

# Reinhard Meinel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5532763/publications.pdf>

Version: 2024-02-01

70  
papers

1,420  
citations

394421

19  
h-index

345221

36  
g-index

77  
all docs

77  
docs citations

77  
times ranked

332  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bäcklund transforms of the extreme Kerr near-horizon geometry. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126572.	2.1	0
2	Relativistic Equilibrium Figures. Encyclopedia of Earth Sciences Series, 2019, , 1-5.	0.1	0
3	A continuous Riemann-Hilbert problem for colliding plane gravitational waves. Classical and Quantum Gravity, 2017, 34, 195011.	4.0	2
4	Die Schwarzschild-Lösung. , 2016, , 143-152.		0
5	Spezielle und allgemeine Relativitätstheorie für Bachelorstudenten. , 2016, , .		0
6	Gyromagnetic factor of rotating disks of electrically charged dust in general relativity. Physical Review D, 2016, 94, .	4.7	2
7	Andere Teilgebiete der Physik im Rahmen der SRT. , 2016, , 67-80.		0
8	Vierervektoren und Vierertensoren. , 2016, , 41-52.		0
9	Das Wirkungsprinzip der ART. , 2016, , 197-208.		0
10	Relativistische Punktmechanik. , 2016, , 53-66.		0
11	Kugelsymmetrische Sternmodelle. , 2016, , 171-184.		0
12	Die Schwarzschild-Lösung als Schwarzes Loch. , 2016, , 185-195.		0
13	Der Minkowski-Raum – die Raumzeit der SRT. , 2016, , 11-25.		0
14	Lorentz-Transformationen. , 2016, , 27-39.		0
15	Die klassischen Effekte der ART. , 2016, , 153-169.		0
16	Die rotierende Staubscheibe. , 2016, , 295-306.		0
17	Rotierende und elektrisch geladene Schwarze Löcher. , 2016, , 259-294.		0
18	Mathematische Methoden. , 2016, , 219-257.		0

#	ARTICLE	IF	CITATIONS
19	Der Newton'sche Grenzfall. , 2016, , 135-142.		0
20	Grundideen. , 2016, , 83-89.		0
21	Geometrie der Raumzeit. , 2016, , 91-106.		0
22	CONSTRUCTIVE PROOF OF THE KERR-NEWMAN BLACK HOLE UNIQUENESS: DERIVATION OF THE FULL SOLUTION FROM SCRATCH. , 2015, , .		0
23	On the black hole limit of rotating discs of charged dust. Classical and Quantum Gravity, 2015, 32, 135022.	4.0	6
24	A note on circular geodesics in the equatorial plane of an extreme Kerr-Newman black hole. Classical and Quantum Gravity, 2015, 32, 147001.	4.0	11
25	BLACK HOLES AND QUASIBLACK HOLES IN EINSTEIN-MAXWELL THEORY. , 2015, , .		2
26	Post-Newtonian expansion of a rigidly rotating disc of dust with a constant specific charge. Classical and Quantum Gravity, 2013, 30, 085010.	4.0	4
27	Constructive proof of the Kerr-Newman black hole uniqueness including the extreme case. Classical and Quantum Gravity, 2012, 29, 035004.	4.0	36
28	RELATIVISTIC FIGURES OF EQUILIBRIUM: FROM MACLAURIN SPHEROIDS TO KERR BLACK HOLES. , 2012, , .		0
29	On the black hole limit of rotating discs and rings. General Relativity and Gravitation, 2011, 43, 1469-1486.	2.0	8
30	On the black hole limit of electrically counterpoised dust configurations. Classical and Quantum Gravity, 2011, 28, 225010.	4.0	14
31	QUASI-STATIONARY ROUTES TO THE KERR BLACK HOLE. , 2008, , .		0
32	Ward identities for invariant group integrals. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 4367-4389.	2.1	13
33	The Ernst equation and ergosurfaces. Classical and Quantum Gravity, 2006, 23, 4399-4414.	4.0	6
34	On the black hole limit of rotating fluid bodies in equilibrium. Classical and Quantum Gravity, 2006, 23, 1359-1363.	4.0	19
35	Solitons for the rotating reduced Maxwell-Bloch equations with anisotropy. Physical Review E, 2005, 72, 056608.	2.1	17
36	Equilibrium configurations of homogeneous fluids in general relativity. Monthly Notices of the Royal Astronomical Society, 2004, 355, 682-688.	4.4	14

#	ARTICLE	IF	CITATIONS
37	Quasistationary collapse to the extreme Kerr black hole. <i>Annalen Der Physik</i> , 2004, 13, 600-603.	2.4	11
38	Uniformly rotating axisymmetric fluid configurations bifurcating from highly flattened Maclaurin spheroids. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 339, 515-523.	4.4	37
39	Progress in relativistic gravitational theory using the inverse scattering method. <i>Journal of Mathematical Physics</i> , 2003, 44, 3407-3429.	1.1	67
40	Highly accurate calculation of rotating neutron stars. <i>Astronomy and Astrophysics</i> , 2003, 405, 711-721.	5.1	57
41	Relativistic Dyson Rings and Their Black Hole Limit. <i>Astrophysical Journal</i> , 2003, 582, L87-L90.	4.5	31
42	Dirichlet boundary value problems of the Ernst equation. <i>Physical Review D</i> , 2002, 65, .	4.7	8
43	Highly accurate calculation of rotating neutron stars. <i>Astronomy and Astrophysics</i> , 2002, 381, L49-L52.	5.1	45
44	Black holes: a physical route to the Kerr metric. <i>Annalen Der Physik</i> , 2002, 11, 509-521.	2.4	17
45	Rotating Equilibrium Configurations in Einstein's Theory of Gravitation. , 2002, , 69-75.		0
46	Post-Newtonian approximation of the rigidly rotating disc of dust to arbitrary order. <i>Physical Review D</i> , 2001, 63, .	4.7	10
47	Differentially Rotating Disks of Dust. <i>General Relativity and Gravitation</i> , 2000, 32, 1365-1380.	2.0	11
48	Gravitational fields of rotating disks and black holes. <i>Annalen Der Physik</i> , 2000, 9, 335-341.	2.4	4
49	Vandermonde-like determinants and N-fold Darboux/Bäcklund transformations. <i>Journal of Mathematical Physics</i> , 1997, 38, 4692-4695.	1.1	25
50	Solutions of degenerate two-photon propagation from Bäcklund transformations. <i>Journal of Modern Optics</i> , 1997, 44, 287-303.	1.3	8
51	Reply to "Some remarks on finite-gap solutions of the Ernst equation" by Korotkin. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 229, 200-202.	2.1	7
52	Solutions of Einstein's field equations related to Jacobi's inversion problem. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1996, 210, 160-162.	2.1	15
53	Darboux transformations for "W-problems". <i>Physica D: Nonlinear Phenomena</i> , 1995, 87, 127-133.	2.8	6
54	The multipole moments of the rigidly rotating disk of dust in general relativity. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 200, 82-86.	2.1	9

#	ARTICLE	IF	CITATIONS
55	Asymptotically flat solutions to the Ernst equation with reflection symmetry. <i>Classical and Quantum Gravity</i> , 1995, 12, 2045-2050.	4.0	30
56	General Relativistic Gravitational Field of a Rigidly Rotating Disk of Dust: Solution in Terms of Ultraelliptic Functions. <i>Physical Review Letters</i> , 1995, 75, 3046-3047.	7.8	152
57	General Relativistic Gravitational Field of a Rigidly Rotating Disk of Dust: Axis Potential, Disk Metric, and Surface Mass Density. <i>Physical Review Letters</i> , 1994, 73, 2166-2168.	7.8	69
58	The Einsteinian gravitational field of the rigidly rotating disk of dust. <i>Astrophysical Journal</i> , 1993, 414, L97.	4.5	112
59	An exactly solvable global $\hat{\pm}2$ -disk dynamo model. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1990, 50, 79-84.	1.2	5
60	Galactic dynamo models without sharp boundaries. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1990, 50, 85-94.	1.2	33
61	Generation of localized magnetic fields by dynamos with conducting surroundings. <i>Astronomische Nachrichten</i> , 1989, 310, 1-6.	1.2	9
62	Stability of simple nonlinear $\hat{\pm}2$ - dynamos. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1988, 43, 95-117.	1.2	58
63	Spiral structure as a standing density-wave packet. <i>Astrophysics and Space Science</i> , 1987, 138, 147-154.	1.4	1
64	Periodic solutions generated by Bäcklund transformations. <i>Physica D: Nonlinear Phenomena</i> , 1986, 21, 155-162.	2.8	5
65	General N-soliton solution of the AKNS class on arbitrary background. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 100, 467-470.	2.1	180
66	A new nonlinear Schrödinger equation, its hierarchy and N-soliton solutions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 102, 1-6.	2.1	28
67	Bäcklund transformation and N-soliton solutions for stimulated Raman scattering and resonant two-photon propagation. <i>Optics Communications</i> , 1984, 49, 224-228.	2.1	26
68	Self-Modulation and Envelope Solitons of Spiral Density Waves. <i>Astronomische Nachrichten</i> , 1983, 304, 65-68.	1.2	5
69	Generation of chirped pulses in optical fibers suitable for an effective pulse compression. <i>Optics Communications</i> , 1983, 47, 343-346.	2.1	44
70	Intergalactic extinction and the deceleration parameter. <i>Astronomische Nachrichten</i> , 1981, 302, 177-179.	1.2	0