

Kevin B Stevenson

List of Publications by Year in descending order

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95
papers

7,000
citations

66343

42
h-index

62596

80
g-index

96
all docs

96
docs citations

96
times ranked

2836
citing authors

#	ARTICLE	IF	CITATIONS
1	Hierarchical Bayesian Atmospheric Retrieval Modeling for Population Studies of Exoplanet Atmospheres: A Case Study on the Habitable Zone. <i>Astronomical Journal</i> , 2022, 163, 140.	4.7	9
2	UV absorption by silicate cloud precursors in ultra-hot Jupiter WASP-178b. <i>Nature</i> , 2022, 604, 49-52.	27.8	21
3	A new method to measure the spectra of transiting exoplanet atmospheres using multi-object spectroscopy. <i>Monthly Notices of the Royal Astronomical Society</i> , 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. <i>Astrophysical Journal</i> , 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. <i>Astronomical Journal</i> , 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. <i>Astronomical Journal</i> , 2022, 163, 261.	4.7	11
7	Clouds in Three-dimensional Models of Hot Jupiters over a Wide Range of Temperatures. I. Thermal Structures and Broadband Phase-curve Predictions. <i>Astrophysical Journal</i> , 2021, 908, 101.	4.5	51
8	Keys of a Mission to Uranus or Neptune, the Closest Ice Giants. , 2021, 53, .		3
9	Looking Back is Looking Forward: The Need for Retrospective Solar System Observations in Advance of Exoplanet Retrievals. , 2021, 53, .		1
10	Origins Space Telescope: trades and decisions leading to the baseline mission concept. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2021, 7, .	1.8	3
11	A comprehensive reanalysis of <i>Spitzer</i> 's 4.5- μ m phase curves, and the phase variations of the ultra-hot Jupiters MASCARA-1b and KELT-16b. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 3316-3337.	4.4	28
12	The Dark World: A Tale of WASP-43b in Reflected Light with HST WFC3/UVIS. <i>Astronomical Journal</i> , 2021, 161, 269.	4.7	13
13	Variable Irradiation on 1D Cloudless Eccentric Exoplanet Atmospheres. <i>Astrophysical Journal</i> , 2021, 915, 41.	4.5	11
14	Transmission Spectroscopy of the Earth-Sun System to Inform the Search for Extrasolar Life. <i>Planetary Science Journal</i> , 2021, 2, 140.	3.6	8
15	The Hubble PanCET Program: Transit and Eclipse Spectroscopy of the Strongly Irradiated Giant Exoplanet WASP-76b. <i>Astronomical Journal</i> , 2021, 162, 108.	4.7	23
16	Spitzer Phase-curve Observations and Circulation Models of the Inflated Ultrahot Jupiter WASP-76b. <i>Astronomical Journal</i> , 2021, 162, 158.	4.7	27
17	On the Utility of Transmission Color Analysis i: Differentiating Super-Earths and Sub-Neptunes. <i>Astronomical Journal</i> , 2021, 162, 168.	4.7	1
18	Neptune Odyssey: A Flagship Concept for the Exploration of the Neptune-Triton System. <i>Planetary Science Journal</i> , 2021, 2, 184.	3.6	11

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19	Retrieving Exoplanet Atmospheres Using Planetary Infrared Excess: Prospects for the Night Side of WASP-43 b and Other Hot Jupiters. <i>Astrophysical Journal Letters</i> , 2021, 921, L4.	8.3	5
20	The Hubble PanCET program: Transit and Eclipse Spectroscopy of the Hot-Jupiter WASP-74b. <i>Astronomical Journal</i> , 2021, 162, 271.	4.7	3
21	Evidence for H ₂ Dissociation and Recombination Heat Transport in the Atmosphere of KELT-9b. <i>Astrophysical Journal Letters</i> , 2020, 888, L15.	8.3	57
22	Transmission Spectroscopy of WASP-79b from 0.6 to 5.0 μ m. <i>Astronomical Journal</i> , 2020, 159, 5.	4.7	22
23	The Detectability and Constraints of Biosignature Gases in the Near- and Mid-infrared from Transit Transmission Spectroscopy. <i>Astronomical Journal</i> , 2020, 159, 117.	4.7	23
24	Aerosol composition of hot giant exoplanets dominated by silicates and hydrocarbon hazes. <i>Nature Astronomy</i> , 2020, 4, 951-956.	10.1	137
25	Statistical Characterization of Hot Jupiter Atmospheres Using Spitzer's Secondary Eclipses. <i>Astronomical Journal</i> , 2020, 159, 137.	4.7	72
26	Into the UV: A Precise Transmission Spectrum of HAT-P-41b Using Hubble's WFC3/UVIS G280 Grism. <i>Astronomical Journal</i> , 2020, 159, 204.	4.7	36
27	Smaller than Expected Bright-spot Offsets in Spitzer Phase Curves of the Hot Jupiter Qatar-1b. <i>Astronomical Journal</i> , 2020, 159, 225.	4.7	13
28	Introducing a New Spitzer Master BLISS Map to Remove the Instrument Systematic Phase-curve-parameter Degeneracy, as Demonstrated by a Reanalysis of the 4.5 μ m WASP-43b Phase Curve. <i>Astronomical Journal</i> , 2020, 160, 140.	4.7	27
29	An Unusual Transmission Spectrum for the Sub-Saturn KELT-11b Suggestive of a Subsolar Water Abundance. <i>Astronomical Journal</i> , 2020, 160, 280.	4.7	21
30	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
31	A New Method for Studying Exoplanet Atmospheres Using Planetary Infrared Excess. <i>Astrophysical Journal Letters</i> , 2020, 898, L35.	8.3	10
32	Into the UV: The Atmosphere of the Hot Jupiter HAT-P-41b Revealed. <i>Astrophysical Journal Letters</i> , 2020, 902, L19.	8.3	25
33	Eigenspectra: a framework for identifying spectra from 3D eclipse mapping. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 5151-5162.	4.4	9
34	Constraining Exoplanet Metallicities and Aerosols with the Contribution to ARIEL Spectroscopy of Exoplanets (CASE). <i>Publications of the Astronomical Society of the Pacific</i> , 2019, 131, 094401.	3.1	15
35	Absence of a thick atmosphere on the terrestrial exoplanet LHS3844b. <i>Nature</i> , 2019, 573, 87-90.	27.8	139
36	An Ultra-Stable Mid-Infrared Sensor for the Detection of Bio-Signatures by Means of Transit Spectroscopy. , 2019, , .		3

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37	Mass loss from the exoplanet WASP-12b inferred from Spitzer phase curves. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 1995-2013.	4.4	43
38	Climate of an ultra hot Jupiter. <i>Astronomy and Astrophysics</i> , 2019, 625, A136.	5.1	71
39	Ground-based optical transmission spectrum of the hot Jupiter HAT-P-1b. <i>Astronomy and Astrophysics</i> , 2019, 631, A169.	5.1	12
40	Impact of Clouds and Hazes on the Simulated JWST Transmission Spectra of Habitable Zone Planets in the TRAPPIST-1 System. <i>Astrophysical Journal</i> , 2019, 887, 194.	4.5	92
41	Exoplanet Atmosphere Forecast: Observers Should Expect Spectroscopic Transmission Features to be Muted to 33%. <i>Research Notes of the AAS</i> , 2019, 3, 7.	0.7	34
42	The Exo.MAST Table for JWST Exoplanet Atmosphere Observability. <i>Research Notes of the AAS</i> , 2019, 3, 193.	0.7	10
43	Strategies for Constraining the Atmospheres of Temperate Terrestrial Planets with JWST. <i>Astrophysical Journal Letters</i> , 2018, 856, L34.	8.3	82
44	The HST PanCET Program: Hints of Na i and Evidence of a Cloudy Atmosphere for the Inflated Hot Jupiter WASP-52b. <i>Astronomical Journal</i> , 2018, 156, 298.	4.7	30
45	Detection of Helium in the Atmosphere of the Exo-Neptune HAT-P-11b. <i>Astrophysical Journal Letters</i> , 2018, 868, L34.	8.3	73
46	The Transiting Exoplanet Community Early Release Science Program for JWST. <i>Publications of the Astronomical Society of the Pacific</i> , 2018, 130, 114402.	3.1	100
47	Community Targets of JWST's Early Release Science Program: Evaluation of WASP-63b. <i>Astronomical Journal</i> , 2018, 156, 103.	4.7	25
48	An HST/WFC3 Thermal Emission Spectrum of the Hot Jupiter HAT-P-7b. <i>Astronomical Journal</i> , 2018, 156, 10.	4.7	70
49	Starspot Occultations in Infrared Transit Spectroscopy: The Case of WASP-52b. <i>Astronomical Journal</i> , 2018, 156, 124.	4.7	24
50	A Comparative Study of WASP-67 b and HAT-P-38 b from WFC3 Data. <i>Astronomical Journal</i> , 2018, 155, 55.	4.7	41
51	H^{α} Opacity and Water Dissociation in the Dayside Atmosphere of the Very Hot Gas Giant WASP-18b. <i>Astrophysical Journal Letters</i> , 2018, 855, L30.	8.3	217
52	Exoplanet Biosignatures: Observational Prospects. <i>Astrobiology</i> , 2018, 18, 739-778.	3.0	130
53	The Origins Space Telescope. <i>Nature Astronomy</i> , 2018, 2, 596-599.	10.1	41
54	Global Climate and Atmospheric Composition of the Ultra-hot Jupiter WASP-103b from HST and Spitzer Phase Curve Observations. <i>Astronomical Journal</i> , 2018, 156, 17.	4.7	156

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55	Water, High-altitude Condensates, and Possible Methane Depletion in the Atmosphere of the Warm Super-Neptune WASP-107b. <i>Astrophysical Journal Letters</i> , 2018, 858, L6.	8.3	67
56	Overview of the Origins Space telescope: science drivers to observatory requirements. , 2018, , .		2
57	The Origins Space Telescope: mission concept overview. , 2018, , .		15
58	Time series observations with the mid-infrared instrument (MIRI) on JWST. , 2018, , .		4
59	HELIOS: AN OPEN-SOURCE, GPU-ACCELERATED RADIATIVE TRANSFER CODE FOR SELF-CONSISTENT EXOPLANETARY ATMOSPHERES. <i>Astronomical Journal</i> , 2017, 153, 56.	4.7	128
60	PandExo: A Community Tool for Transiting Exoplanet Science with JWST & HST. <i>Publications of the Astronomical Society of the Pacific</i> , 2017, 129, 064501.	3.1	230
61	SPITZER PHASE CURVE CONSTRAINTS FOR WASP-43b AT 3.6 AND 4.5 μm . <i>Astronomical Journal</i> , 2017, 153, 68.	4.7	157
62	HST PanCET Program: A Cloudy Atmosphere for the Promising JWST Target WASP-101b. <i>Astrophysical Journal Letters</i> , 2017, 835, L12.	8.3	56
63	Gemini/GMOS Transmission Spectral Survey: Complete Optical Transmission Spectrum of the Hot Jupiter WASP-4b. <i>Astronomical Journal</i> , 2017, 154, 95.	4.7	59
64	The γ Scuti pulsations of δ Pictoris as observed by ASTEP from Antarctica. <i>Astronomy and Astrophysics</i> , 2017, 608, L6.	5.1	17
65	Quantifying the Impact of Spectral Coverage on the Retrieval of Molecular Abundances from Exoplanet Transmission Spectra. <i>Publications of the Astronomical Society of the Pacific</i> , 2017, 129, 104402.	3.1	4
66	THE IMPACT OF NON-UNIFORM THERMAL STRUCTURE ON THE INTERPRETATION OF EXOPLANET EMISSION SPECTRA. <i>Astrophysical Journal</i> , 2016, 829, 52.	4.5	113
67	NO THERMAL INVERSION AND A SOLAR WATER ABUNDANCE FOR THE HOT JUPITER HD 209458B FROM HST/WFC3 SPECTROSCOPY. <i>Astronomical Journal</i> , 2016, 152, 203.	4.7	144
68	REPEATABILITY AND ACCURACY OF EXOPLANET ECLIPSE DEPTHS MEASURED WITH POST-CRYOGENIC SPITZER. <i>Astronomical Journal</i> , 2016, 152, 44.	4.7	102
69	Transiting Exoplanet Studies and Community Targets for JWST's Early Release Science Program. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 094401.	3.1	98
70	A SEARCH FOR WATER IN THE ATMOSPHERE OF HAT-P-26b USING LDSS-3C. <i>Astrophysical Journal</i> , 2016, 817, 141.	4.5	86
71	QUANTIFYING AND PREDICTING THE PRESENCE OF CLOUDS IN EXOPLANET ATMOSPHERES. <i>Astrophysical Journal Letters</i> , 2016, 817, L16.	8.3	132
72	A DETECTION OF WATER IN THE TRANSMISSION SPECTRUM OF THE HOT JUPITER WASP-12b AND IMPLICATIONS FOR ITS ATMOSPHERIC COMPOSITION. <i>Astrophysical Journal</i> , 2015, 814, 66.	4.5	212

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73	THE ATMOSPHERIC CIRCULATION OF THE HOT JUPITER WASP-43b: COMPARING THREE-DIMENSIONAL MODELS TO SPECTROPHOTOMETRIC DATA. <i>Astrophysical Journal</i> , 2015, 801, 86.	4.5	116
74	Characterizing Transiting Planet Atmospheres through 2025. <i>Publications of the Astronomical Society of the Pacific</i> , 2015, 127, 311-327.	3.1	121
75	TRANSMISSION SPECTROSCOPY OF THE HOT JUPITER WASP-12b FROM 0.7 TO 5 μ m. <i>Astronomical Journal</i> , 2014, 147, 161.	4.7	154
76	Least Asymmetry Centering Method and Comparisons. <i>Publications of the Astronomical Society of the Pacific</i> , 2014, 126, 1092-1101.	3.1	14
77	NEW ANALYSIS INDICATES NO THERMAL INVERSION IN THE ATMOSPHERE OF HD 209458b. <i>Astrophysical Journal</i> , 2014, 796, 66.	4.5	120
78	<i>SPITZER</i> OBSERVATIONS OF THE THERMAL EMISSION FROM WASP-43b. <i>Astrophysical Journal</i> , 2014, 781, 116.	4.5	91
79	DECIPHERING THE ATMOSPHERIC COMPOSITION OF WASP-12b: A COMPREHENSIVE ANALYSIS OF ITS DAYSIDE EMISSION. <i>Astrophysical Journal</i> , 2014, 791, 36.	4.5	128
80	Clouds in the atmosphere of the super-Earth exoplanet GJ 1214b. <i>Nature</i> , 2014, 505, 69-72.	27.8	688
81	A <i>HUBBLE SPACE TELESCOPE</i> SEARCH FOR A SUB-EARTH-SIZED EXOPLANET IN THE GJ 436 SYSTEM. <i>Astrophysical Journal</i> , 2014, 796, 32.	4.5	37
82	Thermal structure of an exoplanet atmosphere from phase-resolved emission spectroscopy. <i>Science</i> , 2014, 346, 838-841.	12.6	266
83	A PRECISE WATER ABUNDANCE MEASUREMENT FOR THE HOT JUPITER WASP-43b. <i>Astrophysical Journal Letters</i> , 2014, 793, L27.	8.3	297
84	WASP-8b: CHARACTERIZATION OF A COOL AND ECCENTRIC EXOPLANET WITH <i>SPITZER</i> . <i>Astrophysical Journal</i> , 2013, 768, 42.	4.5	76
85	THERMAL EMISSION OF WASP-14b REVEALED WITH THREE <i>SPITZER</i> ECLIPSES. <i>Astrophysical Journal</i> , 2013, 779, 5.	4.5	61
86	TRANSIT AND ECLIPSE ANALYSES OF THE EXOPLANET HD 149026b USING BLISS MAPPING. <i>Astrophysical Journal</i> , 2012, 754, 136.	4.5	153
87	TWO NEARBY SUB-EARTH-SIZED EXOPLANET CANDIDATES IN THE GJ 436 SYSTEM. <i>Astrophysical Journal</i> , 2012, 755, 9.	4.5	56
88	CT Density Changes with Rapid Onset Acute, Severe, Focal Cerebral Ischemia in Monkeys. <i>Translational Stroke Research</i> , 2012, 3, 369-374.	4.2	6
89	<i>SPITZER</i> SECONDARY ECLIPSES OF WASP-18b. <i>Astrophysical Journal</i> , 2011, 742, 35.	4.5	85
90	ON THE ORBIT OF EXOPLANET WASP-12b. <i>Astrophysical Journal</i> , 2011, 727, 125.	4.5	124

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91	A high C/O ratio and weak thermal inversion in the atmosphere of exoplanet WASP-12b. <i>Nature</i> , 2011, 469, 64-67.	27.8	274
92	<i>SPITZER</i> IRAC SECONDARY ECLIPSE PHOTOMETRY OF THE TRANSITING EXTRASOLAR PLANET HAT-P-1b. <i>Astrophysical Journal</i> , 2010, 708, 498-504.	4.5	73
93	Possible thermochemical disequilibrium in the atmosphere of the exoplanet GJ 436b. <i>Nature</i> , 2010, 464, 1161-1164.	27.8	242
94	Spectroscopic Determination of Radius Changes of Cepheid Variable Stars. <i>Publications of the Astronomical Society of the Pacific</i> , 2007, 119, 398-406.	3.1	12
95	A new method to correct for host star variability in multi-epoch observations of exoplanet transmission spectra. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	4.4	1