

Pankaj S Joshi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7402617/publications.pdf>

Version: 2024-02-01

146
papers

4,389
citations

94433

37
h-index

133252

59
g-index

151
all docs

151
docs citations

151
times ranked

1049
citing authors

#	ARTICLE	IF	CITATIONS
1	Shadows and precession of orbits in rotating Janisâ€“Newmanâ€“Winicour spacetime. European Physical Journal C, 2022, 82, 1.	3.9	16
2	Thin accretion disk in the Simpson-Visser black-bounce and wormhole spacetimes. Physical Review D, 2022, 105, .	4.7	29
3	Singularity resolution in gravitational collapse. Physical Review D, 2022, 105, .	4.7	3
4	Causal structure of singularity in non-spherical gravitational collapse. European Physical Journal C, 2022, 82, .	3.9	4
5	Shadow of nulllike and timelike naked singularities without photon spheres. Physical Review D, 2021, 103, .	4.7	32
6	Precession of timelike bound orbits in Kerr spacetime. European Physical Journal C, 2021, 81, 1.	3.9	16
7	Globally visible singularity in an astrophysical setup. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4743-4750.	4.4	10
8	Shadows and negative precession in non-Kerr spacetime. Physical Review D, 2021, 103, .	4.7	37
9	Accretion disks around naked singularities. Classical and Quantum Gravity, 2021, 38, 035012.	4.0	14
10	Perihelion precession and shadows near black holes and naked singularities. Physical Review D, 2020, 102, .	4.7	23
11	Global visibility of a strong curvature singularity in nonmarginally bound dust collapse. Physical Review D, 2020, 102, .	4.7	15
12	Shadow of a naked singularity without photon sphere. Physical Review D, 2020, 102, .	4.7	46
13	Strong curvature naked singularities in spherically symmetric perfect fluid collapse. Physical Review D, 2020, 101, .	4.7	22
14	Strength of the naked singularity in critical collapse. European Physical Journal C, 2020, 80, 1.	3.9	4
15	Gravitomagnetism and pulsar beam precession near a Kerr black hole. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3262-3286.	4.4	12
16	Can we distinguish black holes from naked singularities by the images of their accretion disks?. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 064-064.	5.4	77
17	Towards an observational test of black hole versus naked singularity at the galactic center. International Journal of Modern Physics D, 2019, 28, 1930024.	2.1	22
18	An approach to stability analyses in general relativity via symplectic geometry. Arabian Journal of Mathematics, 2019, 8, 315-333.	0.9	1

#	ARTICLE	IF	CITATIONS
19	Gravitational collapse of baryonic and dark matter. <i>Arabian Journal of Mathematics</i> , 2019, 8, 269-292.	0.9	5
20	Timelike geodesics in naked singularity and black hole spacetimes. <i>Physical Review D</i> , 2019, 100, .	4.7	42
21	Shadows of spherically symmetric black holes and naked singularities. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 52-64.	4.4	167
22	On the stability of a superspinar. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 780, 410-413.	4.1	12
23	Gravitational collapse in ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle T_j \text{ ETQq1 } 1 \text{ } 0.784314 \text{ rgBT /Overlock } 10 \text{ } \text{TF}$)	4.7	8
24	Spin precession in a black hole and naked singularity spacetimes. <i>Physical Review D</i> , 2017, 95, .	4.7	31
25	Distinguishing Kerr naked singularities and black holes using the spin precession of a test gyro in strong gravitational fields. <i>Physical Review D</i> , 2017, 95, .	4.7	49
26	Self-similarity and Criticality in Gravitational Collapse. <i>Fundamental Theories of Physics</i> , 2017, , 117-126.	0.3	0
27	Black Hole Paradoxes. <i>Journal of Physics: Conference Series</i> , 2016, 759, 012060.	0.4	1
28	Spherical vacuum and scalar collapse for the Starobinsky $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle R \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{ model}$. <i>Physical Review D</i> , 2016, 94, .	4.7	5
29	Infinite efficiency of the collisional Penrose process: Can an overspinning Kerr geometry be the source of ultrahigh-energy cosmic rays and neutrinos?. <i>Physical Review D</i> , 2016, 93, .	4.7	24
30	Genericity aspects of black hole formation in the collapse of spherically symmetric slightly inhomogeneous perfect fluids. <i>International Journal of Modern Physics D</i> , 2016, 25, 1650023.	2.1	6
31	Interior dynamics of neutral and charged black holes. <i>Physical Review D</i> , 2015, 92, .	4.7	6
32	Mass inflation and curvature divergence near the central singularity in spherical collapse. <i>Physical Review D</i> , 2015, 92, .	4.7	2
33	Compact objects from gravitational collapse: an analytical toy model. <i>European Physical Journal C</i> , 2015, 75, 1.	3.9	7
34	Interior Dynamics of Neutral and Charged Black Holes in $f(R)$ Gravity. <i>Universe</i> , 2015, 1, 239-291.	2.5	0
35	Destroying a near-extremal Kerr black hole with a charged particle: Can a test magnetic field serve as a cosmic censor?. <i>Physical Review D</i> , 2015, 91, .	4.7	50
36	Timescale for trans-Planckian collisions in Kerr spacetime. <i>Europhysics Letters</i> , 2015, 110, 30004.	2.0	5

#	ARTICLE	IF	CITATIONS
37	Finite escape fraction for ultrahigh energy collisions around Kerr naked singularity. Pramana - Journal of Physics, 2015, 84, 491-501.	1.8	5
38	All black holes in Lemaître-Tolman-Bondi inhomogeneous dust collapse. Classical and Quantum Gravity, 2015, 32, 145004.	4.0	6
39	How small can an over-spinning body be in general relativity?. Physical Review D, 2014, 90, .	4.7	5
40	Particle acceleration by Majumdar-Papapetrou di-hole. General Relativity and Gravitation, 2014, 46, 1.	2.0	10
41	Spacetime Singularities. Springer Handbooks, 2014, , 409-436.	0.6	11
42	Distinguishing black holes from naked singularities through their accretion disc properties. Classical and Quantum Gravity, 2014, 31, 015002.	4.0	124
43	Time delay between relativistic images as a probe of cosmic censorship. Physical Review D, 2013, 88, .	4.7	28
44	Instability of black hole formation under small pressure perturbations. General Relativity and Gravitation, 2013, 45, 305-317.	2.0	11
45	SHELL-CROSSINGS IN GRAVITATIONAL COLLAPSE. International Journal of Modern Physics D, 2013, 22, 1350027.	2.1	11
46	Ultrahigh energy collision with neither black hole nor naked singularity. Physical Review D, 2013, 87, .	4.7	15
47	Acceleration of particles and shells by Reissner-Nordström naked singularities. Physical Review D, 2012, 86, .	4.7	42
48	Vibro-Acoustic Optimization of Turbulent Boundary Layer Excited Panel with Curvilinear Stiffeners. Journal of Aircraft, 2012, 49, 52-65.	2.4	25
49	Circular geodesics and accretion disks in the Janis-Newman-Winicour and gamma metric spacetimes. Physical Review D, 2012, 85, .	4.7	104
50	Acceleration of particles by Janis-Newman-Winicour singularities. Physical Review D, 2012, 85, .	4.7	34
51	Can strong gravitational lensing distinguish naked singularities from black holes?. Physical Review D, 2012, 86, .	4.7	61
52	GENERICITY ASPECTS IN GRAVITATIONAL COLLAPSE TO BLACK HOLES AND NAKED SINGULARITIES. International Journal of Modern Physics D, 2012, 21, 1250066.	2.1	23
53	Ultrahigh energy particle collisions in a regular spacetime without black holes or naked singularities. Physical Review D, 2012, 86, .	4.7	35
54	Instability of black hole formation in gravitational collapse. Physical Review D, 2011, 83, .	4.7	15

#	ARTICLE	IF	CITATIONS
55	High energy particle collisions in superspinning Kerr geometry. Physical Review D, 2011, 84, .	4.7	46
56	Naked singularities as particle accelerators. II.. Physical Review D, 2011, 83, .	4.7	44
57	RECENT DEVELOPMENTS IN GRAVITATIONAL COLLAPSE AND SPACETIME SINGULARITIES. International Journal of Modern Physics D, 2011, 20, 2641-2729.	2.1	183
58	Key problems in black hole physics today. , 2011, , 101-119.		1
59	Kerr naked singularities as particle accelerators. Classical and Quantum Gravity, 2011, 28, 235012.	4.0	82
60	COLLAPSE AND DISPERSAL IN MASSLESS SCALAR FIELD MODELS. International Journal of Modern Physics D, 2011, 20, 1123-1133.	2.1	12
61	GRAVITATIONAL COLLAPSE WITH TANGENTIAL PRESSURE. International Journal of Modern Physics D, 2011, 20, 463-495.	2.1	16
62	STATIC SPHERICALLY SYMMETRIC SCALAR FIELD SPACETIMES WITH $C^{0,0}$ MATCHING. Modern Physics Letters A, 2011, 26, 1281-1290.	1.2	1
63	Equilibrium configurations from gravitational collapse. Classical and Quantum Gravity, 2011, 28, 235018.	4.0	94
64	Accelerated cosmic expansion in a scalar-field universe. Physical Review D, 2010, 81, .	4.7	8
65	Optimal Design of Unitized Structures Using Response Surface Approaches. Journal of Aircraft, 2010, 47, 1898-1906.	2.4	29
66	Design Optimization for Minimum Sound Radiation from Point-Excited Curvilinearly Stiffened Panel. Journal of Aircraft, 2010, 47, 1100-1110.	2.4	23
67	Naked singularities as particle accelerators. Physical Review D, 2010, 82, .	4.7	47
68	Naked Singularities. Scientific American, 2009, 300, 36-43.	1.0	10
69	GRAVITATIONAL COLLAPSE OF A SELF-INTERACTING SCALAR FIELD. Modern Physics Letters A, 2007, 22, 65-74.	1.2	18
70	On trapped surface formation in gravitational collapse. Classical and Quantum Gravity, 2007, 24, 2917-2928.	4.0	12
71	Critical Collapse of Einstein Cluster. Progress of Theoretical Physics, 2007, 118, 865-878.	2.0	4
72	Visibility of a spacetime singularity. Physical Review D, 2007, 75, .	4.7	5

#	ARTICLE	IF	CITATIONS
73	Spherical gravitational collapse in N dimensions. Physical Review D, 2007, 76, .	4.7	58
74	Rebounce and black hole formation in a gravitational collapse model with vanishing radial pressure. General Relativity and Gravitation, 2007, 39, 825-838.	2.0	2
75	On the genericity of spacetime singularities. Pramana - Journal of Physics, 2007, 69, 119-135.	1.8	8
76	Quantum Evaporation of a Naked Singularity. Physical Review Letters, 2006, 96, 031302.	7.8	94
77	Gravitational collapse from smooth initial data with vanishing radial pressure. Classical and Quantum Gravity, 2005, 22, 271-282.	4.0	10
78	Gravitational collapse in asymptotically anti-de Sitter or de Sitter backgrounds. Physical Review D, 2005, 72, .	4.7	21
79	Cosmic censorship in higher dimensions. II.. Physical Review D, 2005, 72, .	4.7	6
80	Timelike naked singularity. Physical Review D, 2004, 70, .	4.7	16
81	Black hole formation in perfect fluid collapse. Physical Review D, 2004, 69, .	4.7	22
82	Role of initial data in spherical collapse. Physical Review D, 2004, 69, .	4.7	19
83	Spherical dust collapse in higher dimensions. Physical Review D, 2004, 69, .	4.7	21
84	Cosmic censorship in higher dimensions. Physical Review D, 2004, 69, .	4.7	30
85	Why do naked singularities form in gravitational collapse? II. Physical Review D, 2004, 70, .	4.7	33
86	Gravitational collapse of an isentropic perfect fluid with a linear equation of state. Classical and Quantum Gravity, 2004, 21, 3645-3653.	4.0	27
87	Appearance of the central singularity in spherical collapse. Physical Review D, 2002, 65, .	4.7	9
88	COSMIC CENSORSHIP: A CURRENT PERSPECTIVE. Modern Physics Letters A, 2002, 17, 1067-1079.	1.2	21
89	What role do pressures play in determining the final end state of gravitational collapse?. Classical and Quantum Gravity, 2002, 19, 5229-5234.	4.0	40
90	Why do naked singularities form in gravitational collapse?. Physical Review D, 2002, 65, .	4.7	119

#	ARTICLE	IF	CITATIONS
91	Gravitational collapse and the cosmological constant. <i>Physical Review D</i> , 2001, 63, .	4.7	40
92	Gravitational collapse in a constant potential bath. <i>Physical Review D</i> , 2001, 63, .	4.7	9
93	Tolman-Bondi-Lemaitre cell model for the universe and gravitational collapse. <i>Physical Review D</i> , 2001, 63, .	4.7	8
94	Gravitational collapse: The story so far. <i>Pramana - Journal of Physics</i> , 2000, 55, 529-544.	1.8	101
95	GAMMA-RAY BURSTS AS THE BIRTH-CRIES OF BLACK HOLES. <i>Modern Physics Letters A</i> , 2000, 15, 991-995.	1.2	19
96	Structure of nonspacelike geodesics in dust collapse. <i>Physical Review D</i> , 2000, 63, .	4.7	9
97	Initial data and spherical dust collapse. <i>Physical Review D</i> , 2000, 62, .	4.7	25
98	Physical nature of the central singularity in spherical collapse. <i>Physical Review D</i> , 1999, 59, .	4.7	43
99	Initial data and the end state of spherically symmetric gravitational collapse. <i>Classical and Quantum Gravity</i> , 1999, 16, 41-59.	4.0	81
100	On the Global Visibility of the Singularity in Quasi-Spherical Collapse. <i>General Relativity and Gravitation</i> , 1998, 30, 1477-1499.	2.0	29
101	Nature of Singularity in Einstein-Massless Scalar Theory. <i>International Journal of Modern Physics D</i> , 1997, 06, 357-361.	2.1	43
102	Cosmic censorship and the role of pressure in gravitational collapse. <i>Classical and Quantum Gravity</i> , 1997, 14, 2195-2201.	4.0	44
103	Initial data and the final fate of inhomogeneous dust collapse. <i>Classical and Quantum Gravity</i> , 1997, 14, 1223-1236.	4.0	40
104	The final fate of spherical inhomogeneous dust collapse: II. Initial data and causal structure of the singularity. <i>Classical and Quantum Gravity</i> , 1996, 13, 3057-3067.	4.0	64
105	Naked strong curvature singularities in Szekeres spacetimes. <i>Classical and Quantum Gravity</i> , 1996, 13, 3069-3074.	4.0	53
106	The final fate of spherical inhomogeneous dust collapse. <i>Classical and Quantum Gravity</i> , 1996, 13, 559-571.	4.0	110
107	Reply to Unnikrishnan on naked singularities. <i>General Relativity and Gravitation</i> , 1995, 27, 921-932.	2.0	12
108	Role of initial data in the gravitational collapse of inhomogeneous dust. <i>Physical Review D</i> , 1995, 51, 6778-6782.	4.7	83

#	ARTICLE	IF	CITATIONS
109	NAKED SINGULARITIES AS CANDIDATES FOR GAMMA-RAY BURSTERS. International Journal of Modern Physics D, 1994, 03, 647-651.	2.1	16
110	On the occurrence of naked singularity in spherically symmetric gravitational collapse. Communications in Mathematical Physics, 1994, 166, 117-128.	2.2	68
111	The structure of naked singularity in self-similar gravitational collapse: II. Letters in Mathematical Physics, 1993, 27, 235-238.	1.1	25
112	Naked singularities in spherically symmetric inhomogeneous Tolman-Bondi dust cloud collapse. Physical Review D, 1993, 47, 5357-5369.	4.7	264
113	Cosmic censorship violation in non-self-similar Tolman-Bondi models. Classical and Quantum Gravity, 1992, 9, L69-L75.	4.0	65
114	Naked singularities in non-self-similar gravitational collapse of radiation shells. Physical Review D, 1992, 45, 2147-2150.	4.7	12
115	Strong curvature naked singularities in non-self-similar gravitational collapse. General Relativity and Gravitation, 1992, 24, 129-137.	2.0	20
116	The structure of naked singularity in self-similar gravitational collapse. Communications in Mathematical Physics, 1992, 146, 333-342.	2.2	88
117	Strengths of naked singularities in radiation collapse with nonlinear mass functions. Journal of Mathematical Physics, 1991, 32, 2167-2168.	1.1	7
118	Gravitino mass bounds in a general cosmological scenario. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 160, 36-40.	2.1	0
119	On the nature of naked singularities in Vaidya spacetimes: II. Classical and Quantum Gravity, 1991, 8, 1339-1348.	4.0	44
120	Singularities in a new class of inhomogeneous cosmological models. Physical Review Letters, 1991, 67, 2109-2109.	7.8	2
121	On singularity avoidance in quantum gravity. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1990, 105, 101-105.	0.2	2
122	Glueing Reissner-Nordstrom spacetimes along charged shells of matter. Classical and Quantum Gravity, 1990, 7, 41-49.	4.0	7
123	On the nature of naked singularities in Vaidya spacetimes. Classical and Quantum Gravity, 1989, 6, 1599-1606.	4.0	109
124	Causal functions in general relativity. II. General Relativity and Gravitation, 1989, 21, 1227-1231.	2.0	3
125	Constraints on the structure of naked singularities in classical general relativity. Annals of Physics, 1988, 182, 112-119.	2.8	7
126	On reflecting spacetimes. Classical and Quantum Gravity, 1988, 5, 19-25.	4.0	15

#	ARTICLE	IF	CITATIONS
127	Quantum effects near the black hole singularity. <i>Classical and Quantum Gravity</i> , 1988, 5, L191-L195.	4.0	4
128	Quantum effects in a homogeneous dust cloud collapse. <i>General Relativity and Gravitation</i> , 1987, 19, 1033-1042.	2.0	3
129	Quantum effects near the singularity in a general cosmological scenario. II. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 125, 181-183.	2.1	2
130	Quantum effects near the singularity in a general cosmological scenario. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 121, 334-336.	2.1	6
131	Cosmic censorship and topology change in general relativity. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 120, 111-114.	2.1	9
132	Bounds on vacuum energy density in a general cosmological scenario. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 120, 115-118.	2.1	5
133	Light-cone cuts of I^+ for charged-Kerr geometry. <i>General Relativity and Gravitation</i> , 1984, 16, 1157-1162.	2.0	4
134	Causal functions in general relativity. <i>General Relativity and Gravitation</i> , 1983, 15, 553-565.	2.0	7
135	Light cone cuts of null infinity in Schwarzschild geometry. <i>Journal of Mathematical Physics</i> , 1983, 24, 2490-2497.	1.1	11
136	Black hole physics in globally hyperbolic space-times. <i>Pramana - Journal of Physics</i> , 1982, 18, 385-396.	1.8	6
137	Neutrinos of non-zero mass in Friedmann universes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981, 85, 135-137.	2.1	0
138	Causality conditions and the lengths of nonspacelike curves. <i>General Relativity and Gravitation</i> , 1981, 13, 913-922.	2.0	0
139	On higher order causality violations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981, 85, 319-320.	2.1	8
140	Upper bounds on neutrino masses from the large-scale structure of space-time. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981, 85, 131-134.	2.1	5
141	On almost causality. <i>Journal of Mathematical Physics</i> , 1981, 22, 1243-1247.	1.1	14
142	Space-time singularities and microwave background radiation. <i>Pramana - Journal of Physics</i> , 1980, 15, 225-230.	1.8	2
143	Cosmic censorship. , 0, , 135-209.		0
144	Spherical collapse. , 0, , 60-134.		0

#	ARTICLE	IF	CITATIONS
145	The spacetime manifold. , 0 , 10-59.		0
146	Final fate of a massive star. , 0 , 210-254.		0