

Lisa Kaltenegger

List of Publications by Year in descending order

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139
papers

9,791
citations

47006

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142
docs citations

142
times ranked

6146
citing authors

#	ARTICLE	IF	CITATIONS
1	H ₂ -dominated Atmosphere as an Indicator of Second-generation Rocky White Dwarf Exoplanets. <i>Astrophysical Journal Letters</i> , 2022, 925, L10.	8.3	7
2	Follow the water: finding water, snow, and clouds on terrestrial exoplanets with photometry and machine learning. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2022, 513, L72-L77.	3.3	6
3	Biomarkers Atmospheric, Evolution Over Geological Time. , 2021, , 1-1.		0
4	Finding Signs of Life in Transits: High-resolution Transmission Spectra of Earth-like Planets around FGKM Host Stars. <i>Astrophysical Journal Letters</i> , 2021, 909, L2.	8.3	8
5	The Mega-MUSCLES Spectral Energy Distribution of TRAPPIST-1. <i>Astrophysical Journal</i> , 2021, 911, 18.	4.5	22
6	Around Which Stars Can TESS Detect Earth-like Planets? The Revised TESS Habitable Zone Catalog. <i>Astronomical Journal</i> , 2021, 161, 233.	4.7	3
7	Color classification of Earth-like planets with machine learning. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 6106-6116.	4.4	4
8	Differentiating modern and prebiotic Earth scenarios for TRAPPIST-1e: high-resolution transmission spectra and predictions for JWST. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 3562-3578.	4.4	24
9	Past, present and future stars that can see Earth as a transiting exoplanet. <i>Nature</i> , 2021, 594, 505-507.	27.8	15
10	The TESS Objects of Interest Catalog from the TESS Prime Mission. <i>Astrophysical Journal, Supplement Series</i> , 2021, 254, 39.	7.7	190
11	The TESS Mission Target Selection Procedure. <i>Publications of the Astronomical Society of the Pacific</i> , 2021, 133, 095002.	3.1	5
12	Color Catalogue of Life in Ice: Surface Biosignatures on Icy Worlds. <i>Astrobiology</i> , 2021, , .	3.0	4
13	Impact of space weather on climate and habitability of terrestrial-type exoplanets. <i>International Journal of Astrobiology</i> , 2020, 19, 136-194.	1.6	125
14	Which stars can see Earth as a transiting exoplanet?. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 499, L111-L115.	3.3	7
15	A giant planet candidate transiting a white dwarf. <i>Nature</i> , 2020, 585, 363-367.	27.8	111
16	High-resolution Spectra and Biosignatures of Earth-like Planets Transiting White Dwarfs. <i>Astrophysical Journal Letters</i> , 2020, 894, L6.	8.3	14
17	How surfaces shape the climate of habitable exoplanets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 1-11.	4.4	14
18	High-resolution Transmission Spectra of Earth Through Geological Time. <i>Astrophysical Journal Letters</i> , 2020, 892, L17.	8.3	15

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19	The First Habitable-zone Earth-sized Planet from TESS. I. Validation of the TOI-700 System. <i>Astronomical Journal</i> , 2020, 160, 116.	4.7	67
20	The High-energy Radiation Environment around a 10 Gyr M Dwarf: Habitable at Last?. <i>Astronomical Journal</i> , 2020, 160, 237.	4.7	39
21	High-resolution Spectra of Earth-like Planets Orbiting Red Giant Host Stars. <i>Astronomical Journal</i> , 2020, 160, 225.	4.7	1
22	Finding Signs of Life on Transiting Earthlike Planets: High-resolution Transmission Spectra of Earth through Time around FGKM Host Stars. <i>Astrophysical Journal</i> , 2020, 904, 10.	4.5	7
23	High-resolution Spectra for a Wide Range of Habitable Zone Planets around Sun-like Stars. <i>Astrophysical Journal Letters</i> , 2020, 898, L42.	8.3	7
24	The White Dwarf Opportunity: Robust Detections of Molecules in Earth-like Exoplanet Atmospheres with the James Webb Space Telescope. <i>Astrophysical Journal Letters</i> , 2020, 901, L1.	8.3	28
25	Planetary system around the nearby M dwarf GJ 357 including a transiting, hot, Earth-sized planet optimal for atmospheric characterization. <i>Astronomy and Astrophysics</i> , 2019, 628, A39.	5.1	97
26	Biofluorescent Worlds – II. Biological fluorescence induced by stellar UV flares, a new temporal biosignature. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 4530-4545.	4.4	9
27	Expanding the Timeline for Earth’s Photosynthetic Red Edge Biosignature. <i>Astrophysical Journal Letters</i> , 2019, 879, L20.	8.3	13
28	The L 98-59 System: Three Transiting, Terrestrial-size Planets Orbiting a Nearby M Dwarf. <i>Astronomical Journal</i> , 2019, 158, 32.	4.7	93
29	Atmospheres and UV Environments of Earth-like Planets throughout Post-main-sequence Evolution. <i>Astrophysical Journal</i> , 2019, 875, 99.	4.5	10
30	TESS Discovery of an Ultra-short-period Planet around the Nearby M Dwarf LHS 3844. <i>Astrophysical Journal Letters</i> , 2019, 871, L24.	8.3	108
31	TESS Habitable Zone Star Catalog. <i>Astrophysical Journal Letters</i> , 2019, 874, L8.	8.3	16
32	Lessons from early Earth: UV surface radiation should not limit the habitability of active M star systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5598-5603.	4.4	28
33	3D simulations of planet trapping at disc’s cavity boundaries. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 2666-2680.	4.4	20
34	The Habitability of GJ 357D: Possible Climate and Observability. <i>Astrophysical Journal Letters</i> , 2019, 883, L40.	8.3	4
35	Climate sensitivity to ozone and its relevance on the habitability of Earth-like planets. <i>Icarus</i> , 2019, 321, 608-618.	2.5	15
36	The Origins Space Telescope. , 2019, , .		2

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37	Spectra of Earth-like Planets through Geological Evolution around FGKM Stars. <i>Astrophysical Journal</i> , 2018, 854, 19.	4.5	61
38	TESS Discovery of a Transiting Super-Earth in the pi Mensae System. <i>Astrophysical Journal Letters</i> , 2018, 868, L39.	8.3	148
39	Climate Sensitivity to Carbon Dioxide and the Moist Greenhouse Threshold of Earth-like Planets under an Increasing Solar Forcing. <i>Astrophysical Journal</i> , 2018, 869, 129.	4.5	8
40	A Catalog of Spectra, Albedos, and Colors of Solar System Bodies for Exoplanet Comparison. <i>Astrobiology</i> , 2018, 18, 1559-1573.	3.0	25
41	The Vegetation Red Edge Biosignature Through Time on Earth and Exoplanets. <i>Astrobiology</i> , 2018, 18, 1123-1136.	3.0	21
42	Biofluorescent worlds: global biological fluorescence as a biosignature. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 2487-2496.	4.4	10
43	The Origins Space Telescope. <i>Nature Astronomy</i> , 2018, 2, 596-599.	10.1	41
44	UV Surface Environments and Atmospheres of Earth-like Planets Orbiting White Dwarfs. <i>Astrophysical Journal</i> , 2018, 862, 69.	4.5	17
45	A Methane Extension to the Classical Habitable Zone. <i>Astrophysical Journal</i> , 2018, 858, 72.	4.5	39
46	Overview of the Origins Space telescope: science drivers to observatory requirements. , 2018, , .		2
47	A Volcanic Hydrogen Habitable Zone. <i>Astrophysical Journal Letters</i> , 2017, 837, L4.	8.3	88
48	How to Characterize Habitable Worlds and Signs of Life. <i>Annual Review of Astronomy and Astrophysics</i> , 2017, 55, 433-485.	24.3	170
49	UV surface habitability of the TRAPPIST-1 system. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 469, L26-L30.	3.3	78
50	HABITABLE ZONES OF POST-MAIN SEQUENCE STARS. <i>Astrophysical Journal</i> , 2016, 823, 6.	4.5	68
51	A CATALOG OF KEPLER HABITABLE ZONE EXOPLANET CANDIDATES. <i>Astrophysical Journal</i> , 2016, 830, 1.	4.5	133
52	The Transiting Exoplanet Survey Satellite. <i>Proceedings of SPIE</i> , 2016, , .	0.8	56
53	THE MUSCLES TREASURY SURVEY. I. MOTIVATION AND OVERVIEW*. <i>Astrophysical Journal</i> , 2016, 820, 89.	4.5	298
54	EFFECT OF UV RADIATION ON THE SPECTRAL FINGERPRINTS OF EARTH-LIKE PLANETS ORBITING M STARS. <i>Astrophysical Journal</i> , 2015, 809, 57.	4.5	154

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55	Quiescent and flaring Lyman- α radiation of host stars and effects on exoplanets. Proceedings of the International Astronomical Union, 2015, 11, 391-396.	0.0	0
56	Refraction in planetary atmospheres: improved analytical expressions and comparison with a new ray-tracing algorithm. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1268-1283.	4.4	21
57	Surface biosignatures of exo-Earths: Remote detection of extraterrestrial life. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3886-3891.	7.1	46
58	A NEARBY M STAR WITH THREE TRANSITING SUPER-EARTHS DISCOVERED BY K2. Astrophysical Journal, 2015, 804, 10.	4.5	149
59	The effect of Lyman α radiation on mini-Neptune atmospheres around M stars: application to GJ 436b. Monthly Notices of the Royal Astronomical Society, 2015, 446, 345-353.	4.4	81
60	UV SURFACE ENVIRONMENT OF EARTH-LIKE PLANETS ORBITING FGKM STARS THROUGH GEOLOGICAL EVOLUTION. Astrophysical Journal, 2015, 806, 137.	4.5	105
61	Biomarkers, Spectral. , 2015, , 297-306.		0
62	Habitability, Effects of Stellar Irradiation. , 2015, , 1037-1038.		0
63	Clouds. , 2015, , 485-487.		0
64	Habitable Planet, Characterization. , 2015, , 1039-1048.		1
65	Biomarkers Atmospheric, Evolution Over Geological Time. , 2015, , 294-294.		0
66	Fizeau interferometric imaging of Io volcanism with LBT/LMIRcam. Proceedings of SPIE, 2014, , .	0.8	9
67	Transiting Exoplanet Survey Satellite. Journal of Astronomical Telescopes, Instruments, and Systems, 2014, 1, 014003.	1.8	2,300
68	THE HABITABLE ZONES OF PRE-MAIN-SEQUENCE STARS. Astrophysical Journal Letters, 2014, 797, L25.	8.3	142
69	IMPACT OF ATMOSPHERIC REFRACTION: HOW DEEPLY CAN WE PROBE EXO-EARTH'S ATMOSPHERES DURING PRIMARY ECLIPSE OBSERVATIONS?. Astrophysical Journal, 2014, 791, 7.	4.5	99
70	EXPLORING ATMOSPHERES OF HOT MINI-NEPTUNES AND EXTRASOLAR GIANT PLANETS ORBITING DIFFERENT STARS WITH APPLICATION TO HD 97658b, WASP-12b, CoRoT-2b, XO-1b, AND HD 189733b. Astrophysical Journal, 2014, 780, 166.	4.5	83
71	Transiting Exoplanet Survey Satellite (TESS). Proceedings of SPIE, 2014, , .	0.8	566
72	Habitability, Effects of Stellar Irradiation. , 2014, , 1-2.		0

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73	Clouds. , 2014, , 1-4.		0
74	Habitable Planet, Characterization. , 2014, , 1-12.		0
75	Planetary Atmospheres and Chemical Markers for Extraterrestrial Life. , 2013, , 145-167.		3
76	Kepler-62: A Five-Planet System with Planets of 1.4 and 1.6 Earth Radii in the Habitable Zone. Science, 2013, 340, 587-590.	12.6	213
77	Colors of Extreme Exo-Earth Environments. Astrobiology, 2013, 13, 47-56.	3.0	53
78	WATER-PLANETS IN THE HABITABLE ZONE: ATMOSPHERIC CHEMISTRY, OBSERVABLE FEATURES, AND THE CASE OF KEPLER-62 <i>e</i> AND -62 <i>f</i> . Astrophysical Journal Letters, 2013, 775, L47.	8.3	46
79	CALCULATING THE HABITABLE ZONE OF BINARY STAR SYSTEMS. I. S-TYPE BINARIES. Astrophysical Journal, 2013, 777, 165.	4.5	79
80	Atmospheric mass-loss and evolution of short-period exoplanets: the examples of CoRoT-7b and Kepler-10b. Monthly Notices of the Royal Astronomical Society, 2013, 433, 3239-3245.	4.4	25
81	CALCULATING THE HABITABLE ZONE OF BINARY STAR SYSTEMS. II. P-TYPE BINARIES. Astrophysical Journal, 2013, 777, 166.	4.5	97
82	Spectral Fingerprints of Earth-like Planets Around FGK Stars. Astrobiology, 2013, 13, 251-269.	3.0	121
83	TRANSMISSION SPECTRUM OF EARTH AS A TRANSITING EXOPLANET FROM THE ULTRAVIOLET TO THE NEAR-INFRARED. Astrophysical Journal Letters, 2013, 772, L31.	8.3	70
84	Rocky exoplanet characterization and atmospheres. International Journal of Astrobiology, 2012, 11, 297-307.	1.6	10
85	Kepler-22b: A 2.4 EARTH-RADIUS PLANET IN THE HABITABLE ZONE OF A SUN-LIKE STAR. Astrophysical Journal, 2012, 745, 120.	4.5	218
86	High precision astrometry mission for the detection and characterization of nearby habitable planetary systems with the Nearby Earth Astrometric Telescope (NEAT). Experimental Astronomy, 2012, 34, 385-413.	3.7	73
87	EChO. Experimental Astronomy, 2012, 34, 311-353.	3.7	98
88	The Exoplanet Characterization Observatory (EChO): performance model <i>EclipseSim</i> and applications. Proceedings of SPIE, 2012, , .	0.8	1
89	A 1D microphysical cloud model for Earth, and Earth-like exoplanets: Liquid water and water ice clouds in the convective troposphere. Icarus, 2012, 221, 603-616.	2.5	56
90	Energy Sources for, and Detectability of, Life on Extrasolar Planets. Cellular Origin and Life in Extreme Habitats, 2012, , 835-857.	0.3	2

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91	Habitable Zone, Effect of Tidal Locking. , 2011, , 721-722.		0
92	Biomarkers of Habitable Worlds - Super-Earths and Earths. Proceedings of the International Astronomical Union, 2011, 7, 302-312.	0.0	0
93	COMPOSITIONS OF HOT SUPER-EARTH ATMOSPHERES: EXPLORING <i>KEPLER</i> CANDIDATES. Astrophysical Journal Letters, 2011, 742, L19.	8.3	104
94	MODEL SPECTRA OF THE FIRST POTENTIALLY HABITABLE SUPER-EARTHâ€”Gl581d. Astrophysical Journal, 2011, 733, 35.	4.5	51
95	EXPLORING THE HABITABLE ZONE FOR <i>KEPLER</i> PLANETARY CANDIDATES. Astrophysical Journal Letters, 2011, 736, L25.	8.3	85
96	The science of EChO. Proceedings of the International Astronomical Union, 2010, 6, 359-370.	0.0	5
97	Super-Earths and life - a fascinating puzzle: Example GJ 581d. Proceedings of the International Astronomical Union, 2010, 6, 376-384.	0.0	0
98	DETECTING PLANETARY GEOCHEMICAL CYCLES ON EXOPLANETS: ATMOSPHERIC SIGNATURES AND THE CASE OF SO₂. Astrophysical Journal, 2010, 708, 1162-1167.	4.5	83
99	Target star catalogue for Darwin Nearby Stellar sample forÂaÂsearch for terrestrial planets. Astrophysics and Space Science, 2010, 326, 233-247.	1.4	22
100	Spectral Fingerprints of Habitability. EAS Publications Series, 2010, 41, 485-504.	0.3	7
101	DETECTING VOLCANISM ON EXTRASOLAR PLANETS. Astronomical Journal, 2010, 140, 1370-1380.	4.7	50
102	CHARACTERIZING HABITABLE EXOMOONS. Astrophysical Journal Letters, 2010, 712, L125-L130.	8.3	68
103	Dynamical Habitability of Planetary Systems. Astrobiology, 2010, 10, 33-43.	3.0	42
104	Co-Evolution of Atmospheres, Life, and Climate. Astrobiology, 2010, 10, 77-88.	3.0	45
105	Deciphering Spectral Fingerprints of Habitable Exoplanets. Astrobiology, 2010, 10, 89-102.	3.0	88
106	Geophysical and Atmospheric Evolution of Habitable Planets. Astrobiology, 2010, 10, 45-68.	3.0	47
107	Origin and Evolution of Life on Terrestrial Planets. Astrobiology, 2010, 10, 69-76.	3.0	62
108	The Far Future of Exoplanet Direct Characterization. Astrobiology, 2010, 10, 121-126.	3.0	70

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109	Stellar Aspects of Habitabilityâ€”Characterizing Target Stars for Terrestrial Planet-Finding Missions. <i>Astrobiology</i> , 2010, 10, 103-112.	3.0	16
110	A Roadmap for the Detection and Characterization of Other Earths. <i>Astrobiology</i> , 2010, 10, 113-119.	3.0	32
111	The Search for Worlds Like Our Own. <i>Astrobiology</i> , 2010, 10, 5-17.	3.0	16
112	Origin and Formation of Planetary Systems. <i>Astrobiology</i> , 2010, 10, 19-32.	3.0	46
113	Planetary targets in the search for extrasolar oxygenic photosynthesis. <i>Plant Ecology and Diversity</i> , 2009, 2, 207-219.	2.4	14
114	Darwinâ€”an experimental astronomy mission to search for extrasolar planets. <i>Experimental Astronomy</i> , 2009, 23, 435-461.	3.7	74
115	What makes a planet habitable?. <i>Astronomy and Astrophysics Review</i> , 2009, 17, 181-249.	25.5	281
116	Characterizing habitable extrasolar planets using spectral fingerprints. <i>Comptes Rendus - Palevol</i> , 2009, 8, 679-691.	0.2	6
117	<i>Darwin</i> â€”A Mission to Detect and Search for Life on Extrasolar Planets. <i>Astrobiology</i> , 2009, 9, 1-22.	3.0	112
118	Cryptic Photosynthesisâ€”Extrasolar Planetary Oxygen Without a Surface Biological Signature. <i>Astrobiology</i> , 2009, 9, 623-636.	3.0	58
119	TRANSITS OF EARTH-LIKE PLANETS. <i>Astrophysical Journal</i> , 2009, 698, 519-527.	4.5	275
120	Extended-time-scale creep measurement on Maraging cantilever blade springs. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008, 593, 597-607.	1.6	8
121	Session 22. Habitability of Super-Earths. <i>Astrobiology</i> , 2008, 8, 394-396.	3.0	3
122	Spectral characterization of Earth-like transiting exoplanets. , 2008, , .		2
123	Terrestrial exoplanets: diversity, habitability and characterization. <i>Physica Scripta</i> , 2008, T130, 014032.	2.5	19
124	Spectral Evolution of an Earthâ€”like Planet. <i>Astrophysical Journal</i> , 2007, 658, 598-616.	4.5	223
125	M Stars as Targets for Terrestrial Exoplanet Searches And Biosignature Detection. <i>Astrobiology</i> , 2007, 7, 85-166.	3.0	330
126	M Stars as Targets for Terrestrial Exoplanet Searches And Biosignature Detection. <i>Astrobiology</i> , 2007, 7, 85-166.	3.0	0

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127	Interferometric space missions for the search for terrestrial exoplanets: Requirements on the rejection ratio. <i>Astrophysics and Space Science</i> , 2006, 306, 147-158.	1.4	4
128	Direct imaging of Earth-like planets from space (TPF-C). , 2006, , .		5
129	Target star catalogue for Darwin: Nearby Habitable Star Systems. <i>Proceedings of the International Astronomical Union</i> , 2005, 1, 89-92.	0.0	5
130	Characteristics of proposed 3 and 4 telescope configurations for Darwin and TPF-I. <i>Proceedings of the International Astronomical Union</i> , 2005, 1, 255-258.	0.0	2
131	Atmospheric Biomarkers and their Evolution over Geological Timescales. <i>Proceedings of the International Astronomical Union</i> , 2005, 1, 259-264.	0.0	3
132	The Darwin mission: Search for extra-solar planets. <i>Advances in Space Research</i> , 2005, 36, 1114-1122.	2.6	49
133	Requirements of a nulling space interferometer for the search for extrasolar planets. <i>Advances in Space Research</i> , 2004, 34, 618-624.	2.6	4
134	Requirements on the stellar rejection for the Darwin Mission. , 2004, , .		8
135	The simulated detection of low-mass companions with GENIE. , 2004, , .		0
136	Inherent modulation: a fast chopping method for nulling interferometry. , 2003, , .		15
137	Mission Requirements: How to Search for Extrasolar Planets. , 0, , 51-77.		2
138	Biomarkers Set in Context. , 0, , 79-98.		18
139	High-resolution reflection spectra for Proxima b and Trappist-1e models for ELT observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	4.4	8