Charles H Lineweaver

List of Publications by Year
in descending order

91	3,028	172457	175258
papers	citations	29 h-index	52 g-index

98	98	98	2735
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Lonely Universe. Inference, 2022, 6, .	0.0	0
2	A Model Earth-sized Planet in the Habitable Zone of Î± Centauri A/B. Astrophysical Journal, 2022, 927, 134.	4.5	4
3	Understanding the Chances for Life. Inference, 2022, 7, .	0.0	0
4	Cancer progression as a sequence of atavistic reversions. BioEssays, 2021, 43, e2000305.	2.5	37
5	Are We Alone? An Interview with Dr. Norman Sleep. Astrobiology, 2020, 20, 563-571.	3.0	0
6	Comparison of the Atavistic Model of Cancer to Somatic Mutation Theory: Phylostratigraphic Analyses Support the Atavistic Model. , 2020, , 243-261.		4
7	The volatility trend of protosolar and terrestrial elemental abundances. Icarus, 2019, 328, 287-305.	2.5	21
8	Entropy Production and the Maximum Entropy of the Universe. Proceedings (mdpi), 2019, 46, .	0.2	1
9	The Biological Overview Effect: Our Place in Nature. Journal of Big History, 2019, 3, 109-122.	0.4	3
10	The elemental abundances (with uncertainties) of the most Earth-like planet. Icarus, 2018, 299, 460-474.	2.5	63
11	The Cosmic Evolution of Biochemistry. , 2018, , 75-87.		1
12	Global biogeography since Pangaea. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170716.	2.6	15
13	Solutions to the Cosmic Initial Entropy Problem without Equilibrium Initial Conditions. Entropy, 2017, 19, 411.	2.2	6
14	Ancestral gene regulatory networks drive cancer. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6160-6162.	7.1	46
15	Ancient genes establish stress-induced mutation as a hallmark of cancer. PLoS ONE, 2017, 12, e0176258.	2.5	33
16	Campaign 9 of theK2Mission: Observational Parameters, Scientific Drivers, and Community Involvement for a Simultaneous Space- and Ground-based Microlensing Survey. Publications of the Astronomical Society of the Pacific, 2016, 128, 124401.	3.1	79
17	The Case for a Gaian Bottleneck: The Biology of Habitability. Astrobiology, 2016, 16, 7-22.	3.0	71
18	An artificial Kepler dichotomy? Implications for the coplanarity of planetary systems. Proceedings of the International Astronomical Union, 2015, 11, 196-196.	0.0	0

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19	Using the inclinations of Kepler systems to prioritize new Titiusâ€“Bode-based exoplanet predictions. Monthly Notices of the Royal Astronomical Society, 2015, 448, 3608-3627.	4.4	37
20	Targeting cancer's weaknesses (not its strengths): Therapeutic strategies suggested by the atavistic model. BioEssays, 2014, 36, 827-835.	2.5	64
21	Where Do We Go from Here? Astrobiology Editorial Board Opinions. Astrobiology, 2014, 14, 629-644.	3.0	1
22	Beyond the Second Law: An Overview. Understanding Complex Systems, 2014, , 3-27.	0.6	4
23	Exoplanet predictions based on the generalized Titiusâ€“Bode relation. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1126-1138.	4.4	52
24	Information width: a way for the second law to increase complexity. , 2013, , 246-276.		5
25	What is complexity? Is it increasing?. , 2013, , 3-16.		10
26	A simple treatment of complexity: cosmological entropic boundary conditions on increasing complexity. , 2013, , 42-67.		4
27	Using complexity science to search for unity in the natural sciences. , 2013, , 68-79.		9
28	On the spontaneous generation of complexity in the universe. , 2013, , 80-112.		5
29	Emergent order in processes: the interplay of complexity, robustness, correlation, and hierarchy in the biosphere. , 2013, , 191-223.		3
30	Using the phase diagram of liquid water to search for life. Australian Journal of Earth Sciences, 2012, 59, 253-262.	1.0	7
31	The Habitability of Our Earth and Other Earths: Astrophysical, Geochemical, Geophysical, and Biological Limits on Planet Habitability. Annual Review of Earth and Planetary Sciences, 2012, 40, 597-623.	11.0	47
32	The Initial Low Gravitational Entropy of the Universe as the Origin of Design in Nature. Cellular Origin and Life in Extreme Habitats, 2012, , 3-16.	0.3	2
33	What Can Life on Earth Tell Us About Life in the Universe?. Cellular Origin and Life in Extreme Habitats, 2012, , 799-815.	0.3	4
34	Re-ionizing the universe without stars. Astrophysics and Space Science, 2011, 335, 345.	1.4	21
35	An Extensive Phase Space for the Potential Martian Biosphere. Astrobiology, 2011, 11, 1017-1033.	3.0	47
36	Spreading the power. Physics of Life Reviews, 2010, 7, 463-464.	2.8	3

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37	To What Extent Does Terrestrial Life â€œFollow The Waterâ€?. Astrobiology, 2010, 10, 349-361.	3.0	54
38	Dark Energy and the Entropy of the Observable Universe. , 2010, , .		1
39	A LARGER ESTIMATE OF THE ENTROPY OF THE UNIVERSE. Astrophysical Journal, 2010, 710, 1825-1834.	4.5	134
40	Signatures of a Shadow Biosphere. Astrobiology, 2009, 9, 241-249.	3.0	139
41	Paleontological Tests: Human-Like Intelligence Is Not a Convergent Feature of Evolution. Cellular Origin and Life in Extreme Habitats, 2009, , 353-368.	0.3	13
42	Life, gravity and the second law of thermodynamics. Physics of Life Reviews, 2008, 5, 225-242.	2.8	72
43	Dark-energy dynamics required to solve the cosmic coincidence. Physical Review D, 2008, 78, .	4.7	23
44	Increasingly Overlapping Magisteria of Science and Religion. , 2008, , 154-181.		0
45	A Comprehensive Comparison of the Sun to Other Stars: Searching for Selfâ€Selection Effects. Astrophysical Journal, 2008, 684, 691-706.	4.5	33
46	The Cosmic Coincidence as a Temporal Selection Effect Produced by the Age Distribution of Terrestrial Planets in the Universe. Astrophysical Journal, 2007, 671, 853-860.	4.5	17
47	The Metallicity of Stars with Close Companions. Astrophysical Journal, 2007, 669, 1220-1234.	4.5	28
48	How Dry is the Brown Dwarf Desert? Quantifying the Relative Number of Planets, Brown Dwarfs, and Stellar Companions around Nearby Sunâ€like Stars. Astrophysical Journal, 2006, 640, 1051-1062.	4.5	284
49	Misconceptions about the Big Bang. Scientific American, 2005, 292, 36-45.	1.0	39
50	Comparative CMBology: Putting Things Together. Symposium - International Astronomical Union, 2005, 201, 358-367.	0.1	0
51	Finding a Second Sample of Life on Earth. Astrobiology, 2005, 5, 154-163.	3.0	85
52	INFLATION AND THE COSMIC MICROWAVE BACKGROUND. , 2005, , .		4
53	Precambrian Surface Temperatures and Molecular Phylogeny. Symposium - International Astronomical Union, 2004, 213, 355-358.	0.1	1
54	How Common are Earths? How Common are Jupiters?. Symposium - International Astronomical Union, 2004, 213, 41-44.	0.1	1

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55	What can Rapid Terrestrial Biogenesis Tell Us about Life in the Universe?. Symposium - International Astronomical Union, 2004, 213, 259-262.	0.1	1
56	Expanding Confusion: Common Misconceptions of Cosmological Horizons and the Superluminal Expansion of the Universe. Publications of the Astronomical Society of Australia, 2004, 21, 97-109.	3.4	137
57	The Galactic Habitable Zone and the Age Distribution of Complex Life in the Milky Way. Science, 2004, 303, 59-62.	12.6	282
58	Testing the Cosmic Microwave Background Data for Systematic Effects. Astrophysical Journal, 2004, 603, 371-382.	4.5	3
59	The hyperthermophilic origin of life revisited. Biochemical Society Transactions, 2004, 32, 168-171.	3.4	83
60	Cosmic Thermobiology. , 2004, , 233-248.		2
61	Is the pre-WMAP CMB data self-consistent?. New Astronomy Reviews, 2003, 47, 901-905.	12.8	0
62	Solutions to the tethered galaxy problem in an expanding universe and the observation of receding blueshifted objects. American Journal of Physics, 2003, 71, 358-364.	0.7	25
63	On the Nonobservability of Recent Biogenesis. Astrobiology, 2003, 3, 241-243.	3.0	7
64	Black hole versus cosmological horizon entropy. Classical and Quantum Gravity, 2003, 20, 2753-2764.	4.0	49
65	What Fraction of Sunâ€like Stars Have Planets?. Astrophysical Journal, 2003, 598, 1350-1360.	4.5	77
66	The Observational Case for Jupiter Being a Typical Massive Planet. Astrobiology, 2002, 2, 325-334.	3.0	12
67	Does the Rapid Appearance of Life on Earth Suggest that Life Is Common in the Universe?. Astrobiology, 2002, 2, 293-304.	3.0	97
68	Black holes constrain varying constants. Nature, 2002, 418, 602-603.	27.8	56
69	Witnesses to the birth of the big bang. Physics World, 2001, 14, 42-42.	0.0	0
70	An Estimate of the Age Distribution of Terrestrial Planets in the Universe: Quantifying Metallicity as a Selection Effect. Icarus, 2001, 151, 307-313.	2.5	148
71	Applications of wavelets to the analysis of cosmic microwave background maps. Monthly Notices of the Royal Astronomical Society, 1999, 310, 823-834.	4.4	58
72	A Younger Age for the Universe. Science, 1999, 284, 1503-1507.	12.6	44

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73	Cosmology in a Nutshell + an Argument Against Î© Î› = 0 Based on the Inconsistency of the CMB and Supernovae Results. Globular Clusters - Guides To Galaxies, 1999, , 167-173.	0.1	0
74	What Can Cosmic Microwave Background Observations Already Say about Cosmological Parameters in Open and Criticalâ€Density Cold Dark Matter Models?. Astrophysical Journal, 1998, 496, 624-634.	4.5	59
75	The Cosmic Microwave Background and Observational Convergence in the Î©[TINF][CLC][ITAL]m[/ITAL][/CLC][/TINF]-Î©[TINF]Î›[/TINF] Plane. Astrophysical Journal, 1998, 505, L69-L73.	4.5	110
76	Cosmic Microwave Background Anisotropies from Scaling Seeds: Fit to Observational Data. Physical Review Letters, 1997, 79, 5198-5201.	7.8	20
77	Root Mean Square Anisotropy in theCOBEDMR Fourâ€Year Sky Maps. Astrophysical Journal, 1997, 475, 393-398.	4.5	59
78	Comments on the Comparison of the COBE DMR and Tenerife Data. Annals of the New York Academy of Sciences, 1995, 759, 676-679.	3.8	0
79	Life: the final frontier for complexity?. , 0, , 135-161.		7
80	The role of generative entrenchment and robustness in the evolution of complexity. , 0, , 308-331.		5
81	6 Cosmological and Biological Reproducibility: Limits on the Maximum Entropy Production Principle. , 0, , 67-77.		3
82	16 Temperature, Biogenesis, and Biospheric Self-Organization. , 0, , 207-221.		9
83	Evolution beyond Newton, Darwin, and entailing law: the origin of complexity in the evolving biosphere. , 0, , 162-190.		12
84	Directionality principles from cancer to cosmology. , 0, , 19-41.		6
85	Wrestling with biological complexity: from Darwin to Dawkins. , 0, , 279-307.		2
86	On the plurality of complexity- producing mechanisms. , 0, , 332-351.		2
87	Can we describe the evolution of the cosmic event horizon with the maximum entropy production principle?. , 0, , .		0
88	Baryon asymmetry as a stochastic result and implications for the time of baryogenesis. , 0, , .		0
89	An inflationary explanation to the universe's low initial gravitational entropy. , 0, , .		0
90	Emergent spatiotemporal complexity in field theory. , 0, , 113-132.		2

#	Article	IF	Citations
91	The inferential evolution of biological complexity: forgetting nature by learning to nurture. , 0, , 224-245.		1