J Davy Kirkpatrick

List of Publications by Year
in descending order

125 papers	19,460 citations	22153 59 h-index	16650 123 g-index
125 all docs	125 docs citations	125 times ranked	9034 citing authors

#	Article	IF	Citations
1	THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE): MISSION DESCRIPTION AND INITIAL ON-ORBIT PERFORMANCE. Astronomical Journal, 2010, 140, 1868-1881.	4.7	5,751
2	Dwarfs Cooler than â€œMâ€: The Definition of Spectral Type â€œLâ€•Using Discoveries from the 2 Micron Allâ€Sky Survey (2MASS). Astrophysical Journal, 1999, 519, 802-833.	4.5	803
3	Astrometry and Photometry for Cool Dwarfs and Brown Dwarfs. Astronomical Journal, 2002, 124, 1170-1189.	4.7	522
4	67 Additional L Dwarfs Discovered by the Two Micron All Sky Survey. Astronomical Journal, 2000, 120, 447-472.	4.7	497
5	New Spectral Types L and T. Annual Review of Astronomy and Astrophysics, 2005, 43, 195-245.	24.3	435
6	INITIAL PERFORMANCE OF THENEOWISEREACTIVATION MISSION. Astrophysical Journal, 2014, 792, 30.	4.5	426
7	New Neighbors from 2MASS: Activity and Kinematics at the Bottom of the Main Sequence. Astronomical Journal, 2000, 120, 1085-1099.	4.7	413
8	A Unified Nearâ€Infrared Spectral Classification Scheme for T Dwarfs. Astrophysical Journal, 2006, 637, 1067-1093.	4.5	377
9	The Spectra of T Dwarfs. I. Nearâ€Infrared Data and Spectral Classification. Astrophysical Journal, 2002, 564, 421-451.	4.5	364
10	Binarity in Brown Dwarfs: T Dwarf Binaries Discovered with theHubble Space TelescopeWide Field Planetary Camera 2. Astrophysical Journal, 2003, 586, 512-526.	4.5	355
11	Preliminary Parallaxes of 40 L and T Dwarfs from the US Naval Observatory Infrared Astrometry Program. Astronomical Journal, 2004, 127, 2948-2968.	4.7	353
12	Meeting the Cool Neighbors. V. A 2MASS-Selected Sample of Ultracool Dwarfs. Astronomical Journal, 2003, 126, 2421-2448.	4.7	334
13	THE FIRST HUNDRED BROWN DWARFS DISCOVERED BY THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE). Astrophysical Journal, Supplement Series, 2011, 197, 19.	7.7	317
14	THE DISCOVERY OF Y DWARFS USING DATA FROM THEWIDE-FIELD INFRARED SURVEY EXPLORER(WISE). Astrophysical Journal, 2011, 743, 50.	4.5	303
15	FURTHER DEFINING SPECTRAL TYPE â€œYâ€•AND EXPLORING THE LOW-MASS END OF THE FIELD BROWN DWARF MASS FUNCTION. Astrophysical Journal, 2012, 753, 156.	4.5	276
16	The NIRSPEC Brown Dwarf Spectroscopic Survey. I. Lowâ€Resolution Nearâ€Infrared Spectra. Astrophysical Journal, 2003, 596, 561-586.	4.5	271
17	Meeting the Cool Neighbors. IX. The Luminosity Function of M7-L8 Ultracool Dwarfs in the Field. Astronomical Journal, 2007, 133, 439-467.	4.7	262
18	The 2MASS Wide-Field T Dwarf Search. III. Seven New T Dwarfs and Other Cool Dwarf Discoveries. Astronomical Journal, 2004, 127, 2856-2870.	4.7	255

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19	YOUNG L DWARFS IDENTIFIED IN THE FIELD: A PRELIMINARY LOW-GRAVITY, OPTICAL SPECTRAL SEQUENCE FROM L0 TO L5. Astronomical Journal, 2009, 137, 3345-3357.	4.7	238
20	DISCOVERIES FROM A NEAR-INFRARED PROPER MOTION SURVEY USING MULTI-EPOCH TWO MICRON ALL-SKY SURVEY DATA. Astrophysical Journal, Supplement Series, 2010, 190, 100-146.	7.7	228
21	A T8.5 BROWN DWARF MEMBER OF THE Î¾ URSAE MAJORIS SYSTEM. Astronomical Journal, 2013, 145, 84.	4.7	211
22	SpeX SPECTROSCOPY OF UNRESOLVED VERY LOW MASS BINARIES. I. IDENTIFICATION OF 17 CANDIDATE BINARIES STRADDLING THE L DWARF/T DWARF TRANSITION. Astrophysical Journal, 2010, 710, 1142-1169.	4.5	209
23	Infrared Parallaxes for Methane T Dwarfs. Astronomical Journal, 2003, 126, 975-992.	4.7	204
24	MEETING THE COOL NEIGHBORS. X. ULTRACOOL DWARFS FROM THE 2MASS ALL-SKY DATA RELEASE. Astronomical Journal, 2008, 136, 1290-1311.	4.7	202
25	Discovery of a Brown Dwarf Companion to Gliese 570ABC: A 2MASS T Dwarf Significantly Cooler than Gliese 229B. Astrophysical Journal, 2000, 531, L57-L60.	4.5	191
26	A Search for L Dwarf Binary Systems. Astronomical Journal, 2001, 121, 489-502.	4.7	190
27	Discovery of Four Field Methane (T-Type) Dwarfs with the Two Micron All-Sky Survey. Astrophysical Journal, 1999, 522, L65-L68.	4.5	181
28	Hubble Space Telescope NICMOS Observations of T Dwarfs: Brown Dwarf Multiplicity and New Probes of the L/T Transition. Astrophysical Journal, Supplement Series, 2006, 166, 585-612.	7.7	179
29	A Sample of Very Young Field L Dwarfs and Implications for the Brown Dwarf â€œLithium Testâ€•at Early Ages. Astrophysical Journal, 2008, 689, 1295-1326.	4.5	176
30	Hubble Space TelescopeObservations of Binary Very Low Mass Stars and Brown Dwarfs. Astronomical Journal, 2003, 125, 3302-3310.	4.7	163
31	Near-Infrared Spectral Classification of Late M and L Dwarfs. Astronomical Journal, 2001, 121, 1710-1721.	4.7	159
32	ASpitzerInfrared Spectrograph Spectral Sequence of M, L, and T Dwarfs. Astrophysical Journal, 2006, 648, 614-628.	4.5	156
33	Four Nearby L Dwarfs. Astronomical Journal, 2000, 119, 369-377.	4.7	152
34	A Method for Determining the Physical Properties of the Coldest Known Brown Dwarfs. Astrophysical Journal, 2006, 639, 1095-1113.	4.5	148
35	The Spectra of T Dwarfs. II. Red Optical Data. Astrophysical Journal, 2003, 594, 510-524.	4.5	146
36	The CatWISE2020 Catalog. Astrophysical Journal, Supplement Series, 2021, 253, 8.	7.7	131

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37	L Dwarfs Found in Sloan Digital Sky Survey Commissioning Imaging Data. Astronomical Journal, 2000, 119, 928-935.	4.7	126
38	Discovery of 11 New T Dwarfs in the Two Micron All Sky Survey, Including a Possible L/T Transition Binary. Astronomical Journal, 2007, 134, 1162-1182.	4.7	124
39	Discovery of Two Nearby Peculiar L Dwarfs from the 2MASS Properâ€Motion Survey: Young or Metalâ€Rich?. Astrophysical Journal, 2008, 686, 528-541.	4.5	122
40	THE ALLWISE MOTION SURVEY AND THE QUEST FOR COLD SUBDWARFS. Astrophysical Journal, 2014, 783, 122.	4.5	118
41	Clouds, Gravity, and Metallicity in Blue L Dwarfs: The Case of 2MASS J11263991â^'5003550. Astrophysical Journal, 2008, 674, 451-465.	4.5	117
42	A Crossâ€Match of 2MASS and SDSS: Newly Found L and T Dwarfs and an Estimate of the Space Density of T Dwarfs. Astrophysical Journal, 2008, 676, 1281-1306.	4.5	109
43	A STUDY OF THE DIVERSE T DWARF POPULATION REVEALED BY WISE. Astrophysical Journal, Supplement Series, 2013, 205, 6.	7.7	107
44	A Flaring L5 Dwarf: The Nature of HÎ± Emission in Very Low Mass (Sub)Stellar Objects. Astronomical Journal, 2003, 125, 343-347.	4.7	100
45	The 2MASS Wide-Field T Dwarf Search. IV. Hunting Out T Dwarfs with Methane Imaging. Astronomical Journal, 2005, 130, 2326-2346.	4.7	97
46	Keck Imaging of Binary L Dwarfs. Astrophysical Journal, 1999, 526, L25-L28.	4.5	91
47	The 2Mass Wide-Field T Dwarf Search. I. Discovery of a Bright T Dwarf within 10 Parsecs of the Sun. Astronomical Journal, 2003, 125, 850-857.	4.7	88
48	Optical Spectroscopy of 2MASS Colorâ€selected Ultracool Subdwarfs. Astrophysical Journal, 2007, 657, 494-510.	4.5	88
49	The Field Substellar Mass Function Based on the Full-sky 20 pc Census of 525 L, T, and Y Dwarfs. Astrophysical Journal, Supplement Series, 2021, 253, 7.	7.7	87
50	THE FIRST ULTRA-COOL BROWN DWARF DISCOVERED BY THE WIDE-FIELD INFRARED SURVEY EXPLORER. Astrophysical Journal, 2011, 726, 30.	4.5	85
51	The Coolest Isolated M Dwarf and Other 2MASS Discoveries. Astrophysical Journal, 1997, 476, 311-318.	4.5	85
52	Preliminary Trigonometric Parallaxes of 184 Late-T and Y Dwarfs and an Analysis of the Field Substellar Mass Function into the â€œPlanetaryâ€•Mass Regime. Astrophysical Journal, Supplement Series, 2019, 240, 19.	7.7	83
53	WISEY DWARFS AS PROBES OF THE BROWN DWARF-EXOPLANET CONNECTION. Astrophysical Journal, 2014, 783, 68.	4.5	82
54	Discovery of a T Dwarf Binary with the Largest KnownJâ€Band Flux Reversal. Astrophysical Journal, 2008, 685, 1183-1192.	4.5	79

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55	THE LUMINOSITIES OF THE COLDEST BROWN DWARFS. Astrophysical Journal, 2014, 796, 39.	4.5	76
56	DISCOVERY OF THE YOUNG L DWARF WISE J174102.78â€“464225.5. Astronomical Journal, 2014, 147, 34.	4.7	75
57	THE ALLWISE MOTION SURVEY, PART 2. Astrophysical Journal, Supplement Series, 2016, 224, 36.	7.7	70
58	WISE BROWN DWARF BINARIES: THE DISCOVERY OF A T5+T5 AND A T8.5+T9 SYSTEM. Astronomical Journal, 2011, 142, 57.	4.7	67
59	HUBBLE SPACE TELESCOPESPECTROSCOPY OF BROWN DWARFS DISCOVERED WITH THE WIDE-FIELD INFRARED SURVEY EXPLORER. Astrophysical Journal, 2015, 804, 92.	4.5	67
60	The NIRSPEC Brown Dwarf Spectroscopic Survey. II. Highâ€ResolutionJâ€Band Spectra of M, L, and T Dwarfs. Astrophysical Journal, 2007, 658, 1217-1235.	4.5	64
61	The CatWISE Preliminary Catalog: Motions from WISE and NEOWISE Data. Astrophysical Journal, Supplement Series, 2020, 247, 69.	7.7	63
62	THE COLDEST BROWN DWARF (OR FREE-FLOATING PLANET)?: THE Y DWARF WISE 1828+2650. Astrophysical Journal, 2013, 764, 101.	4.5	59
63	Nearby M, L, and T Dwarfs Discovered by theWide-field Infrared Survey Explorer(WISE). Publications of the Astronomical Society of the Pacific, 2013, 125, 809-837.	3.1	59
64	WISEA J114724.10-204021.3: A FREE-FLOATING PLANETARY MASS MEMBER OF THE TW HYA ASSOCIATION. Astrophysical Journal Letters, 2016, 822, L1.	8.3	59
65	SDSS J042348.57-041403.5AB: A Brown Dwarf Binary Straddling the L/T Transition. Astrophysical Journal, 2005, 634, L177-L180.	4.5	56
66	WISEP J004701.06+680352.1: AN INTERMEDIATE SURFACE GRAVITY, DUSTY BROWN DWARF IN THE AB DOR MOVING GROUP. Astrophysical Journal, 2015, 799, 203.	4.5	54
67	THE EXEMPLAR T8 SUBDWARF COMPANION OF WOLF 1130. Astrophysical Journal, 2013, 777, 36.	4.5	53
68	A SURVEY FOR HÎ± EMISSION FROM LATE L DWARFS AND T DWARFS*. Astrophysical Journal, 2016, 826, 73.	4.5	53
69	Discovery of a High Proper Motion L Dwarf Binary: 2MASS J15200224â^’4422419AB. Astrophysical Journal, 2007, 658, 557-568.	4.5	52
70	WISE J163940.83â€“684738.6: A Y DWARF IDENTIFIED BY METHANE IMAGING. Astrophysical Journal, 2012, 759, 60.	4.5	52
71	The 2MASS Wide-Field T Dwarf Search. II. Discovery of Three T Dwarfs in the Southern Hemisphere. Astronomical Journal, 2003, 126, 2487-2494.	4.7	50
72	Discovery of the Coolest Extreme Subdwarf. Astrophysical Journal, 2006, 645, 1485-1497.	4.5	49

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73	2MASS J09393548-2448279: The Coldest and Least Luminous Brown Dwarf Binary Known?. Astrophysical Journal, 2008, 689, L53-L56.	4.5	49
74	Surface Gravities for 228 M, L, and T Dwarfs in the NIRSPEC Brown Dwarf Spectroscopic Survey^{â^—}. Astrophysical Journal, 2017, 838, 73.	4.5	44
75	THREE NEW COOL BROWN DWARFS DISCOVERED WITH THEWIDE-FIELD INFRARED SURVEY EXPLORER(WISE) AND AN IMPROVED SPECTRUM OF THE Y0 DWARF WISE J041022.71+150248.4. Astronomical Journal, 2014, 147, 113.	4.7	43
76	A TARGETED SEARCH FOR PECULIARLY RED L AND T DWARFS IN SDSS, 2MASS, ANDWISE: DISCOVERY OF A POSSIBLE L7 MEMBER OF THE TW HYDRAE ASSOCIATION. Astronomical Journal, 2015, 150, 182.	4.7	43
77	A PROPER MOTION SURVEY USING THE FIRST SKY PASS OF NEOWISE-REACTIVATION DATA. Astrophysical Journal, 2016, 817, 112.	4.5	43
78	THE FIRST DETECTION OF PHOTOMETRIC VARIABILITY IN A Y DWARF: WISE J140518.39+553421.3. Astrophysical Journal, 2016, 823, 152.	4.5	42
79	A CROSS-MATCH OF 2MASS AND SDSS. II. PECULIAR L DWARFS, UNRESOLVED BINARIES, AND THE SPACE DENSITY OF T DWARF SECONDARIES. Astrophysical Journal, 2011, 732, 56.	4.5	39
80	NEW M, L, AND T DWARF COMPANIONS TO NEARBY STARS FROM THEWIDE-FIELD INFRARED SURVEY EXPLORER. Astrophysical Journal, 2012, 760, 152.	4.5	37
81	DISCOVERY OF THE Y1 DWARF WISE J064723.23â€“623235.5. Astrophysical Journal, 2013, 776, 128.	4.5	37
82	RADIAL VELOCITY VARIABILITY OF FIELD BROWN DWARFS. Astrophysical Journal, 2015, 808, 12.	4.5	36
83	A 2MASS/AllWISE Search for Extremely Red L Dwarfs: The Discovery of Several Likely L Type Members of Î² Pic, AB Dor, Tuc-Hor, Argus, and the Hyades. Astronomical Journal, 2017, 153, 196.	4.7	35
84	Radii of 88 M Subdwarfs and Updated Radius Relations for Low-metallicity M-dwarf Stars. Astronomical Journal, 2019, 157, 63.	4.7	35
85	FIRE SPECTROSCOPY OF FIVE LATE-TYPE T DWARFS DISCOVERED WITH THE WIDE-FIELD INFRARED SURVEY EXPLORER. Astrophysical Journal, 2011, 735, 116.	4.5	34
86	SPITZERPHOTOMETRY OFWISE-SELECTED BROWN DWARF AND HYPER-LUMINOUS INFRARED GALAXY CANDIDATES. Astronomical Journal, 2012, 144, 148.	4.7	29
87	NEOWISE-R OBSERVATION OF THE COOLEST KNOWN BROWN DWARF. Astronomical Journal, 2014, 148, 82.	4.7	29
88	Spitzer Follow-up of Extremely Cold Brown Dwarfs Discovered by the Backyard Worlds: Planet 9 Citizen Science Project. Astrophysical Journal, 2020, 899, 123.	4.5	28
89	Expanding the Y Dwarf Census with Spitzer Follow-up of the Coldest CatWISE Solar Neighborhood Discoveries. Astrophysical Journal, 2020, 889, 74.	4.5	26
90	Y Dwarf Trigonometric Parallaxes from the Spitzer Space Telescope. Astrophysical Journal, 2018, 867, 109.	4.5	25

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91	WISEA J041451.67â€“585456.7 and WISEA J181006.18â€“101000.5: The First Extreme T-type Subdwarfs?. Astrophysical Journal, 2020, 898, 77.	4.5	24
92	DISCOVERY OF FOUR HIGH PROPER MOTION L DWARFS, INCLUDING A 10 pc L DWARF AT THE L/T TRANSITION[,]. Astrophysical Journal, 2013, 776, 126.	4.5	23
93	Accurate Coordinates and 2MASS Cross Identifications for (Almost) All Gliese Catalog Star. Publications of the Astronomical Society of the Pacific, 2010, 122, 885-897.	3.1	22
94	RESOLVED SPECTROSCOPY OF A BROWN DWARF BINARY AT THE T DWARF/Y DWARF TRANSITION. Astrophysical Journal, 2012, 745, 26.	4.5	20
95	Wolf 1130: A Nearby Triple System Containing a Cool, Ultramassive White Dwarf. Astrophysical Journal, 2018, 854, 145.	4.5	20
96	SEARCHING FOR BINARY Y DWARFS WITH THE GEMINI MULTI-CONJUGATE ADAPTIVE OPTICS SYSTEM (GeMS). Astrophysical Journal, 2016, 819, 17.	4.5	19
97	New Y and T Dwarfs from WISE Identified by Methane Imaging. Astrophysical Journal, Supplement Series, 2018, 236, 28.	7.7	19
98	WISEA J083011.95+283716.0: A Missing Link Planetary-mass Object. Astrophysical Journal, 2020, 895, 145.	4.5	18
99	THE COLLAPSE OF THE WIEN TAIL IN THE COLDEST BROWN DWARF? HUBBLE SPACE TELESCOPE NEAR-INFRARED PHOTOMETRY OF WISE J085510.83â€“071442.5. Astrophysical Journal Letters, 2016, 823, L35.	8.3	17
100	CWISEP J193518.59â€“154620.3: An Extremely Cold Brown Dwarf in the Solar Neighborhood Discovered with CatWISE. Astrophysical Journal, 2019, 881, 17.	4.5	17
101	New Candidate Extreme T Subdwarfs from the Backyard Worlds: Planet 9 Citizen Science Project. Astrophysical Journal, 2021, 915, 120.	4.5	17
102	Spitzer Light Curves of the Young, Planetary-mass TW Hya Members 2MASS J11193254â€“1137466AB and WISEA J114724.10â€“204021.3. Astronomical Journal, 2018, 155, 238.	4.7	15
103	The 2MASS Wide-Field T Dwarf Search. V. Discovery of a T Dwarf via Methane Imaging. Astronomical Journal, 2005, 130, 2347-2351.	4.7	14
104	Improved Infrared Photometry and a Preliminary Parallax Measurement for the Extremely Cold Brown Dwarf CWISEP J144606.62-231717.8. Astrophysical Journal Letters, 2020, 888, L19.	8.3	11
105	The Enigmatic Brown Dwarf WISEA J153429.75-104303.3 (a.k.a. â€œThe Accidentâ€). Astrophysical Journal Letters, 2021, 915, L6.	8.3	11
106	Spectroscopic Follow-up of Discoveries from the NEOWISE Proper Motion Survey. Astronomical Journal, 2019, 158, 182.	4.7	11
107	An Improved Near-infrared Spectrum of the Archetype Y Dwarf WISEP J182831.08+265037.8. Astrophysical Journal, 2021, 920, 20.	4.5	9
108	Ross 19B: An Extremely Cold Companion Discovered via the Backyard Worlds: Planet 9 Citizen Science Project. Astrophysical Journal, 2021, 921, 140.	4.5	9

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109	A Wide Planetary Mass Companion Discovered through the Citizen Science Project Backyard Worlds: Planet 9. Astrophysical Journal, 2021, 923, 48.	4.5	9
110	Parallaxes and infrared photometry of three Y0 dwarfs. Monthly Notices of the Royal Astronomical Society, 2017, 468, 3764-3774.	4.4	7
111	Enhancement of the Spitzer Infrared Array Camera (IRAC) distortion correction for parallax measurements. Proceedings of SPIE, 2014, , .	0.8	5
112	CWISE J014611.20â€“050850.0AB: The Widest Known Brown Dwarf Binary in the Field. Astrophysical Journal Letters, 2022, 926, L12.	8.3	5
113	Discovery of 34 Low-mass Comoving Systems Using NOIRLab Source Catalog DR2. Astronomical Journal, 2022, 164, 3.	4.7	5
114	Discovery of a Possible Early-T Thick-disk Subdwarf from the AllWISE2 Motion Survey*. Astronomical Journal, 2018, 155, 87.	4.7	4
115	Backyard Worlds: Planet 9 Discovery of an Unusual Low-mass Companion to an M Dwarf at 80 pc. Research Notes of the AAS, 2021, 5, 18.	0.7	4
116	What Is a Planet?. Science, 2001, 291, 1487b-1488.	12.6	4
117	Discovery of CWISE J052306.42â^'015355.4, an Extreme T Subdwarf Candidate. Astronomical Journal, 2022, 163, 47.	4.7	4
118	Discovery of 16 New Members of the Solar Neighborhood Using Proper Motions from CatWISE2020. Astronomical Journal, 2022, 163, 116.	4.7	4
119	The NIRSPEC Brown Dwarf Spectroscopic Survey. Symposium - International Astronomical Union, 2003, 211, 385-388.	0.1	3
120	2MASS Data Mining and the M, L, and T Dwarf Archives. Symposium - International Astronomical Union, 2003, 211, 189-196.	0.1	3
121	Dwarf Archives: A Compendium of M, L, and T Dwarf Data. , 2009, , .		3
122	Discovery of a Low-mass Comoving System Using NOIRLab Source Catalog DR2. Research Notes of the AAS, 2021, 5, 196.	0.7	2
123	A Secure W2 Detection of WD 0806-661B from CatWISE. Research Notes of the AAS, 2018, 2, 140.	0.7	2
124	The Next Generation Sky Survey and the Quest for Cooler Brown Dwarfs. Symposium - International Astronomical Union, 2003, 211, 497-504.	0.1	1
125	WDJ220838.73+454434.04: a White Dwarf Companion in the AR Lacertae System. Research Notes of the AAS, 2022, 6, 127.	0.7	1