

Peter Gao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6472072/publications.pdf>

Version: 2024-02-01

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 HIGH-PRECISION NEAR-INFRARED SURVEY FOR RADIAL VELOCITY VARIABLE LOW-MASS STARS USING CSHELL AND A METHANE GAS CELL. <i>Astrophysical Journal</i> , 2016, 822, 40. | 4.5 | 225 |
| 2 | Water Vapor and Clouds on the Habitable-zone Sub-Neptune Exoplanet K2-18b. <i>Astrophysical Journal Letters</i> , 2019, 887, L14. | 8.3 | 183 |
| 3 | A planet within the debris disk around the pre-main-sequence star AU Microscopii. <i>Nature</i> , 2020, 582, 497-500. | 27.8 | 145 |
| 4 | Aerosol composition of hot giant exoplanets dominated by silicates and hydrocarbon hazes. <i>Nature Astronomy</i> , 2020, 4, 951-956. | 10.1 | 137 |
| 5 | STABILITY OF CO ₂ ATMOSPHERES ON DESICCATED M DWARF EXOPLANETS. <i>Astrophysical Journal</i> , 2015, 806, 249. | 4.5 | 104 |
| 6 | The Transiting Exoplanet Community Early Release Science Program for <i>JWST</i> . <i>Publications of the Astronomical Society of the Pacific</i> , 2018, 130, 114402. | 3.1 | 100 |
| 7 | Structure and composition of Pluto's atmosphere from the New Horizons solar ultraviolet occultation. <i>Icarus</i> , 2018, 300, 174-199. | 2.5 | 90 |
| 8 | Nitrogen Oxides in Early Earth's Atmosphere as Electron Acceptors for Life's Emergence. <i>Astrobiology</i> , 2017, 17, 975-983. | 3.0 | 88 |
| 9 | Formation of Silicate and Titanium Clouds on Hot Jupiters. <i>Astrophysical Journal</i> , 2018, 860, 18. | 4.5 | 86 |
| 10 | The Intrinsic Temperature and Radiative-Convective Boundary Depth in the Atmospheres of Hot Jupiters. <i>Astrophysical Journal Letters</i> , 2019, 884, L6. | 8.3 | 82 |
| 11 | Bimodal distribution of sulfuric acid aerosols in the upper haze of Venus. <i>Icarus</i> , 2014, 231, 83-98. | 2.5 | 79 |
| 12 | The photochemistry of Pluto's atmosphere as illuminated by New Horizons. <i>Icarus</i> , 2017, 287, 110-115. | 2.5 | 75 |
| 13 | Constraints on the microphysics of Pluto's photochemical haze from New Horizons observations. <i>Icarus</i> , 2017, 287, 116-123. | 2.5 | 73 |
| 14 | A Hot Saturn Orbiting an Oscillating Late Subgiant Discovered by TESS. <i>Astronomical Journal</i> , 2019, 157, 245. | 4.7 | 72 |
| 15 | Sulfur Hazes in Giant Exoplanet Atmospheres: Impacts on Reflected Light Spectra. <i>Astronomical Journal</i> , 2017, 153, 139. | 4.7 | 71 |
| 16 | The Venusian Lower Atmosphere Haze as a Depot for Desiccated Microbial Life: A Proposed Life Cycle for Persistence of the Venusian Aerial Biosphere. <i>Astrobiology</i> , 2021, 21, 1206-1223. | 3.0 | 69 |
| 17 | Transit Signatures of Inhomogeneous Clouds on Hot Jupiters: Insights from Microphysical Cloud Modeling. <i>Astrophysical Journal</i> , 2019, 887, 170. | 4.5 | 64 |
| 18 | Sedimentation Efficiency of Condensation Clouds in Substellar Atmospheres. <i>Astrophysical Journal</i> , 2018, 855, 86. | 4.5 | 63 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY ⁺ . <i>Astronomical Journal</i> , 2021, 161, 148. | 4.7 | 59 |
| 20 | Microphysics of KCl and ZnS Clouds on GJ 1214 b. <i>Astrophysical Journal</i> , 2018, 863, 165. | 4.5 | 57 |
| 21 | Global Chemistry and Thermal Structure Models for the Hot Jupiter WASP-43b and Predictions for JWST. <i>Astrophysical Journal</i> , 2020, 890, 176. | 4.5 | 53 |
| 22 | Demonstration of a near-IR line-referenced electro-optical laser frequency comb for precision radial velocity measurements in astronomy. <i>Nature Communications</i> , 2016, 7, 10436. | 12.8 | 52 |
| 23 | Keck/NIRC2 L ⁺ -band Imaging of Jovian-mass Accreting Protoplanets around PDS 70. <i>Astronomical Journal</i> , 2020, 159, 263. | 4.7 | 51 |
| 24 | Methane on Mars and Habitability: Challenges and Responses. <i>Astrobiology</i> , 2018, 18, 1221-1242. | 3.0 | 50 |
| 25 | Pluto's haze as a surface material. <i>Icarus</i> , 2018, 314, 232-245. | 2.5 | 50 |
| 26 | Distribution of sulphuric acid aerosols in the clouds and upper haze of Venus using Venus Express VAST and VeRa temperature profiles. <i>Planetary and Space Science</i> , 2015, 113-114, 205-218. | 1.7 | 47 |
| 27 | Aerosols in Exoplanet Atmospheres. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006655. | 3.6 | 44 |
| 28 | Deflating Super-puffs: Impact of Photochemical Hazes on the Observed Mass-Radius Relationship of Low-mass Planets. <i>Astrophysical Journal</i> , 2020, 890, 93. | 4.5 | 44 |
| 29 | Nonhydrostatic effects and the determination of icy satellites ⁺ moment of inertia. <i>Icarus</i> , 2013, 226, 1185-1191. | 2.5 | 39 |
| 30 | Diving Beneath the Sea of Stellar Activity: Chromatic Radial Velocities of the Young AU Mic Planetary System. <i>Astronomical Journal</i> , 2021, 162, 295. | 4.7 | 39 |
| 31 | Aggregate Hazes in Exoplanet Atmospheres. <i>Astrophysical Journal</i> , 2019, 874, 61. | 4.5 | 38 |
| 32 | A Hubble PanCET Study of HAT-P-11b: A Cloudy Neptune with a Low Atmospheric Metallicity. <i>Astronomical Journal</i> , 2019, 158, 244. | 4.7 | 37 |
| 33 | Design and Construction of Absorption Cells for Precision Radial Velocities in the K ₁ Band Using Methane Isotopologues. <i>Publications of the Astronomical Society of the Pacific</i> , 2012, 124, 586-597. | 3.1 | 35 |
| 34 | Precise Radial Velocities of Cool Low-mass Stars with iSHELL. <i>Astronomical Journal</i> , 2019, 158, 170. | 4.7 | 31 |
| 35 | Photochemical control of the distribution of Venusian water. <i>Planetary and Space Science</i> , 2015, 113-114, 226-236. | 1.7 | 27 |
| 36 | Haze evolution in temperate exoplanet atmospheres through surface energy measurements. <i>Nature Astronomy</i> , 2021, 5, 822-831. | 10.1 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | VERTICAL DISTRIBUTION OF C_3 -HYDROCARBONS IN THE STRATOSPHERE OF TITAN. <i>Astrophysical Journal Letters</i> , 2015, 803, L19. | 8.3 | 25 |
| 38 | Hypotheses for Near-Surface Exchange of Methane on Mars. <i>Astrobiology</i> , 2016, 16, 539-550. | 3.0 | 25 |
| 39 | Into the UV: The Atmosphere of the Hot Jupiter HAT-P-41b Revealed. <i>Astrophysical Journal Letters</i> , 2020, 902, L19. | 8.3 | 25 |
| 40 | A Featureless Infrared Transmission Spectrum for the Super-puff Planet Kepler-79d. <i>Astronomical Journal</i> , 2020, 160, 201. | 4.7 | 24 |
| 41 | A Universal Cloud Composition on the Nightsides of Hot Jupiters. <i>Astrophysical Journal Letters</i> , 2021, 918, L7. | 8.3 | 22 |
| 42 | Optical to Near-infrared Transmission Spectrum of the Warm Sub-Saturn HAT-P-12b. <i>Astronomical Journal</i> , 2020, 159, 234. | 4.7 | 21 |
| 43 | Aggregate particles in the plumes of Enceladus. <i>Icarus</i> , 2016, 264, 227-238. | 2.5 | 16 |
| 44 | A New Sedimentation Model for Greater Cloud Diversity in Giant Exoplanets and Brown Dwarfs. <i>Astrophysical Journal</i> , 2022, 925, 33. | 4.5 | 16 |
| 45 | The First Near-infrared Transmission Spectrum of HIP 41378 f, A Low-mass Temperate Jovian World in a Multiplanet System. <i>Astrophysical Journal Letters</i> , 2022, 927, L5. | 8.3 | 16 |
| 46 | Precision near-infrared radial velocity instrumentation II: noncircular core fiber scrambler. <i>Proceedings of SPIE</i> , 2013, , . | 0.8 | 14 |
| 47 | Spatially Resolved Modeling of Optical Albedos for a Sample of Six Hot Jupiters. <i>Astrophysical Journal</i> , 2022, 926, 157. | 4.5 | 14 |
| 48 | Retrieval of Precise Radial Velocities from Near-infrared High-resolution Spectra of Low-mass Stars. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 104501. | 3.1 | 13 |
| 49 | Atmospheric Circulation, Chemistry, and Infrared Spectra of Titan-like Exoplanets around Different Stellar Types. <i>Astrophysical Journal</i> , 2018, 853, 58. | 4.5 | 10 |
| 50 | Transit Timing Variations for AU Microscopii b and c. <i>Astronomical Journal</i> , 2022, 164, 27. | 4.7 | 10 |
| 51 | Microphysics of Water Clouds in the Atmospheres of Y Dwarfs and Temperate Giant Planets. <i>Astrophysical Journal</i> , 2022, 927, 184. | 4.5 | 8 |
| 52 | Retrieval of Chemical Abundances in Titan's Upper Atmosphere From Cassini UVIS Observations With Pointing Motion. <i>Earth and Space Science</i> , 2019, 6, 1057-1066. | 2.6 | 7 |
| 53 | Precision near-infrared radial velocity instrumentation I: absorption gas cells. <i>Proceedings of SPIE</i> , 2013, , . | 0.8 | 6 |
| 54 | Gemini/GMOS Transmission Spectroscopy of the Grazing Planet Candidate WD 1856+534 b. <i>Astronomical Journal</i> , 2021, 162, 296. | 4.7 | 6 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | A bimodal distribution of haze in Pluto's atmosphere. Nature Communications, 2022, 13, 240. | 12.8 | 5 |
| 56 | A Close-in Puffy Neptune with Hidden Friends: The Enigma of TOI 620. Astronomical Journal, 2022, 163, 269. | 4.7 | 4 |
| 57 | 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 |
| 58 | The Diversity of Planetary Atmospheric Chemistry. Space Science Reviews, 2021, 217, 1. | 8.1 | 2 |
| 59 | Characterization of HD 206893 B from Near- to Thermal-infrared. Astrophysical Journal, 2021, 917, 62. | 4.5 | 2 |
| 60 | LORRI observations of waves in Pluto's atmosphere. Icarus, 2021, 356, 113825. | 2.5 | 1 |
| 61 | H α Variability of V1298 Tau c. Research Notes of the AAS, 2021, 5, 195. | 0.7 | 1 |
| 62 | Precise Near-Infrared Radial Velocities. Proceedings of the International Astronomical Union, 2015, 10, 286-287. | 0.0 | 0 |