David K Sing

List of Publications by Year
in descending order

105	9,578	36303	39675
papers	citations	51 h-index	94 g-index

109	109	109	3054
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A continuum from clear to cloudy hot-Jupiter exoplanets without primordial water depletion. Nature, 2016, 529, 59-62.	27.8	714
2	A giant comet-like cloud of hydrogen escaping the warm Neptune-mass exoplanet GJ 436b. Nature, 2015, 522, 459-461.	27.8	383
3	Hubble Space Telescope transmission spectroscopy of the exoplanet HDâ€ƒ189733b: high-altitude atmospheric haze in the optical and near-ultraviolet with STIS. Monthly Notices of the Royal Astronomical Society, 2011, 416, 1443-1455.	4.4	335
4	The prevalence of dust on the exoplanet HD 189733b from Hubble and Spitzer observations. Monthly Notices of the Royal Astronomical Society, 2013, 432, 2917-2944.	4.4	334
5	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
6	Evaporation of the planet HDâ€‰189733b observed in HÂI Lyman-Î±. Astronomy and Astrophysics, 2010, 514, A72.	5.1	281
7	Stellar limb-darkening coefficients for CoRot and Kepler. Astronomy and Astrophysics, 2010, 510, A21.	5.1	258
8	Helium in the eroding atmosphere of an exoplanet. Nature, 2018, 557, 68-70.	27.8	239
9	Temporal variations in the evaporating atmosphere of the exoplanet HDâ€‰189733b. Astronomy and Astrophysics, 2012, 543, L4.	5.1	205
10	An ultrahot gas-giant exoplanet with a stratosphere. Nature, 2017, 548, 58-61.	27.8	192
11	DETECTION OF H ₂ O AND EVIDENCE FOR TiO/VO IN AN ULTRA-HOT EXOPLANET ATMOSPHERE. Astrophysical Journal Letters, 2016, 822, L4.	8.3	181
12	A CONSISTENT RETRIEVAL ANALYSIS OF 10 HOT JUPITERS OBSERVED IN TRANSMISSION. Astrophysical Journal, 2017, 834, 50.	4.5	180
13	HAT-P-26b: A Neptune-mass exoplanet with a well-constrained heavy element abundance. Science, 2017, 356, 628-631.	12.6	175
14	HST hot-Jupiter transmission spectral survey: detection of potassium in WASP-31b along with a cloud deck and Rayleigh scattering. Monthly Notices of the Royal Astronomical Society, 2015, 446, 2428-2443.	4.4	172
15	HST hot-Jupiter transmission spectral survey: evidence for aerosols and lack of TiO in the atmosphere of WASP-12b. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2956-2973.	4.4	168
16	An HST optical-to-near-IR transmission spectrum of the hot Jupiter WASP-19b: detection of atmospheric water and likely absence of TiO. Monthly Notices of the Royal Astronomical Society, 2013, 434, 3252-3274.	4.4	167
17	Temperature-pressure profile of the hot Jupiter HD 189733b from HST sodium observations: detection of upper atmospheric heating. Monthly Notices of the Royal Astronomical Society, 2012, 422, 2477-2488.	4.4	164
18	Spectrally resolved helium absorption from the extended atmosphere of a warm Neptune-mass exoplanet. Science, 2018, 362, 1384-1387.	12.6	152

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19	Hubble Space Telescope hot Jupiter transmission spectral survey: a detection of Na and strong optical absorption in HAT-P-1b. Monthly Notices of the Royal Astronomical Society, 2014, 437, 46-66.	4.4	151
20	Hubble Space TelescopeSTIS Optical Transit Transmission Spectra of the Hot Jupiter HD 209458b. Astrophysical Journal, 2008, 686, 658-666.	4.5	148
21	The Complete Transmission Spectrum of WASP-39b with a Precise Water Constraint. Astronomical Journal, 2018, 155, 29.	4.7	142
22	Transmission spectral properties of clouds for hot Jupiter exoplanets. Astronomy and Astrophysics, 2015, 573, A122.	5.1	142
23	THE DEEP BLUE COLOR OF HD 189733b: ALBEDO MEASUREMENTS WITH HUBBLE SPACE TELESCOPE /SPACE TELESCOPE IMAGING SPECTROGRAPH AT VISIBLE WAVELENGTHS. Astrophysical Journal Letters, 2013, 772, L16.	8.3	138
24	THE ATMOSPHERIC CIRCULATION OF A NINE-HOT-JUPITER SAMPLE: PROBING CIRCULATION AND CHEMISTRY OVER A WIDE PHASE SPACE. Astrophysical Journal, 2016, 821, 9.	4.5	134
25	HST hot-Jupiter transmission spectral survey: haze in the atmosphere of WASP-6b. Monthly Notices of the Royal Astronomical Society, 2015, 447, 463-478.	4.4	129
26	The signature of hot hydrogen in the atmosphere of the extrasolar planet HD 209458b. Nature, 2007, 445, 511-514.	27.8	128
27	Hubble PanCET: an extended upper atmosphere of neutral hydrogen around the warm Neptune GJ 3470b. Astronomy and Astrophysics, 2018, 620, A147.	5.1	128
28	Hint of a transiting extended atmosphere on 55 Cancri b. Astronomy and Astrophysics, 2012, 547, A18.	5.1	126
29	Probing the haze in the atmosphere of HD 189733b with Hubble Space Telescope/WFC3 transmission spectroscopy. Monthly Notices of the Royal Astronomical Society, 2012, 422, 753-760.	4.4	124
30	An absolute sodium abundance for a cloud-free â€˜hot Saturnâ€™ exoplanet. Nature, 2018, 557, 526-529.	27.8	114
31	The Hubble Space Telescope PanCET Program: Exospheric Mg ii and Fe ii in the Near-ultraviolet Transmission Spectrum of WASP-121b Using Jitter Decorrelation. Astronomical Journal, 2019, 158, 91.	4.7	112
32	Detection of Feâ€‰i in the atmosphere of the ultra-hot Jupiter WASP-121b, and a new likelihood-based approach for Doppler-resolved spectroscopy. Monthly Notices of the Royal Astronomical Society, 2020, 493, 2215-2228.	4.4	112
33	GTC OSIRIS transiting exoplanet atmospheric survey: detection of sodium in XO-2b from differential long-slit spectroscopy. Monthly Notices of the Royal Astronomical Society, 2012, 426, 1663-1670.	4.4	111
34	Atmospheric escape from HDâ€‰189733b observed in Hâ€‰I Lyman-Î±: detailed analysis of HST/STIS September 2011 observations. Astronomy and Astrophysics, 2013, 551, A63.	5.1	110
35	Gran Telescopio Canarias OSIRIS transiting exoplanet atmospheric survey: detection of potassium in XO-2b from narrowband spectrophotometry. Astronomy and Astrophysics, 2011, 527, A73.	5.1	108
36	An Optical Transmission Spectrum for the Ultra-hot Jupiter WASP-121b Measured with the Hubble Space Telescope. Astronomical Journal, 2018, 156, 283.	4.7	106

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37	VLT FORS2 COMPARATIVE TRANSMISSION SPECTROSCOPY: DETECTION OF Na IN THE ATMOSPHERE OF WASP-39b FROM THE GROUND. Astrophysical Journal, 2016, 832, 191.	4.5	105
38	HST hot Jupiter transmission spectral survey: detection of water in HAT-P-1b from WFC3 near-IR spatial scan observations. Monthly Notices of the Royal Astronomical Society, 2013, 435, 3481-3493.	4.4	103
39	Magnesium in the atmosphere of the planet HDâ€‰209458â€‰b: observations of the thermosphere-exosphere transition region. Astronomy and Astrophysics, 2013, 560, A54.	5.1	103
40	A GROUND-BASED OPTICAL TRANSMISSION SPECTRUM OF WASP-6b. Astrophysical Journal, 2013, 778, 184.	4.5	100
41	The Transiting Exoplanet Community Early Release Science Program for JWST. Publications of the Astronomical Society of the Pacific, 2018, 130, 114402.	3.1	100
42	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
43	High-resolution confirmation of an extended helium atmosphere around WASP-107b. Astronomy and Astrophysics, 2019, 623, A58.	5.1	93
44	A library of ATMO forward model transmission spectra for hot Jupiter exoplanets. Monthly Notices of the Royal Astronomical Society, 2018, 474, 5158-5185.	4.4	86
45	MARGINALIZING INSTRUMENT SYSTEMATICS IN HST WFC3 TRANSIT LIGHT CURVES. Astrophysical Journal, 2016, 819, 10.	4.5	80
46	HST HOT-JUPITER TRANSMISSION SPECTRAL SURVEY: CLEAR SKIES FOR COOL SATURN WASP-39b. Astrophysical Journal, 2016, 827, 19.	4.5	73
47	Statistical Characterization of Hot Jupiter Atmospheres Using Spitzerâ€™s Secondary Eclipses. Astronomical Journal, 2020, 159, 137.	4.7	72
48	VLT/FORS2 comparative transmission spectroscopy II: Confirmation of a cloud deck and Rayleigh scattering in WASP-31b, but no potassium?. Monthly Notices of the Royal Astronomical Society, 2017, 467, 4591-4605.	4.4	71
49	DAY-SIDE z â€²-BAND EMISSION AND ECCENTRICITY OF WASP-12b. Astrophysical Journal Letters, 2010, 716, L36-L40.	8.3	66
50	The Very Low Albedo of WASP-12b from Spectral Eclipse Observations with Hubble. Astrophysical Journal Letters, 2017, 847, L2.	8.3	63
51	An emission spectrum for WASP-121b measured across the 0.8â€“1.1â€‰Î¼m wavelength range using the Hubble Space Telescope. Monthly Notices of the Royal Astronomical Society, 2019, 488, 2222-2234.	4.4	61
52	Non-detection of TiO and VO in the atmosphere of WASP-121b using high-resolution spectroscopy. Astronomy and Astrophysics, 2020, 636, A117.	5.1	59
53	HST PanCET Program: A Cloudy Atmosphere for the Promising JWST Target WASP-101b. Astrophysical Journal Letters, 2017, 835, L12.	8.3	56
54	Observable Signatures of Wind-driven Chemistry with a Fully Consistent Three-dimensional Radiative Hydrodynamics Model of HD 209458b. Astrophysical Journal Letters, 2018, 855, L31.	8.3	56

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55	Hubble PanCET: an isothermal day-side atmosphere for the bloated gas-giant HAT-P-32Ab. Monthly Notices of the Royal Astronomical Society, 2018, 474, 1705-1717.	4.4	55
56	The 3D Thermal, Dynamical, and Chemical Structure of the Atmosphere of HD 189733b: Implications of Wind-driven Chemistry for the Emission Phase Curve. Astrophysical Journal, 2018, 869, 28.	4.5	47
57	Confirmation of water emission in the dayside spectrum of the ultrahot Jupiter WASP-121b. Monthly Notices of the Royal Astronomical Society, 2020, 496, 1638-1644.	4.4	46
58	Exonephology: transmission spectra from a 3D simulated cloudy atmosphere of HD 209458b. Monthly Notices of the Royal Astronomical Society, 2018, 481, 194-205.	4.4	45
59	A New Window into Planet Formation and Migration: Refractory-to-Volatile Elemental Ratios in Ultra-hot Jupiters. Astrophysical Journal, 2021, 914, 12.	4.5	43
60	A unique hot Jupiter spectral sequence with evidence for compositional diversity. Nature Astronomy, 2021, 5, 1224-1232.	10.1	40
61	Overcast on Osiris: 3D radiative-hydrodynamical simulations of a cloudy hot Jupiter using the parametrized, phase-equilibrium cloud formation code EddySed. Monthly Notices of the Royal Astronomical Society, 2019, 488, 1332-1355.	4.4	39
62	A Hubble PanCET Study of HAT-P-11b: A Cloudy Neptune with a Low Atmospheric Metallicity. Astronomical Journal, 2019, 158, 244.	4.7	37
63	A library of self-consistent simulated exoplanet atmospheres. Monthly Notices of the Royal Astronomical Society, 2020, 498, 4680-4704.	4.4	36
64	Into the UV: A Precise Transmission Spectrum of HAT-P-41b Using Hubbleâ€™s WFC3/UVIS G280 Grism. Astronomical Journal, 2020, 159, 204.	4.7	36
65	UV Exoplanet Transmission Spectral Features as Probes of Metals and Rainout. Astrophysical Journal Letters, 2020, 898, L14.	8.3	36
66	An inventory of atomic species in the atmosphere of WASP-121b using UVES high-resolution spectroscopy. Monthly Notices of the Royal Astronomical Society, 2021, 506, 3853-3871.	4.4	35
67	The Hubble PanCET program: an extensive search for metallic ions in the exosphere of GJ 436 b. Astronomy and Astrophysics, 2019, 629, A47.	5.1	34
68	Fully scalable forward model grid of exoplanet transmission spectra. Monthly Notices of the Royal Astronomical Society, 2019, 482, 4503-4513.	4.4	33
69	The HST PanCET Program: Hints of Na i and Evidence of a Cloudy Atmosphere for the Inflated Hot Jupiter WASP-52b. Astronomical Journal, 2018, 156, 298.	4.7	30
70	Detection of Na, K, and H2O in the hazy atmosphere of WASP-6b. Monthly Notices of the Royal Astronomical Society, 2020, 494, 5449-5472.	4.4	30
71	WASP-52b. The effect of star-spot correction on atmospheric retrievals. Monthly Notices of the Royal Astronomical Society, 2020, 491, 5361-5375.	4.4	30
72	Abundance measurements of H2O and carbon-bearing species in the atmosphere of WASP-127b confirm its supersolar metallicity. Monthly Notices of the Royal Astronomical Society, 2020, 500, 4042-4064.	4.4	28

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73	The carbon-to-oxygen ratio: implications for the spectra of hydrogen-dominated exoplanet atmospheres. Monthly Notices of the Royal Astronomical Society, 2019, 486, 1123-1137.	4.4	26
74	The Hubble Space Telescope PanCET Program: An Optical to Infrared Transmission Spectrum of HAT-P-32Ab. Astronomical Journal, 2020, 160, 51.	4.7	26
75	Relative abundance constraints from high-resolution optical transmission spectroscopy of WASP-121b, and a fast model-filtering technique for accelerating retrievals. Monthly Notices of the Royal Astronomical Society, 2022, 512, 4618-4638.	4.4	26
76	Diurnal variations in the stratosphere of the ultrahot giant exoplanet WASP-121b. Nature Astronomy, 2022, 6, 471-479.	10.1	26
77	Signatures of strong magnetization and a metal-poor atmosphere for a Neptune-sized exoplanet. Nature Astronomy, 2022, 6, 141-153.	10.1	26
78	Gemini/GMOS optical transmission spectroscopy of WASP-121b: signs of variability in an ultra-hot Jupiter?. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4787-4801.	4.4	25
79	Into the UV: The Atmosphere of the Hot Jupiter HAT-P-41b Revealed. Astrophysical Journal Letters, 2020, 902, L19.	8.3	25
80	Revisiting the potassium feature of WASP-31b at high resolution. Monthly Notices of the Royal Astronomical Society, 2019, 482, 606-615.	4.4	24
81	TESS Observations of the WASP-121 b Phase Curve. Astronomical Journal, 2021, 161, 131.	4.7	23
82	The Hubble PanCET Program: Transit and Eclipse Spectroscopy of the Strongly Irradiated Giant Exoplanet WASP-76b. Astronomical Journal, 2021, 162, 108.	4.7	23
83	Transmission Spectroscopy of WASP-79b from 0.6 to 5.0 Î¼m. Astronomical Journal, 2020, 159, 5.	4.7	22
84	Analysis of a JWST NIRSpec Lab Time Series: Characterizing Systematics, Recovering Exoplanet Transit Spectroscopy, and Constraining a Noise Floor. Astrophysical Journal Letters, 2022, 928, L7.	8.3	22
85	Optical to Near-infrared Transmission Spectrum of the Warm Sub-Saturn HAT-P-12b. Astronomical Journal, 2020, 159, 234.	4.7	21
86	HST PanCET Program: A Complete Near-UV to Infrared Transmission Spectrum for the Hot Jupiter WASP-79b. Astronomical Journal, 2021, 162, 138.	4.7	21
87	UV absorption by silicate cloud precursors in ultra-hot Jupiter WASP-178b. Nature, 2022, 604, 49-52.	27.8	21
88	Ground-based transmission spectroscopy with FORS2: A featureless optical transmission spectrum and detection of H2O for the ultra-hot Jupiter WASP-103b. Monthly Notices of the Royal Astronomical Society, 2020, 497, 5155-5170.	4.4	20
89	Evidence of a Clear Atmosphere for WASP-62b: The Only Known Transiting Gas Giant in the JWST Continuous Viewing Zone. Astrophysical Journal Letters, 2021, 906, L10.	8.3	20
90	Evidence that the Hot Jupiter WASP-77 A b Formed Beyond Its Parent Protoplanetary Diskâ€™s H2O Ice Line. Astronomical Journal, 2022, 163, 159.	4.7	20

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91	The impact of mixing treatments on cloud modelling in 3D simulations of hot Jupiters. Monthly Notices of the Royal Astronomical Society, 2021, 506, 4500-4515.	4.4	19
92	Detection of Ionized Calcium in the Atmosphere of the Ultra-hot Jupiter WASP-76b. Astrophysical Journal Letters, 2021, 919, L15.	8.3	18
93	The Hubble PanCET Program: A Metal-rich Atmosphere for the Inflated Hot Jupiter HAT-P-41b. Astronomical Journal, 2021, 161, 51.	4.7	16
94	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
95	Solar-to-supersolar sodium and oxygen absolute abundances for a â€˜hot Saturnâ€™ orbiting a metal-rich star. Monthly Notices of the Royal Astronomical Society, 2022, 515, 3037-3058.	4.4	15
96	GRAVITY K-band spectroscopy of HD 206893 B. Astronomy and Astrophysics, 2021, 652, A57.	5.1	12
97	Observational Techniques with Transiting Exoplanetary Atmospheres. Astrophysics and Space Science Library, 2018, , 3-48.	2.7	11
98	A comprehensive analysis of WASP-17bâ€™s transmission spectrum from space-based observations. Monthly Notices of the Royal Astronomical Society, 2022, 512, 4185-4209.	4.4	11
99	The Hubble PanCET program: long-term chromospheric evolution and flaring activity of the M dwarf host GJ 3470. Astronomy and Astrophysics, 2021, 650, A73.	5.1	8
100	HST PanCET program: non-detection of atmospheric escape in the warm Saturn-sized planet WASP-29 b. Astronomy and Astrophysics, 2021, 649, A40.	5.1	7
101	Ground-based Transmission Spectroscopy with VLT FORS2: Evidence for Faculae and Clouds in the Optical Spectrum of the Warm Saturn WASP-110b. Astronomical Journal, 2021, 162, 88.	4.7	6
102	The Emission Spectrum of the Hot Jupiter WASP-79b from HST/WFC3. Astronomical Journal, 2022, 163, 7.	4.7	4
103	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
104	The Hubble PanCET program: Transit and Eclipse Spectroscopy of the Hot-Jupiter WASP-74b. Astronomical Journal, 2021, 162, 271.	4.7	3
105	The Hubble PanCET Program: Emission Spectrum of Hot Jupiter HAT-P-41b. Astronomical Journal, 2022, 163, 190.	4.7	1