Edward W Schwieterman

List of Publications by Year
in descending order

41 papers	2,391 citations	257450 24 h-index	315739 38 g-index
44 all docs	44 docs citations	44 times ranked	1957 citing authors

#	Article	IF	Citations
1	Exoplanet Biosignatures: A Review of Remotely Detectable Signs of Life. Astrobiology, 2018, 18, 663-708.	3.0	328
2	The Pale Orange Dot: The Spectrum and Habitability of Hazy Archean Earth. Astrobiology, 2016, 16, 873-899.	3.0	229
3	Exoplanet Biosignatures: Understanding Oxygen as a Biosignature in the Context of Its Environment. Astrobiology, 2018, 18, 630-662.	3.0	194
4	ABIOTIC O₂LEVELS ON PLANETS AROUND F, G, K, AND M STARS: POSSIBLE FALSE POSITIVES FOR LIFE?. Astrophysical Journal, 2015, 812, 137.	4.5	173
5	Pale Orange Dots: The Impact of Organic Haze on the Habitability and Detectability of Earthlike Exoplanets. Astrophysical Journal, 2017, 836, 49.	4.5	122
6	The Habitability of Proxima Centauri b: Environmental States and Observational Discriminants. Astrobiology, 2018, 18, 133-189.	3.0	102
7	IDENTIFYING PLANETARY BIOSIGNATURE IMPOSTORS: SPECTRAL FEATURES OF CO AND O₄ RESULTING FROM ABIOTIC O₂/O₃ PRODUCTION. Astrophysical Journal Letters, 2016, 819, L13.	8.3	100
8	False Negatives for Remote Life Detection on Ocean-Bearing Planets: Lessons from the Early Earth. Astrobiology, 2017, 17, 287-297.	3.0	97
9	EPOXI: COMET 103P/HARTLEY 2 OBSERVATIONS FROM A WORLDWIDE CAMPAIGN. Astrophysical Journal Letters, 2011, 734, L1.	8.3	96
10	DETECTION OF OCEAN GLINT AND OZONE ABSORPTION USINGLCROSSEARTH OBSERVATIONS. Astrophysical Journal, 2014, 787, 171.	4.5	93
11	Exoplanet Biosignatures: Future Directions. Astrobiology, 2018, 18, 779-824.	3.0	85
12	DETECTING AND CONSTRAINING N₂ABUNDANCES IN PLANETARY ATMOSPHERES USING COLLISIONAL PAIRS. Astrophysical Journal, 2015, 810, 57.	4.5	73
13	Nonphotosynthetic Pigments as Potential Biosignatures. Astrobiology, 2015, 15, 341-361.	3.0	61
14	Exoplanet Biosignatures: At the Dawn of a New Era of Planetary Observations. Astrobiology, 2018, 18, 619-629.	3.0	54
15	Modeling pN₂ through Geological Time: Implications for Planetary Climates and Atmospheric Biosignatures. Astrobiology, 2016, 16, 949-963.	3.0	53
16	Detecting Ocean Glint on Exoplanets Using Multiphase Mapping. Astronomical Journal, 2018, 156, 301.	4.7	49
17	Photochemistry of Anoxic Abiotic Habitable Planet Atmospheres: Impact of New H₂O Cross Sections. Astrophysical Journal, 2020, 896, 148.	4.5	45
18	Extremophilic models for astrobiology: haloarchaeal survival strategies and pigments for remote sensing. Extremophiles, 2020, 24, 31-41.	2.3	42

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19	Atmospheric Seasonality as an Exoplanet Biosignature. Astrophysical Journal Letters, 2018, 858, L14.	8.3	40
20	Claimed Detection of PH₃ in the Clouds of Venus Is Consistent with Mesospheric SO₂. Astrophysical Journal Letters, 2021, 908, L44.	8.3	40
21	Early evolution of purple retinal pigments on Earth and implications for exoplanet biosignatures. International Journal of Astrobiology, 2021, 20, 241-250.	1.6	34
22	Sensitive probing of exoplanetary oxygen via mid-infrared collisional absorption. Nature Astronomy, 2020, 4, 372-376.	10.1	32
23	IS THE PALE BLUE DOT UNIQUE? OPTIMIZED PHOTOMETRIC BANDS FOR IDENTIFYING EARTH-LIKE EXOPLANETS. Astrophysical Journal, 2016, 817, 31.	4.5	31
24	A Limited Habitable Zone for Complex Life. Astrophysical Journal, 2019, 878, 19.	4.5	30
25	Rethinking CO Antibiosignatures in the Search for Life Beyond the Solar System. Astrophysical Journal, 2019, 874, 9.	4.5	23
26	THE INCREASING ROTATION PERIOD OF COMET 10P/TEMPEL 2. Astronomical Journal, 2011, 141, 2.	4.7	19
27	A QUARTER-CENTURY OF OBSERVATIONS OF COMET 10P/TEMPEL 2 AT LOWELL OBSERVATORY: CONTINUED SPIN-DOWN, COMA MORPHOLOGY, PRODUCTION RATES, AND NUMERICAL MODELING. Astronomical Journal, 2012, 144, 153.	4.7	19
28	Correlations Between Life-Detection Techniques and Implications for Sampling Site Selection in Planetary Analog Missions. Astrobiology, 2017, 17, 1009-1021.	3.0	17
29	L 98-59: A Benchmark System of Small Planets for Future Atmospheric Characterization. Astronomical Journal, 2021, 162, 169.	4.7	14
30	Giant Outer Transiting Exoplanet Mass (GOT â€˜EM) Survey. II. Discovery of a Failed Hot Jupiter on a 2.7 Yr, Highly Eccentric Orbit*. Astronomical Journal, 2021, 162, 154.	4.7	14
31	Giant Outer Transiting Exoplanet Mass (GOT â€˜EM) Survey. I. Confirmation of an Eccentric, Cool Jupiter with an Interior Earth-sized Planet Orbiting Kepler-1514*. Astronomical Journal, 2021, 161, 103.	4.7	12
32	Observational Constraints on the Great Filter. Astrobiology, 2020, 20, 572-579.	3.0	11
33	Synchronous in-field application of life-detection techniques in planetary analog missions. Planetary and Space Science, 2015, 106, 1-10.	1.7	10
34	Earthshine as an illumination source at the Moon. Icarus, 2019, 321, 841-856.	2.5	9
35	Disruption of a Planetary Nitrogen Cycle as Evidence of Extraterrestrial Agriculture. Astrophysical Journal Letters, 2022, 929, L28.	8.3	7
36	Earth: Atmospheric Evolution of a Habitable Planet. , 2018, , 2817-2853.		6

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37	Surface and Temporal Biosignatures. , 2018, , 3173-3201.		5
38	Earliest Photic Zone Niches Probed by Ancestral Microbial Rhodopsins. Molecular Biology and Evolution, 2022, 39, .	8.9	5
39	Searching for technosignatures in exoplanetary systems with current and future missions. Acta Astronautica, 2022, 198, 194-207.	3.2	5
40	Earth: Atmospheric Evolution of a Habitable Planet. , 2018, , 1-37.		4
41	Surface and Temporal Biosignatures. , 2018, , 1-29.		1