

Manasvi Lingam

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

1,714
citations

257450

24
h-index

330143

37
g-index

81
all docs

81
docs citations

81
times ranked

1644
citing authors

#	ARTICLE	IF	CITATIONS
1	Atmospheric escape from the TRAPPIST-1 planets and implications for habitability. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 260-265.	7.1	159
2	Is Proxima Centauri b Habitable? A Study of Atmospheric Loss. Astrophysical Journal Letters, 2017, 837, L26.	8.3	143
3	The Dehydration of Water Worlds via Atmospheric Losses. Astrophysical Journal Letters, 2017, 847, L4.	8.3	64
4	Risks for Life on Habitable Planets from Superflares of Their Host Stars. Astrophysical Journal, 2017, 848, 41.	4.5	59
5	Plasmoid Instability in Forming Current Sheets. Astrophysical Journal, 2017, 850, 142.	4.5	58
6	Modeling Martian Atmospheric Losses over Time: Implications for Exoplanetary Climate Evolution and Habitability. Astrophysical Journal Letters, 2018, 859, L14.	8.3	51
7	Enhanced interplanetary panspermia in the TRAPPIST-1 system. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6689-6693.	7.1	44
8	Fast Radio Bursts from Extragalactic Light Sails. Astrophysical Journal Letters, 2017, 837, L23.	8.3	43
9	Multi-fluid systemsâ€™ Multi-Beltrami relaxed states and their implications. Physics of Plasmas, 2015, 22, .	1.9	42
10	Physical constraints on the likelihood of life on exoplanets. International Journal of Astrobiology, 2018, 17, 116-126.	1.6	40
11	Galactic Panspermia. Astrophysical Journal Letters, 2018, 868, L12.	8.3	40
12	Life in the Cosmos. , 2021, , .		40
13	Magnetohydrodynamic Turbulence in the Plasmoid-mediated Regime. Astrophysical Journal, 2018, 854, 103.	4.5	39
14	<i>Colloquium</i>: Physical constraints for the evolution of life on exoplanets. Reviews of Modern Physics, 2019, 91, .	45.6	39
15	Concomitant Hamiltonian and topological structures of extended magnetohydrodynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2400-2406.	2.1	38
16	Analytical families of two-component anisotropic polytropes and their relativistic extensions. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2014-2028.	4.4	34
17	Subsurface exolife. International Journal of Astrobiology, 2019, 18, 112-141.	1.6	33
18	Modelling astrophysical outflows via the unified dynamoâ€™reverse dynamo mechanism. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 449, L36-L40.	3.3	30

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19	Relative Likelihood of Success in the Search for Primitive versus Intelligent Extraterrestrial Life. <i>Astrobiology</i> , 2019, 19, 28-39.	3.0	30
20	The Propitious Role of Solar Energetic Particles in the Origin of Life. <i>Astrophysical Journal</i> , 2018, 853, 10.	4.5	29
21	Is Extraterrestrial Life Suppressed on Subsurface Ocean Worlds due to the Paucity of Bioessential Elements?. <i>Astronomical Journal</i> , 2018, 156, 151.	4.7	29
22	Atmospheric Escape From TOI-700 d: Venus versus Earth Analogs. <i>Astrophysical Journal Letters</i> , 2020, 896, L24.	8.3	28
23	Natural and artificial spectral edges in exoplanets. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 470, L82-L86.	3.3	27
24	Role of Planetary Obliquity in Regulating Atmospheric Escape: G-dwarf versus M-dwarf Earth-like Exoplanets. <i>Astrophysical Journal Letters</i> , 2019, 882, L16.	8.3	26
25	Is life most likely around Sun-like stars?. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 020-020.	5.4	25
26	Implications of Captured Interstellar Objects for Panspermia and Extraterrestrial Life. <i>Astronomical Journal</i> , 2018, 156, 193.	4.7	25
27	Photosynthesis on habitable planets around low-mass stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5924-5928.	4.4	24
28	Reduced Diversity of Life around Proxima Centauri and TRAPPIST-1. <i>Astrophysical Journal Letters</i> , 2017, 846, L21.	8.3	23
29	Dependence of Biological Activity on the Surface Water Fraction of Planets. <i>Astronomical Journal</i> , 2019, 157, 25.	4.7	23
30	Propulsion of Spacecraft to Relativistic Speeds Using Natural Astrophysical Sources. <i>Astrophysical Journal</i> , 2020, 894, 36.	4.5	23
31	EXTENDED MHD TURBULENCE AND ITS APPLICATIONS TO THE SOLAR WIND. <i>Astrophysical Journal</i> , 2016, 829, 87.	4.5	22
32	Derivation of the Hall and extended magnetohydrodynamics brackets. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	22
33	Active Galactic Nuclei: Boon or Bane for Biota?. <i>Astrophysical Journal</i> , 2019, 877, 62.	4.5	22
34	Implications of Tides for Life on Exoplanets. <i>Astrobiology</i> , 2018, 18, 967-982.	3.0	21
35	Interstellar Travel and Galactic Colonization: Insights from Percolation Theory and the Yule Process. <i>Astrobiology</i> , 2016, 16, 418-426.	3.0	18
36	Role of stellar physics in regulating the critical steps for life. <i>International Journal of Astrobiology</i> , 2019, 18, 527-546.	1.6	16

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37	The Case for Technosignatures: Why They May Be Abundant, Long-lived, Highly Detectable, and Unambiguous. <i>Astrophysical Journal Letters</i> , 2022, 927, L30.	8.3	16
38	Brown Dwarf Atmospheres as the Potentially Most Detectable and Abundant Sites for Life. <i>Astrophysical Journal</i> , 2019, 883, 143.	4.5	14
39	Analytical approaches to modelling panspermia “ beyond the mean-field paradigm. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 2792-2803.	4.4	13
40	HALL CURRENT EFFECTS IN MEAN-FIELD DYNAMO THEORY. <i>Astrophysical Journal</i> , 2016, 829, 51.	4.5	12
41	Interstellar Now! Missions to Explore Nearby Interstellar Objects. <i>Advances in Space Research</i> , 2022, 69, 402-414.	2.6	12
42	On the structure and statistical theory of turbulence of extended magnetohydrodynamics. <i>New Journal of Physics</i> , 2017, 19, 015007.	2.9	11
43	Optimal Target Stars in the Search for Life. <i>Astrophysical Journal Letters</i> , 2018, 857, L17.	8.3	11
44	Photosynthesis on exoplanets and exomoons from reflected light. <i>International Journal of Astrobiology</i> , 2020, 19, 210-219.	1.6	10
45	A Precursor Balloon Mission for Venusian Astrobiology. <i>Astrophysical Journal Letters</i> , 2020, 903, L36.	8.3	10
46	A heuristic model for MRI turbulent stresses in Hall MHD. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 478-488.	4.4	9
47	A maximum entropy principle for inferring the distribution of 3D plasmoids. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	9
48	Electric sails are potentially more effective than light sails near most stars. <i>Acta Astronautica</i> , 2020, 168, 146-154.	3.2	9
49	Detectability of Chlorofluorocarbons in the Atmospheres of Habitable M-dwarf Planets. <i>Planetary Science Journal</i> , 2022, 3, 60.	3.6	9
50	Multi-region relaxed Hall magnetohydrodynamics with flow. <i>Physics of Plasmas</i> , 2016, 23, 082103.	1.9	8
51	Revisiting the Biological Ramifications of Variations in Earth’s Magnetic Field. <i>Astrophysical Journal Letters</i> , 2019, 874, L28.	8.3	8
52	Constraining Alfvénic turbulence with helicity invariants. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 2771-2776.	4.4	8
53	Potential for Liquid Water Biochemistry Deep under the Surfaces of the Moon, Mars, and beyond. <i>Astrophysical Journal Letters</i> , 2020, 901, L11.	8.3	8
54	The double-power approach to spherically symmetric astrophysical systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 2636-2664.	4.4	7

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55	Hall viscosity: A link between quantum Hall systems, plasmas and liquid crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1425-1430.	2.1	7
56	On the Habitable Lifetime of Terrestrial Worlds with High Radionuclide Abundances. Astrophysical Journal Letters, 2020, 889, L20.	8.3	7
57	A brief history of the term "habitable zone"™ in the 19th century. International Journal of Astrobiology, 2021, 20, 332-336.	1.6	7
58	Constraints on Aquatic Photosynthesis for Terrestrial Planets around Other Stars. Astrophysical Journal Letters, 2020, 889, L15.	8.3	7
59	Prospects for Life on Temperate Planets around Brown Dwarfs. Astrophysical Journal, 2020, 888, 102.	4.5	6
60	Dissipative effects in magnetohydrodynamical models with intrinsic magnetization. Communications in Nonlinear Science and Numerical Simulation, 2015, 28, 223-231.	3.3	5
61	Black hole Brownian motion in a rotating environment. Monthly Notices of the Royal Astronomical Society, 2018, 473, 1719-1735.	4.4	5
62	Longevity and power density of intermediate-to-deep geothermal wells in district heating applications. European Physical Journal Plus, 2021, 136, 1.	2.6	5
63	Characteristics of aquatic biospheres on temperate planets around Sun-like stars and M dwarfs. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3434-3448.	4.4	5
64	The History and Origins of Directed Panspermia. Research Notes of the AAS, 2021, 5, 154.	0.7	5
65	Excitation Properties of Photopigments and Their Possible Dependence on the Host Star. Astrophysical Journal Letters, 2021, 921, L41.	8.3	5
66	A class of three-dimensional gyroviscous magnetohydrodynamic models. Journal of Plasma Physics, 2020, 86, .	2.1	4
67	Implications of Abiotic Oxygen Buildup for Earth-like Complex Life. Astronomical Journal, 2020, 159, 144.	4.7	4
68	What's in a name: the etymology of astrobiology. International Journal of Astrobiology, 2020, 19, 379-385.	1.6	4
69	Feasibility of Detecting Interstellar Panspermia in Astrophysical Environments. Astronomical Journal, 2021, 162, 23.	4.7	4
70	Theoretical Constraints Imposed by Gradient Detection and Dispersal on Microbial Size in Astrobiological Environments. Astrobiology, 2021, 21, 813-830.	3.0	4
71	Relativistic-amplitude electromagnetic waves "Beating the "magnetic" barrier. Physics of Plasmas, 2018, 25, 072112.	1.9	3
72	Limitations of Chemical Propulsion for Interstellar Escape from Habitable Zones Around Low-mass Stars. Research Notes of the AAS, 2018, 2, 154.	0.7	3

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73	A birth-death-migration model for life in astrophysical environments. Monthly Notices of the Royal Astronomical Society, 2021, 509, 4365-4371.	4.4	3
74	Analytical solutions for weak black hole kicks. Astrophysics and Space Science, 2014, 354, 561-570.	1.4	2
75	Physical Constraints on Motility with Applications to Possible Life on Mars and Enceladus. Planetary Science Journal, 2021, 2, 101.	3.6	2
76	Constraints on the Abundance of 0.01 c Stellar Engines in the Milky Way. Astrophysical Journal, 2020, 905, 175.	4.5	2
77	Tidal modulations and the habitability of exoplanetary systems. Monthly Notices of the Royal Astronomical Society, 2022, 510, 4837-4843.	4.4	2
78	The effects of a non-zero cosmological constant on the Veltmann models. Monthly Notices of the Royal Astronomical Society, 2014, 444, 1548-1558.	4.4	0
79	Interstellar Now! Missions to and Sample Returns from Nearby Interstellar Objects. , 2021, 53, .		0
80	The Possible Role of Body Temperature in Modulating Brain and Body Sizes in Hominin Evolution. Frontiers in Psychology, 2021, 12, 774683.	2.1	0