

# Hans J Haubold

## List of Publications by Year in descending order

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112  
papers

1,986  
citations

430874  
18  
h-index

377865  
34  
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120  
all docs

120  
docs citations

120  
times ranked

829  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytic Representation of Maxwellâ€”Boltzmann and Tsallis Thermonuclear Functions with Depleted Tail. <i>Axioms</i> , 2021, 10, 115.	1.9	2
2	Entropy Optimization, Maxwellâ€”Boltzmann, and Rayleigh Distributions. <i>Entropy</i> , 2021, 23, 754.	2.2	1
3	Space Science and Technology Education, Teaching, Research. <i>Space Policy</i> , 2020, 53, 101384.	1.5	3
4	Mathematical Aspects of KrÃ¶tzel Integral and KrÃ¶tzel Transform. <i>Mathematics</i> , 2020, 8, 526.	2.2	5
5	A. M. Mathai Centre for Mathematical and Statistical Sciences: A Brief History of the Centre and Prof. Dr. A. M. Mathaiâ€™s Research and Education Programs at the Occasion of His 85th Anniversary. <i>Creative Education</i> , 2020, 11, 356-405.	0.4	1
6	A Versatile Integral in Physics and Astronomy and Foxâ€™s H-Function. <i>Axioms</i> , 2019, 8, 122.	1.9	3
7	United Nations Education Program in Space Science and Technology 1988-2018. <i>Creative Education</i> , 2019, 10, 2219-2231.	0.4	3
8	A generalized entropy optimization and Maxwellâ€”Boltzmann distribution. <i>European Physical Journal B</i> , 2018, 91, 1.	1.5	1
9	ErdÃ©lyi-Kober fractional integral operators from a statistical perspective -II. <i>Cogent Mathematics</i> , 2017, 4, 1309769.	0.4	2
10	On the q-Laplace Transform and Related Special Functions. <i>Axioms</i> , 2016, 5, 24.	1.9	7
11	Boltzmann-Gibbs entropy is sufficient but not necessary for the likelihood factorization required by Einstein. <i>Europhysics Letters</i> , 2015, 110, 30005.	2.0	14
12	Computational Solutions of Distributed Order Reaction-Diffusion Systems Associated with Riemann-Liouville Derivatives. <i>Axioms</i> , 2015, 4, 120-133.	1.9	6
13	Scientific Endeavors of A.M. Mathai: An Appraisal on the Occasion of his Eightieth Birthday, 28 April 2015. <i>Axioms</i> , 2015, 4, 213-234.	1.9	0
14	Stochastic Processes via the Pathway Model. <i>Entropy</i> , 2015, 17, 2642-2654.	2.2	5
15	Computational solutions of unified fractional reactionâ€”diffusion equations with composite fractional time derivative. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015, 27, 1-11.	3.3	7
16	Analytical Results Connecting Stellar Structure Parameters and Extended Reaction Rates. <i>Journal of Astrophysics</i> , 2014, 2014, 1-12.	0.4	0
17	Analysis of Solar Neutrino Data from Super-Kamiokande I and II. <i>Entropy</i> , 2014, 16, 1414-1425.	2.2	16
18	Space-Time Fractional Reaction-Diffusion Equations Associated with a Generalized Riemannâ€”Liouville Fractional Derivative. <i>Axioms</i> , 2014, 3, 320-334.	1.9	11

#	ARTICLE	IF	CITATIONS
19	Threats from space: 20 years of progress. <i>Bulletin of the Atomic Scientists</i> , 2014, 70, 85-93.	0.6	3
20	United Nations Human Space Technology Initiative (HSTI). <i>Acta Astronautica</i> , 2014, 104, 582-588.	3.2	3
21	On a Generalized Entropy Measure Leading to the Pathway Model with a Preliminary Application to Solar Neutrino Data. <i>Entropy</i> , 2013, 15, 4011-4025.	2.2	29
22	A pathway from Bayesian statistical analysis to superstatistics. <i>Applied Mathematics and Computation</i> , 2011, 218, 799-804.	2.2	14
23	Further solutions of fractional reaction-diffusion equations in terms of the $\text{H}$ -function. <i>Journal of Computational and Applied Mathematics</i> , 2011, 235, 1311-1316.	2.0	34
24	Fusion yield: Guderley model and Tsallis statistics. <i>Journal of Plasma Physics</i> , 2011, 77, 1-14.	2.1	6
25	On extended thermonuclear functions through pathway model. <i>Advances in Space Research</i> , 2010, 45, 698-708.	2.6	12
26	Mittag-Leffler functions to pathway model to Tsallis statistics. <i>Integral Transforms and Special Functions</i> , 2010, 21, 867-875.	1.2	14
27	Solutions of certain fractional kinetic equations and a fractional diffusion equation. <i>Journal of Mathematical Physics</i> , 2010, 51, 103506.	1.1	24
28	Progress in basic space science education and research: The UNBSSI. <i>Space Policy</i> , 2010, 26, 61-63.	1.5	1
29	The United Nations Programme on Space Applications: Status and direction for 2010. <i>Space Policy</i> , 2010, 26, 185-188.	1.5	11
30	The H-Function. , 2010, .		328
31	Generalized Mittag-Leffler Distributions and Processes for Applications in Astrophysics and Time Series Modeling. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2010, , 79-92.	0.3	12
32	Proposal for a United Nations Basic Space Technology Initiative. <i>Advances in Space Research</i> , 2009, 43, 1847-1853.	2.6	5
33	Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science. <i>Earth, Moon and Planets</i> , 2009, 104, 141-159.	0.6	2
34	Preface to the Proceedings of the European General Assembly on IHY 2007. <i>Earth, Moon and Planets</i> , 2009, 104, 1-2.	0.6	1
35	Preface to the Proceedings of the European General Assembly and the United Nations Workshop. <i>Earth, Moon and Planets</i> , 2009, 104, 139-140.	0.6	1
36	The United Nations Basic Space Science Initiative (UNBSSI). <i>Advances in Space Research</i> , 2009, 43, 1854-1862.	2.6	0

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37	Regional Centres for Space Science and Technology Education and ICG Information Centres affiliated to the United Nations. <i>Advances in Space Research</i> , 2009, 43, 1863-1865.	2.6	2
38	On generalized distributions and pathways. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 2109-2113.	2.1	42
39	International Heliophysical Year 2007: A Report from the UN/NASA Workshop Bangalore, India, 27 Novemberâ€“1 December 2006. <i>Earth, Moon and Planets</i> , 2008, 103, 9-24.	0.6	1
40	Pathway parameter and thermonuclear functions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 2462-2470.	2.6	6
41	Extension of thermonuclear functions through the pathway model including Maxwellâ€“Boltzmann and Tsallis distributions. <i>Astroparticle Physics</i> , 2008, 29, 70-76.	4.3	32
42	Special Functions for Applied Scientists., 2008, . . .		237
43	International Heliophysical Year 2007: Basic space science initiatives. <i>Space Policy</i> , 2007, 23, 121-126.	1.5	5
44	Letters to the Editor. <i>Isis</i> , 2007, 98, 799-800.	0.5	0
45	University satellites and space science education. <i>Eos</i> , 2007, 88, 172-172.	0.1	0
46	Pathway model, superstatistics, Tsallis statistics, and a generalized measure of entropy. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007, 375, 110-122.	2.6	125
47	On generalized entropy measures and pathways. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007, 385, 493-500.	2.6	25
48	The United Nations Basic Space Science Initiative for IHY 2007. <i>Proceedings of the International Astronomical Union</i> , 2006, 2, 295-302.	0.0	2
49	A Certain Class of Laplace Transforms with Applications to Reaction and Reaction-Diffusion Equations. <i>Astrophysics and Space Science</i> , 2006, 305, 283-288.	1.4	24
50	Reaction-Diffusion Systems and Nonlinear Waves. <i>Astrophysics and Space Science</i> , 2006, 305, 297-303.	1.4	40
51	Solution of Generalized Fractional Reaction-Diffusion Equations. <i>Astrophysics and Space Science</i> , 2006, 305, 305-313.	1.4	55
52	Report on the Twelfth United Nations/European Space Agency Workshop on Basic Space Science (Beijing, P.R. China, 24â€“28 May 2004). <i>Astrophysics and Space Science</i> , 2006, 305, 325-330.	1.4	1
53	Unified Fractional Kinetic Equation and a Fractional Diffusion Equation. <i>Astrophysics and Space Science</i> , 2004, 290, 299-310.	1.4	82
54	Astrophysical thermonuclear functions for Boltzmannâ€“Gibbs statistics and Tsallis statistics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 344, 649-656.	2.6	20

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55	On generalized fractional kinetic equations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 344, 657-664.	2.6	137
56	World Space Observatory/ultraviolet (WSO/UV): progress report. <i>Advances in Space Research</i> , 2004, 34, 2200-2202.	2.6	4
57	Developing basic space science world wide: progress report. <i>Advances in Space Research</i> , 2004, 34, 2178-2181.	2.6	1
58	Education curricula of the UN-affiliated regional Centres for Space Science and Technology Education. <i>Space Policy</i> , 2003, 19, 67-69.	1.5	6
59	Promoting research and education in basic space science: the approach of the UN/ESA workshops. <i>Space Policy</i> , 2003, 19, 215-219.	1.5	6
60	Education curricula in space science and technology: the approach of the UN-affiliated regional centres. <i>Space Policy</i> , 2003, 19, 221-223.	1.5	5
61	Review of mathematical techniques applicable in astrophysical reaction rate theory. <i>Astrophysics and Space Science</i> , 2002, 282, 265-280.	1.4	13
62	Title is missing!. <i>Astrophysics and Space Science</i> , 2002, 282, 341-357.	1.4	3
63	On fractional kinetic equations. <i>Astrophysics and Space Science</i> , 2002, 282, 281-287.	1.4	113
64	NEO scientific and policy developments, 1995–2000. <i>Space Policy</i> , 2001, 17, 213-218.	1.5	8
65	Analytical study of thermonuclear reaction probability integrals. <i>Astrophysics and Space Science</i> , 2000, 273, 43-52.	1.4	0
66	The fractional kinetic equation and thermonuclear functions. <i>Astrophysics and Space Science</i> , 2000, 273, 53-63.	1.4	124
67	Report on the eight UN/ESA Workshop on Basic Space Science: Scientific Exploration from Space. <i>Astrophysics and Space Science</i> , 2000, 273, 331-341.	1.4	0
68	United Nations Contributions to the Worldwide Development of Astronomy. <i>Annals of the New York Academy of Sciences</i> , 1997, 822, 621-630.	3.8	0
69	Fourier spectrum analysis of the new solar neutrino capture rate data for the Homestake experiment. <i>Nuclear Physics A</i> , 1997, 621, 341-344.	1.5	0
70	Wavelet Analysis of the New Solar Neutrino Capture Rate Data for the Homestake Experiment. <i>Astrophysics and Space Science</i> , 1997, 258, 201-218.	1.4	12
71	On Thermonuclear Reaction Rates. <i>Astrophysics and Space Science</i> , 1997, 258, 185-199.	1.4	15
72	Space law and space science at the United Nations. <i>Earth, Moon and Planets</i> , 1996, 73, 165-166.	0.6	1

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73	Solar structure in terms of Gauss' hypergeometric function. <i>Astrophysics and Space Science</i> , 1995, 228, 77-86.	1.4	8
74	A heuristic remark on the periodic variation in the number of solar neutrinos detected on Earth. <i>Astrophysics and Space Science</i> , 1995, 228, 113-134.	1.4	25
75	Potential of interplanetary torques and solar modulation for triggering terrestrial atmospheric and lithospheric events. <i>Earth, Moon and Planets</i> , 1995, 70, 179-181.	0.6	1
76	Astrophysical thermonuclear functions. <i>Astrophysics and Space Science</i> , 1994, 214, 49-70.	1.4	18
77	Computational aspects of the gravitational instability problem for a multicomponent cosmological medium. <i>Astrophysics and Space Science</i> , 1994, 214, 139-149.	1.4	1
78	The dynamical behaviour of aN-shell model for an expanding universe. <i>Astrophysics and Space Science</i> , 1993, 199, 175-183.	1.4	0
79	Analytic stellar structure. <i>Astrophysics and Space Science</i> , 1992, 197, 153-161.	1.4	1
80	On gravitational instability in a multi-component cosmological medium. <i>Astronomische Nachrichten</i> , 1991, 312, 1-6.	1.2	3
81	Analytic solar structure. <i>Astrophysics and Space Science</i> , 1991, 176, 51-59.	1.4	1
82	On the fourier spectrum analysis of the solar neutrino capture rate. <i>Solar Physics</i> , 1990, 127, 347-356.	2.5	23
83	Relativistic Astrophysics and Gravitation. <i>Astronomische Nachrichten</i> , 1990, 311, 145-145.	1.2	0
84	Explosive perturbations in the expanding Universe. <i>Astronomische Nachrichten</i> , 1990, 311, 202-202.	1.2	0
85	W. HILLEBRANDT, R. KUHFUSS, F. MÄÖLLER, J. W. TRURAN (Eds.): Nuclear Astrophysics. <i>Astronomische Nachrichten</i> , 1989, 310, 60-60.	1.2	0
86	The evolution of gravitational instabilities: Amplification by coupling of perturbation modes. <i>Astrophysics and Space Science</i> , 1989, 159, 295-300.	1.4	0
87	The formation of primordial stars triggered by the evolution of large-scale density perturbations. <i>Astronomische Nachrichten</i> , 1988, 309, 291-294.	1.2	0
88	Gravitational instability in a multicomponent cosmological medium. <i>Journal of Mathematical Physics</i> , 1988, 29, 2069-2077.	1.1	9
89	A possible explanation of the second neutrino burst from SN 1987A. <i>Astrophysics and Space Science</i> , 1987, 138, 421-424.	1.4	6
90	The forest of QSO absorption lines and cosmological models with unstable dark matter. <i>Astronomische Nachrichten</i> , 1987, 308, 177-181.	1.2	5

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91	A note on the linear stellar model. <i>Astronomische Nachrichten</i> , 1987, 308, 313-318.	1.2	2
92	The LMC supernova (SN 1987 A) as a probe for the outcome of stellar collapse. <i>Astronomische Nachrichten</i> , 1987, 308, 329-331.	1.2	0
93	Analytical Results Connecting Stellar Structure Parameters and Neutrino Fluxes. <i>Annalen Der Physik</i> , 1987, 499, 103-116.	2.4	2
94	On the Cosmological Origin of Population III Objects. <i>Annalen Der Physik</i> , 1987, 499, 519-523.	2.4	3
95	Analytic Representations of Thermonuclear Reaction Rates. <i>Studies in Applied Mathematics</i> , 1986, 75, 123-137.	2.4	10
96	An analytic approach to the connection between stellar structure parameters and the neutrino emission rate in a simple stellar model. <i>Astronomische Nachrichten</i> , 1986, 307, 1-7.	1.2	2
97	Analytic solution to the problem of nuclear energy generation rate in a simple stellar model. <i>Astronomische Nachrichten</i> , 1986, 307, 9-12.	1.2	0
98	Jun Ishiwaras Text über Albert Einsteins Gastvortrag an der Universität zu Kyoto am 14. Dezember 1922. <i>Archive for History of Exact Sciences</i> , 1986, 36, 271-279.	0.5	3
99	The resonant thermonuclear reaction rate. <i>Journal of Mathematical Physics</i> , 1986, 27, 2203-2207.	1.1	4
100	Time variations of the solar neutrino flux. <i>Astrophysics and Space Science</i> , 1985, 112, 397-405.	1.4	9
101	The search for possible time variations in Davis' measurements of the argon production rate in the solar neutrino experiment. <i>Astronomische Nachrichten</i> , 1985, 306, 203-211.	1.2	13
102	On the Nuclear Energy Generation Rate in a Simple Analytic Stellar Model. <i>Annalen Der Physik</i> , 1984, 496, 372-379.	2.4	7
103	On Nuclear Reaction Rate Theory. <i>Annalen Der Physik</i> , 1984, 496, 380-396.	2.4	18
104	Zeitlich periodische Variationen des solaren Neutrinoflusses und das Standardmodell der Sonne. <i>Astronomische Nachrichten</i> , 1983, 304, 299-304.	1.2	12
105	Der gegenwärtige Stand der Theorie und der analytischen Auswertung von nichtresonanten thermonuklearen Reaktionsraten. <i>Astronomische Nachrichten</i> , 1982, 303, 161-187.	1.2	8
106	Neutrino oscillations in neutron star matter. <i>Astrophysics and Space Science</i> , 1982, 82, 457-461.	1.4	2
107	Neutrinooszillationen in Neutronensternmaterie. <i>Astronomische Nachrichten</i> , 1981, 302, 223-226.	1.2	1
108	Closed-form evaluation and approximation considerations of the non-resonant thermonuclear reaction rate. <i>Astrophysics and Space Science</i> , 1981, 75, 531-534.	1.4	1

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109	Analytical representation of the thermonuclear reaction rate and fusion energy production in a spherical plasma shock wave. <i>Plasma Physics</i> , 1981, 23, 399-411.	0.9	10
110	On resonant thermonuclear reaction rate integralsâ€¢closedâ€¢form evaluation and approximation considerations. <i>Astronomische Nachrichten</i> , 1979, 300, 63-75.	1.2	7
111	Spectral line profiles and neutron cross sections: New results concerning the analysis of Voigt functions. <i>Astrophysics and Space Science</i> , 1979, 65, 477-491.	1.4	11
112	On the evaluation of an integral connected with the thermonuclear reaction rate in closed form. <i>Astronomische Nachrichten</i> , 1978, 299, 225-232.	1.2	22