Jacob Bean

List of Publications by Year
in descending order

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107 papers	11,899 citations	38742 50 h-index	30922 102 g-index
109 all docs	109 docs citations	109 times ranked	5290 citing authors

#	Article	IF	Citations
1	Strong H₂O and CO Emission Features in the Spectrum of KELT-20b Driven by Stellar UV Irradiation. Astrophysical Journal Letters, 2022, 925, L3.	8.3	16
2	A Second Planet Transiting LTT 1445A and a Determination of the Masses of Both Worlds. Astronomical Journal, 2022, 163, 168.	4.7	23
3	A new method to measure the spectra of transiting exoplanet atmospheres using multi-object spectroscopy. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3236-3265.	4.4	5
4	No Umbrella Needed: Confronting the Hypothesis of Iron Rain on WASP-76b with Post-processed General Circulation Models. Astrophysical Journal, 2022, 926, 85.	4.5	22
5	A New Analysis of Eight Spitzer Phase Curves and Hot Jupiter Population Trends: Qatar-1b, Qatar-2b, WASP-52b, WASP-34b, and WASP-140b. Astronomical Journal, 2022, 163, 256.	4.7	10
6	Confirmation of Water Absorption in the Thermal Emission Spectrum of the Hot Jupiter WASP-77Ab with HST/WFC3. Astronomical Journal, 2022, 163, 261.	4.7	11
7	Assessing the Transiting Exoplanet Survey Satelliteâ€™s Yield of Rocky Planets Around Nearby M Dwarfs. Astronomical Journal, 2022, 163, 255.	4.7	8
8	A Close-in Puffy Neptune with Hidden Friends: The Enigma of TOI 620. Astronomical Journal, 2022, 163, 269.	4.7	4
9	The Volatile Carbon-to-oxygen Ratio as a Tracer for the Formation Locations of Interstellar Comets. Planetary Science Journal, 2022, 3, 150.	3.6	10
10	Clouds in Three-dimensional Models of Hot Jupiters over a Wide Range of Temperatures. I. Thermal Structures and Broadband Phase-curve Predictions. Astrophysical Journal, 2021, 908, 101.	4.5	51
11	A nearby transiting rocky exoplanet that is suitable for atmospheric investigation. Science, 2021, 371, 1038-1041.	12.6	41
12	Evidence for disequilibrium chemistry from vertical mixing in hot Jupiter atmospheres. Astronomy and Astrophysics, 2021, 648, A127.	5.1	24
13	A comprehensive reanalysis of Spitzerâ€™s 4.5â€‰Î¼m phase curves, and the phase variations of the ultra-hot Jupiters MASCARA-1b and KELT-16b. Monthly Notices of the Royal Astronomical Society, 2021, 504, 3316-3337.	4.4	28
14	The Dark World: A Tale of WASP-43b in Reflected Light with HST WFC3/UVIS. Astronomical Journal, 2021, 161, 269.	4.7	13
15	The TESS Objects of Interest Catalog from the TESS Prime Mission. Astrophysical Journal, Supplement Series, 2021, 254, 39.	7.7	190
16	HD 183579b: a warm sub-Neptune transiting a solar twin detected by TESS. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2220-2240.	4.4	3
17	H-Î± Variability of V1298 Tau c. Research Notes of the AAS, 2021, 5, 195.	0.7	1
18	Spitzer Phase-curve Observations and Circulation Models of the Inflated Ultrahot Jupiter WASP-76b. Astronomical Journal, 2021, 162, 158.	4.7	27

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19	The Nature and Origins of Subâ€Neptune Size Planets. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006639.	3.6	65
20	Science Extraction from TESS Observations of Known Exoplanet Hosts. Publications of the Astronomical Society of the Pacific, 2021, 133, 014402.	3.1	19
21	TOI 122b and TOI 237b: Two Small Warm Planets Orbiting Inactive M Dwarfs Found by TESS. Astronomical Journal, 2021, 161, 13.	4.7	12
22	H-alpha and Ca ii Infrared Triplet Variations During a Transit of the 23 Myr Planet V1298 Tau c. Astronomical Journal, 2021, 162, 213.	4.7	18
23	A unique hot Jupiter spectral sequence with evidence for compositional diversity. Nature Astronomy, 2021, 5, 1224-1232.	10.1	40
24	A solar C/O and sub-solar metallicity in a hot Jupiter atmosphere. Nature, 2021, 598, 580-584.	27.8	82
25	Confirmation of Iron Emission Lines and Nondetection of TiO on the Dayside of KELT-9b with MAROON-X. Astrophysical Journal Letters, 2021, 921, L18.	8.3	22
26	Evidence for H2 Dissociation and Recombination Heat Transport in the Atmosphere of KELT-9b. Astrophysical Journal Letters, 2020, 888, L15.	8.3	57
27	A transition between the hot and the ultra-hot Jupiter atmospheres. Astronomy and Astrophysics, 2020, 639, A36.	5.1	45
28	Carbon, isotopic ratio 12C/13C, and nitrogen in solar twins: constraints for the chemical evolution of the local disc. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2196-2213.	4.4	15
29	Smaller than Expected Bright-spot Offsets in Spitzer Phase Curves of the Hot Jupiter Qatar-1b. Astronomical Journal, 2020, 159, 225.	4.7	13
30	Exploring the Atmospheric Dynamics of the Extreme Ultrahot Jupiter KELT-9b Using TESS Photometry. Astronomical Journal, 2020, 160, 88.	4.7	44
31	Transits of Known Planets Orbiting a Naked-eye Star. Astronomical Journal, 2020, 160, 129.	4.7	22
32	Flare Statistics for Young Stars from a Convolutional Neural Network Analysis of TESS Data. Astronomical Journal, 2020, 160, 219.	4.7	66
33	Nondetection of Helium in the Upper Atmospheres of Three Sub-Neptune Exoplanets. Astronomical Journal, 2020, 160, 258.	4.7	44
34	Global Chemistry and Thermal Structure Models for the Hot Jupiter WASP-43b and Predictions for JWST. Astrophysical Journal, 2020, 890, 176.	4.5	53
35	On-sky commissioning of MAROON-X: a new precision radial velocity spectrograph for Gemini North. , 2020, , .		19
36	Constraining Exoplanet Metallicities and Aerosols with the Contribution to ARIEL Spectroscopy of Exoplanets (CASE). Publications of the Astronomical Society of the Pacific, 2019, 131, 094401.	3.1	15

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37	A super-Earth and two sub-Neptunes transiting the nearby and quiet M dwarf TOI-270. Nature Astronomy, 2019, 3, 1099-1108.	10.1	84
38	eleanor: An Open-source Tool for Extracting Light Curves from the TESS Full-frame Images. Publications of the Astronomical Society of the Pacific, 2019, 131, 094502.	3.1	167
39	TESS Asteroseismology of the Known Red-giant Host Stars HD 212771 and HD 203949. Astrophysical Journal, 2019, 885, 31.	4.5	28
40	The Revised TESS Input Catalog and Candidate Target List. Astronomical Journal, 2019, 158, 138.	4.7	577
41	TESS Discovery of an Ultra-short-period Planet around the Nearby M Dwarf LHS 3844. Astrophysical Journal Letters, 2019, 871, L24.	8.3	108
42	Climate of an ultra hot Jupiter. Astronomy and Astrophysics, 2019, 625, A136.	5.1	71
43	Predicted Yield of Transits of Known Radial Velocity Exoplanets from the TESS Primary and Extended Missions. Publications of the Astronomical Society of the Pacific, 2019, 131, 034401.	3.1	20
44	Constraining the evolution of stellar rotation using solar twins. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 485, L68-L72.	3.3	32
45	The Liâ€“age correlation: the Sun is unusually Li deficient for its age. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4052-4059.	4.4	39
46	Analyzing Atmospheric Temperature Profiles and Spectra of M Dwarf Rocky Planets. Astrophysical Journal, 2019, 886, 142.	4.5	30
47	Identifying Atmospheres on Rocky Exoplanets through Inferred High Albedo. Astrophysical Journal, 2019, 886, 141.	4.5	37
48	Ground-based optical transmission spectrum of the hot Jupiter HAT-P-1b. Astronomy and Astrophysics, 2019, 631, A169.	5.1	12
49	A Hubble PanCET Study of HAT-P-11b: A Cloudy Neptune with a Low Atmospheric Metallicity. Astronomical Journal, 2019, 158, 244.	4.7	37
50	Thorium in solar twins: implications for habitability in rocky planets. Monthly Notices of the Royal Astronomical Society, 2019, 482, 1690-1700.	4.4	20
51	Identifying Candidate Atmospheres on Rocky M Dwarf Planets via Eclipse Photometry. Astrophysical Journal, 2019, 886, 140.	4.5	46
52	SimulatedJWST/NIRISS Transit Spectroscopy of Anticipated Tess Planets Compared to Select Discoveries from Space-based and Ground-based Surveys. Publications of the Astronomical Society of the Pacific, 2018, 130, 044401.	3.1	50
53	The Solar Twin Planet Search. Astronomy and Astrophysics, 2018, 619, A73.	5.1	66
54	TESS Discovery of a Transiting Super-Earth in the pi Mensae System. Astrophysical Journal Letters, 2018, 868, L39.	8.3	148

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55	Detection of Helium in the Atmosphere of the Exo-Neptune HAT-P-11b. Astrophysical Journal Letters, 2018, 868, L34.	8.3	73
56	A Framework for Prioritizing the TESS Planetary Candidates Most Amenable to Atmospheric Characterization. Publications of the Astronomical Society of the Pacific, 2018, 130, 114401.	3.1	314
57	The Transiting Exoplanet Community Early Release Science Program for JWST. Publications of the Astronomical Society of the Pacific, 2018, 130, 114402.	3.1	100
58	The Chemical Homogeneity of Sun-like Stars in the Solar Neighborhood. Astrophysical Journal, 2018, 865, 68.	4.5	118
59	From thermal dissociation to condensation in the atmospheres of ultra hot Jupiters: WASP-121b in context. Astronomy and Astrophysics, 2018, 617, A110.	5.1	230
60	Community Targets of JWSTâ€™s Early Release Science Program: Evaluation of WASP-63b. Astronomical Journal, 2018, 156, 103.	4.7	25
61	An HST/WFC3 Thermal Emission Spectrum of the Hot Jupiter HAT-P-7b. Astronomical Journal, 2018, 156, 10.	4.7	70
62	H^{â^’} Opacity and Water Dissociation in the Dayside Atmosphere of the Very Hot Gas Giant WASP-18b. Astrophysical Journal Letters, 2018, 855, L30.	8.3	217
63	Global Climate and Atmospheric Composition of the Ultra-hot Jupiter WASP-103b from HST and Spitzer Phase Curve Observations. Astronomical Journal, 2018, 156, 17.	4.7	156
64	MAROON-X: a radial velocity spectrograph for the Gemini Observatory. , 2018, , .		31
65	HELIOS: AN OPEN-SOURCE, GPU-ACCELERATED RADIATIVE TRANSFER CODE FOR SELF-CONSISTENT EXOPLANETARY ATMOSPHERES. Astronomical Journal, 2017, 153, 56.	4.7	128
66	SPITZERPHASE CURVE CONSTRAINTS FOR WASP-43b AT 3.6 AND 4.5Î¼m. Astronomical Journal, 2017, 153, 68.	4.7	157
67	Kepler-11 is a Solar Twin: Revising the Masses and Radii of Benchmark Planets via Precise Stellar Characterization. Astrophysical Journal, 2017, 839, 94.	4.5	41
68	Rubidium-traced white-light etalon calibrator for radialÂvelocity measurements at the cm s^{â^’1} level. Journal of Astronomical Telescopes, Instruments, and Systems, 2017, 3, 025003.	1.8	12
69	A Statistical Comparative Planetology Approach to the Hunt for Habitable Exoplanets and Life Beyond the Solar System. Astrophysical Journal Letters, 2017, 841, L24.	8.3	80
70	A Framework to Combine Low- and High-resolution Spectroscopy for the Atmospheres of Transiting Exoplanets. Astrophysical Journal Letters, 2017, 839, L2.	8.3	108
71	An Observational Diagnostic for Distinguishing between Clouds and Haze in Hot Exoplanet Atmospheres. Astrophysical Journal Letters, 2017, 845, L20.	8.3	43
72	The Solar Twin Planet Search. Astronomy and Astrophysics, 2017, 597, A34.	5.1	36

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73	Spectroscopic binaries in the Solar Twin Planet Search program: from substellarâ€“mass to M dwarf companions. Monthly Notices of the Royal Astronomical Society, 2017, 472, 3425-3436.	4.4	13
74	Gemini/GMOS Transmission Spectral Survey: Complete Optical Transmission Spectrum of the Hot Jupiter WASP-4b. Astronomical Journal, 2017, 154, 95.	4.7	59
75	Quantifying the Impact of Spectral Coverage on the Retrieval of Molecular Abundances from Exoplanet Transmission Spectra. Publications of the Astronomical Society of the Pacific, 2017, 129, 104402.	3.1	4
76	THE IMPACT OF NON-UNIFORM THERMAL STRUCTURE ON THE INTERPRETATION OF EXOPLANET EMISSION SPECTRA. Astrophysical Journal, 2016, 829, 52.	4.5	113
77	The Solar Twin Planet Search. Astronomy and Astrophysics, 2016, 592, A156.	5.1	42
78	NO THERMAL INVERSION AND A SOLAR WATER ABUNDANCE FOR THE HOT JUPITER HD 209458B FROM HST/WFC3 SPECTROSCOPY. Astronomical Journal, 2016, 152, 203.	4.7	144
79	Transiting Exoplanet Studies and Community Targets forJWST's Early Release Science Program. Publications of the Astronomical Society of the Pacific, 2016, 128, 094401.	3.1	98
80	Development and construction of MAROON-X. Proceedings of SPIE, 2016, , .	0.8	28
81	State of the Field: Extreme Precision Radial Velocities. Publications of the Astronomical Society of the Pacific, 2016, 128, 066001.	3.1	253
82	A SEARCH FOR WATER IN THE ATMOSPHERE OF HAT-P-26b USING LDSS-3C. Astrophysical Journal, 2016, 817, 141.	4.5	86
83	The Solar Twin Planet Search. Astronomy and Astrophysics, 2016, 590, A32.	5.1	86
84	Full gradient solution to adaptive hybrid control. Proceedings of Meetings on Acoustics, 2016, , .	0.3	0
85	A DETECTION OF WATER IN THE TRANSMISSION SPECTRUM OF THE HOT JUPITER WASP-12b AND IMPLICATIONS FOR ITS ATMOSPHERIC COMPOSITION. Astrophysical Journal, 2015, 814, 66.	4.5	212
86	The Solar Twin Planet Search. Astronomy and Astrophysics, 2015, 581, A34.	5.1	25
87	THE ATMOSPHERIC CIRCULATION OF THE HOT JUPITER WASP-43b: COMPARING THREE-DIMENSIONAL MODELS TO SPECTROPHOTOMETRIC DATA. Astrophysical Journal, 2015, 801, 86.	4.5	116
88	TRANSMISSION SPECTROSCOPY OF THE HOT JUPITER WASP-12b FROM 0.7 TO 5 Î¼m. Astronomical Journal, 2014, 147, 161.	4.7	154
89	Observations of Transiting Exoplanets with the James Webb Space Telescope (JWST). Publications of the Astronomical Society of the Pacific, 2014, 126, 1134-1173.	3.1	245
90	Transiting Exoplanet Survey Satellite. Journal of Astronomical Telescopes, Instruments, and Systems, 2014, 1, 014003.	1.8	2,300

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91	NEW ANALYSIS INDICATES NO THERMAL INVERSION IN THE ATMOSPHERE OF HD 209458b. Astrophysical Journal, 2014, 796, 66.	4.5	120
92	STELLAR CHEMICAL ABUNDANCES: IN PURSUIT OF THE HIGHEST ACHIEVABLE PRECISION. Astrophysical Journal, 2014, 795, 23.	4.5	77
93	DECIPHERING THE ATMOSPHERIC COMPOSITION OF WASP-12b: A COMPREHENSIVE ANALYSIS OF ITS DAYSIDE EMISSION. Astrophysical Journal, 2014, 791, 36.	4.5	128
94	Transiting Exoplanet Survey Satellite (TESS). Proceedings of SPIE, 2014, , .	0.8	566
95	Clouds in the atmosphere of the super-Earth exoplanet GJâ€‰1214b. Nature, 2014, 505, 69-72.	27.8	688
96	AHUBBLE SPACE TELESCOPESEARCH FOR A SUB-EARTH-SIZED EXOPLANET IN THE GJ 436 SYSTEM. Astrophysical Journal, 2014, 796, 32.	4.5	37
97	Thermal structure of an exoplanet atmosphere from phase-resolved emission spectroscopy. Science, 2014, 346, 838-841.	12.6	266
98	HUBBLE SPACE TELESCOPENEAR-IR TRANSMISSION SPECTROSCOPY OF THE SUPER-EARTH HD 97658B. Astrophysical Journal, 2014, 794, 155.	4.5	164
99	A PRECISE WATER ABUNDANCE MEASUREMENT FOR THE HOT JUPITER WASP-43b. Astrophysical Journal Letters, 2014, 793, L27.	8.3	297
100	GROUND-BASED TRANSIT SPECTROSCOPY OF THE HOT-JUPITER WASP-19b IN THE NEAR-INFRARED. Astrophysical Journal, 2013, 771, 108.	4.5	80
101	On the Current State of Ground-based Transmission Spectroscopy of Planet Atmospheres. Proceedings of the International Astronomical Union, 2012, 8, 315-318.	0.0	0
102	THE OPTICAL AND NEAR-INFRARED TRANSMISSION SPECTRUM OF THE SUPER-EARTH GJ 1214b: FURTHER EVIDENCE FOR A METAL-RICH ATMOSPHERE. Astrophysical Journal, 2011, 743, 92.	4.5	190
103	THE GJ1214 SUPER-EARTH SYSTEM: STELLAR VARIABILITY, NEW TRANSITS, AND A SEARCH FOR ADDITIONAL PLANETS. Astrophysical Journal, 2011, 736, 12.	4.5	140
104	THE CRIRES SEARCH FOR PLANETS AROUND THE LOWEST-MASS STARS. I. HIGH-PRECISION NEAR-INFRARED RADIAL VELOCITIES WITH AN AMMONIA GAS CELL. Astrophysical Journal, 2010, 713, 410-422.	4.5	139
105	A ground-based transmission spectrum of the super-Earth exoplanet GJ 1214b. Nature, 2010, 468, 669-672.	27.8	320
106	The temporal evolution of neutron-capture elements in the Galactic discs. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	58
107	A new method to correct for host star variability in multi-epoch observations of exoplanet transmission spectra. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	1