Peter Gao

List of Publications by Year
in descending order

62 papers	2,887 citations	136950 32 h-index	168389 53 g-index
64 all docs	64 docs citations	64 times ranked	2861 citing authors

#	Article	IF	Citations
1	A bimodal distribution of haze in Plutoâ€™s atmosphere. Nature Communications, 2022, 13, 240.	12.8	5
2	A New Sedimentation Model for Greater Cloud Diversity in Giant Exoplanets and Brown Dwarfs. Astrophysical Journal, 2022, 925, 33.	4.5	16
3	Spatially Resolved Modeling of Optical Albedos for a Sample of Six Hot Jupiters. Astrophysical Journal, 2022, 926, 157.	4.5	14
4	Microphysics of Water Clouds in the Atmospheres of Y Dwarfs and Temperate Giant Planets. Astrophysical Journal, 2022, 927, 184.	4.5	8
5	The First Near-infrared Transmission Spectrum of HIP 41378 f, A Low-mass Temperate Jovian World in a Multiplanet System. Astrophysical Journal Letters, 2022, 927, L5.	8.3	16
6	A Close-in Puffy Neptune with Hidden Friends: The Enigma of TOI 620. Astronomical Journal, 2022, 163, 269.	4.7	4
7	Transit Timing Variations for AU Microscopii b and c. Astronomical Journal, 2022, 164, 27.	4.7	10
8	The Hubble PanCET Program: A Featureless Transmission Spectrum for WASP-29b and Evidence of Enhanced Atmospheric Metallicity on WASP-80b. Astronomical Journal, 2022, 164, 30.	4.7	4
9	The Venusian Lower Atmosphere Haze as a Depot for Desiccated Microbial Life: A Proposed Life Cycle for Persistence of the Venusian Aerial Biosphere. Astrobiology, 2021, 21, 1206-1223.	3.0	69
10	LORRI observations of waves in Pluto's atmosphere. Icarus, 2021, 356, 113825.	2.5	1
11	Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY ^{âˆ—}. Astronomical Journal, 2021, 161, 148.	4.7	59
12	The Diversity of Planetary Atmospheric Chemistry. Space Science Reviews, 2021, 217, 1.	8.1	2
13	Aerosols in Exoplanet Atmospheres. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006655.	3.6	44
14	Haze evolution in temperate exoplanet atmospheres through surface energy measurements. Nature Astronomy, 2021, 5, 822-831.	10.1	27
15	A Universal Cloud Composition on the Nightsides of Hot Jupiters. Astrophysical Journal Letters, 2021, 918, L7.	8.3	22
16	Characterization of HD 206893 B from Near- to Thermal-infrared. Astrophysical Journal, 2021, 917, 62.	4.5	2
17	H-Î± Variability of V1298 Tau c. Research Notes of the AAS, 2021, 5, 195.	0.7	1
18	Diving Beneath the Sea of Stellar Activity: Chromatic Radial Velocities of the Young AU Mic Planetary System. Astronomical Journal, 2021, 162, 295.	4.7	39

#	Article	IF	Citations
19	Gemini/GMOS Transmission Spectroscopy of the Grazing Planet Candidate WD 1856+534 b. Astronomical Journal, 2021, 162, 296.	4.7	6
20	Optical to Near-infrared Transmission Spectrum of the Warm Sub-Saturn HAT-P-12b. Astronomical Journal, 2020, 159, 234.	4.7	21
21	Keck/NIRC2 Lâ€™-band Imaging of Jovian-mass Accreting Protoplanets around PDS 70. Astronomical Journal, 2020, 159, 263.	4.7	51
22	A planet within the debris disk around the pre-main-sequence star AU Microscopii. Nature, 2020, 582, 497-500.	27.8	145
23	Aerosol composition of hot giant exoplanets dominated by silicates and hydrocarbon hazes. Nature Astronomy, 2020, 4, 951-956.	10.1	137
24	A Featureless Infrared Transmission Spectrum for the Super-puff Planet Kepler-79d. Astronomical Journal, 2020, 160, 201.	4.7	24
25	Global Chemistry and Thermal Structure Models for the Hot Jupiter WASP-43b and Predictions for JWST. Astrophysical Journal, 2020, 890, 176.	4.5	53
26	Deflating Super-puffs: Impact of Photochemical Hazes on the Observed Massâ€"Radius Relationship of Low-mass Planets. Astrophysical Journal, 2020, 890, 93.	4.5	44
27	Into the UV: The Atmosphere of the Hot Jupiter HAT-P-41b Revealed. Astrophysical Journal Letters, 2020, 902, L19.	8.3	25
28	Retrieval of Chemical Abundances in Titan's Upper Atmosphere From Cassini UVIS Observations With Pointing Motion. Earth and Space Science, 2019, 6, 1057-1066.	2.6	7
29	A Hot Saturn Orbiting an Oscillating Late Subgiant Discovered by TESS. Astronomical Journal, 2019, 157, 245.	4.7	72
30	Aggregate Hazes in Exoplanet Atmospheres. Astrophysical Journal, 2019, 874, 61.	4.5	38
31	Precise Radial Velocities of Cool Low-mass Stars with iSHELL. Astronomical Journal, 2019, 158, 170.	4.7	31
32	Transit Signatures of Inhomogeneous Clouds on Hot Jupiters: Insights from Microphysical Cloud Modeling. Astrophysical Journal, 2019, 887, 170.	4.5	64
33	The Intrinsic Temperature and Radiativeâ€"Convective Boundary Depth in the Atmospheres of Hot Jupiters. Astrophysical Journal Letters, 2019, 884, L6.	8.3	82
34	Water Vapor and Clouds on the Habitable-zone Sub-Neptune Exoplanet K2-18b. Astrophysical Journal Letters, 2019, 887, L14.	8.3	183
35	A Hubble PanCET Study of HAT-P-11b: A Cloudy Neptune with a Low Atmospheric Metallicity. Astronomical Journal, 2019, 158, 244.	4.7	37
36	Atmospheric Circulation, Chemistry, and Infrared Spectra of Titan-like Exoplanets around Different Stellar Types. Astrophysical Journal, 2018, 853, 58.	4.5	10

#	ARTICLE	IF	CITATIONS
37	Structure and composition of Pluto's atmosphere from the New Horizons solar ultraviolet occultation. Icarus, 2018, 300, 174-199.	2.5	90
38	Methane on Mars and Habitability: Challenges and Responses. Astrobiology, 2018, 18, 1221-1242.	3.0	50
39	The Transiting Exoplanet Community Early Release Science Program for <i>JWST</i>. Publications of the Astronomical Society of the Pacific, 2018, 130, 114402.	3.1	100
40	Microphysics of KCl and ZnS Clouds on GJ 1214 b. Astrophysical Journal, 2018, 863, 165.	4.5	57
41	Sedimentation Efficiency of Condensation Clouds in Substellar Atmospheres. Astrophysical Journal, 2018, 855, 86.	4.5	63
42	Formation of Silicate and Titanium Clouds on Hot Jupiters. Astrophysical Journal, 2018, 860, 18.	4.5	86
43	Pluto's haze as a surface material. Icarus, 2018, 314, 232-245.	2.5	50
44	Nitrogen Oxides in Early Earth's Atmosphere as Electron Acceptors for Life's Emergence. Astrobiology, 2017, 17, 975-983.	3.0	88
45	Sulfur Hazes in Giant Exoplanet Atmospheres: Impacts on Reflected Light Spectra. Astronomical Journal, 2017, 153, 139.	4.7	71
46	Constraints on the microphysics of Pluto's photochemical haze from New Horizons observations. Icarus, 2017, 287, 116-123.	2.5	73
47	The photochemistry of Pluto's atmosphere as illuminated by New Horizons. Icarus, 2017, 287, 110-115.	2.5	75
48	Demonstration of a near-IR line-referenced electro-optical laser frequency comb for precision radial velocity measurements in astronomy. Nature Communications, 2016, 7, 10436.	12.8	52
49	Retrieval of Precise Radial Velocities from Near-infrared High-resolution Spectra of Low-mass Stars. Publications of the Astronomical Society of the Pacific, 2016, 128, 104501.	3.1	13
50	A HIGH-PRECISION NEAR-INFRARED SURVEY FOR RADIAL VELOCITY VARIABLE LOW-MASS STARS USING CSHELL AND A METHANE GAS CELL. Astrophysical Journal, 2016, 822, 40.	4.5	225
51	Hypotheses for Near-Surface Exchange of Methane on Mars. Astrobiology, 2016, 16, 539-550.	3.0	25
52	Aggregate particles in the plumes of Enceladus. Icarus, 2016, 264, 227-238.	2.5	16
53	Precise Near-Infrared Radial Velocities. Proceedings of the International Astronomical Union, 2015, 10, 286-287.	0.0	0
54	VERTICAL DISTRIBUTION OF <i>C</i> ₃ -HYDROCARBONS IN THE STRATOSPHERE OF TITAN. Astrophysical Journal Letters, 2015, 803, L19.	8.3	25

#	Article	IF	Citations
55	Distribution of sulphuric acid aerosols in the clouds and upper haze of Venus using Venus Express VAST and VeRa temperature profiles. Planetary and Space Science, 2015, 113-114, 205-218.	1.7	47
56	Photochemical control of the distribution of Venusian water. Planetary and Space Science, 2015, 113-114, 226-236.	1.7	27
57	STABILITY OF CO₂ATMOSPHERES ON DESICCATED M DWARF EXOPLANETS. Astrophysical Journal, 2015, 806, 249.	4.5	104
58	Bimodal distribution of sulfuric acid aerosols in the upper haze of Venus. Icarus, 2014, 231, 83-98.	2.5	79
59	Nonhydrostatic effects and the determination of icy satellitesâ€™ moment of inertia. Icarus, 2013, 226, 1185-1191.	2.5	39
60	Precision near-infrared radial velocity instrumentation II: noncircular core fiber scrambler. Proceedings of SPIE, 2013, , .	0.8	14
61	Precision near-infrared radial velocity instrumentation I: absorption gas cells. Proceedings of SPIE, 2013, , .	0.8	6
62	Design and Construction of Absorption Cells for Precision Radial Velocities in the<i>K</i>Band Using Methane Isotopologues. Publications of the Astronomical Society of the Pacific, 2012, 124, 586-597.	3.1	35