal</i> , 2022, 3, 2.	3.6	6
4	Optical Constants of a Titan Haze Analog from 0.4 to 3.5 $\mu$ m Determined Using Vacuum Spectroscopy. <i>Planetary Science Journal</i> , 2022, 3, 25.	3.6	10
5	Triton Haze Analogs: The Role of Carbon Monoxide in Haze Formation. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	4
6	Titan's Prevailing Circulation Might Drive Highly Intermittent, Yet Significant Sediment Transport. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	12
7	Compositional Measurements of Saturn's Upper Atmosphere and Rings From Cassini INMS: An Extended Analysis of Measurements From Cassini's Grand Finale Orbits. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	7
8	H <sub>2</sub> SO <sub>4</sub> and Organosulfur Compounds in Laboratory Analogue Aerosols of Warm High-metallicity Exoplanet Atmospheres. <i>Planetary Science Journal</i> , 2021, 2, 2.	3.6	14
9	Modeling transmission windows in Titan's lower troposphere: Implications for infrared spectrometers aboard future aerial and surface missions. <i>Icarus</i> , 2021, 357, 114228.	2.5	3
10	Titan: Earth-like on the Outside, Ocean World on the Inside. <i>Planetary Science Journal</i> , 2021, 2, 112.	3.6	21
11	Haze evolution in temperate exoplanet atmospheres through surface energy measurements. <i>Nature Astronomy</i> , 2021, 5, 822-831.	10.1	27
12	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. <i>Planetary Science Journal</i> , 2021, 2, 130.	3.6	80
13	On the Utility of Transmission Color Analysis i: Differentiating Super-Earths and Sub-Neptunes. <i>Astronomical Journal</i> , 2021, 162, 168.	4.7	1
14	Decomposition of electron ionization mass spectra for space application using a Monte Carlo approach. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8684.	1.5	8
15	Single particle triboelectrification of Titan sand analogs. <i>Earth and Planetary Science Letters</i> , 2020, 530, 115996.	4.4	7
16	Transmission Spectroscopy of WASP-79b from 0.6 to 5.0 $\mu$ m. <i>Astronomical Journal</i> , 2020, 159, 5.	4.7	22
17	Compositional Measurements of Saturn's Upper Atmosphere and Rings from Cassini INMS. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006427.	3.6	5
18	Sulfur-driven haze formation in warm CO <sub>2</sub> -rich exoplanet atmospheres. <i>Nature Astronomy</i> , 2020, 4, 986-993.	10.1	33

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19	Enhancing data acquisition for the analysis of complex organic matter in direct-infusion Orbitrap mass spectrometry using micro-scans. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8818.	1.5	3
20	Surface Energy of the Titan Aerosol Analog –Tholin–. <i>Astrophysical Journal</i> , 2020, 905, 88.	4.5	22
21	Chemistry of Temperate Super-Earth and Mini-Neptune Atmospheric Hazes from Laboratory Experiments. <i>Planetary Science Journal</i> , 2020, 1, 17.	3.6	34
22	Haze Formation in Warm H <sub>2</sub> -rich Exoplanet Atmospheres. <i>Planetary Science Journal</i> , 2020, 1, 51.	3.6	34
23	Kepler K2 Time Series Photometry of Titan. <i>Publications of the Astronomical Society of the Pacific</i> , 2019, 131, 084505.	3.1	1
24	Experimental investigation of surface adhesion of Titan analog materials: Mitigation by dust-repellent coatings. <i>Planetary and Space Science</i> , 2019, 179, 104721.	1.7	8
25	Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. <i>Geophysical Research Letters</i> , 2019, 46, 2372-2380.	4.0	20
26	Simulating the density of organic species in the atmosphere of Titan with a coupled ion-neutral photochemical model. <i>Icarus</i> , 2019, 324, 120-197.	2.5	125
27	Disentangling the Planet from the Star in Late-Type M Dwarfs: A Case Study of TRAPPIST-1g. <i>Astronomical Journal</i> , 2019, 157, 11.	4.7	54
28	Gas Phase Chemistry of Cool Exoplanet Atmospheres: Insight from Laboratory Simulations. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 39-50.	2.7	38
29	Haze production rates in super-Earth and mini-Neptune atmosphere experiments. <i>Nature Astronomy</i> , 2018, 2, 303-306.	10.1	93
30	Laboratory Simulations of Haze Formation in the Atmospheres of Super-Earths and Mini-Neptunes: Particle Color and Size Distribution. <i>Astrophysical Journal Letters</i> , 2018, 856, L3.	8.3	48
31	Laboratory investigations of Titan haze formation: In situ measurement of gas and particle composition. <i>Icarus</i> , 2018, 301, 136-151.	2.5	37
32	Limits on Clouds and Hazes for the TRAPPIST-1 Planets. <i>Astronomical Journal</i> , 2018, 156, 252.	4.7	43
33	Detection of Prebiotic Molecules in Plasma and Photochemical Aerosol Analogs Using GC/MS/MS Techniques. <i>Astrophysical Journal</i> , 2018, 865, 133.	4.5	25
34	Thermal Structure and Composition of Saturn's Upper Atmosphere From Cassini/Ion Neutral Mass Spectrometer Measurements. <i>Geophysical Research Letters</i> , 2018, 45, 10,951.	4.0	22
35	The Origin of Titan's External Oxygen: Further Constraints from ALMA Upper Limits on CS and CH <sub>2</sub> NH. <i>Astronomical Journal</i> , 2018, 155, 251.	4.7	8
36	Exploring the Atmosphere of Neoproterozoic Earth: The Effect of O <sub>2</sub> on Haze Formation and Composition. <i>Astrophysical Journal</i> , 2018, 858, 119.	4.5	18

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37	The Effect of Oxygen on Organic Haze Properties. <i>Astrophysical Journal Letters</i> , 2018, 859, L2.	8.3	10
38	Photochemical Haze Formation in the Atmospheres of Super-Earths and Mini-Neptunes. <i>Astronomical Journal</i> , 2018, 156, 38.	4.7	59
39	Where Does Titan Sand Come From: Insight From Mechanical Properties of Titan Sand Candidates. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 2310-2321.	3.6	18
40	Titan's atmosphere and climate. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 432-482.	3.6	228
41	Carbon Monoxide Affecting Planetary Atmospheric Chemistry. <i>Astrophysical Journal Letters</i> , 2017, 841, L31.	8.3	68
42	Titan's methane lakes. <i>Nature Astronomy</i> , 2017, 1, 573-573.	10.1	0
43	The effect of adsorbed liquid and material density on saltation threshold: Insight from laboratory and wind tunnel experiments. <i>Icarus</i> , 2017, 297, 97-109.	2.5	10
44	Direct Measurement of Interparticle Forces of Titan Aerosol Analogs (Tholin) Using Atomic Force Microscopy. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2610-2622.	3.6	19
45	Vortices in Saturn's Northern Hemisphere (2008-2015) observed by Cassini ISS. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1814-1826.	3.6	9
46	THE EFFECT OF CARBON MONOXIDE ON PLANETARY HAZE FORMATION. <i>Astrophysical Journal</i> , 2014, 781, 53.	4.5	34
47	The global vortex analysis of Jupiter and Saturn based on Cassini Imaging Science Subsystem. <i>Icarus</i> , 2014, 242, 122-129.	2.5	13
48	Perturbation of the Mars atmosphere by the near-collision with Comet C/2013 A1 (Siding Spring). <i>Icarus</i> , 2014, 237, 202-210.	2.5	21
49	Identification of primary amines in Titan tholins using microchip nonaqueous capillary electrophoresis. <i>Earth and Planetary Science Letters</i> , 2014, 403, 99-107.	4.4	34
50	The role of benzene photolysis in Titan haze formation. <i>Icarus</i> , 2014, 233, 233-241.	2.5	40
51	Upper limits for PH <sub>3</sub> and H <sub>2</sub> S in Titan's atmosphere from Cassini CIRS. <i>Icarus</i> , 2013, 224, 253-256.	2.5	12
52	Compositional and structural investigation of HCN polymer through high resolution mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2013, 354-355, 193-203.	1.5	22
53	IN SITU MEASUREMENTS OF THE SIZE AND DENSITY OF TITAN AEROSOL ANALOGS. <i>Astrophysical Journal Letters</i> , 2013, 770, L10.	8.3	52
54	A SEARCH FOR MAGNESIUM IN EUROPA'S ATMOSPHERE. <i>Astrophysical Journal Letters</i> , 2013, 764, L28.	8.3	9

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55	Titan Tholins: Simulating Titan Organic Chemistry in the Cassini-Huygens Era. <i>Chemical Reviews</i> , 2012, 112, 1882-1909.	47.7	193
56	Formation of Amino Acids and Nucleotide Bases in a Titan Atmosphere Simulation Experiment. <i>Astrobiology</i> , 2012, 12, 809-817.	3.0	158
57	Organic chemistry on the surface of Titan. <i>Rendiconti Lincei</i> , 2011, 22, 183-189.	2.2	13
58	Formation of NH <sub>3</sub> and CH <sub>2</sub> NH in Titan's upper atmosphere. <i>Faraday Discussions</i> , 2010, 147, 31.	3.2	66
59	Cassini RADAR images at Hotei Arcus and western Xanadu, Titan: Evidence for geologically recent cryovolcanic activity. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	55
60	Origin of oxygen species in Titan's atmosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	129
61	Cassini imaging of Saturn: Southern hemisphere winds and vortices. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	83