Pankaj S Joshi

List of Publications by Year
in descending order

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146	4,389	94433	133252
papers	citations	37 h-index	59 g-index

151	151	151	1049
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Naked singularities in spherically symmetric inhomogeneous Tolman-Bondi dust cloud collapse. Physical Review D, 1993, 47, 5357-5369.	4.7	264
2	RECENT DEVELOPMENTS IN GRAVITATIONAL COLLAPSE AND SPACETIME SINGULARITIES. International Journal of Modern Physics D, 2011, 20, 2641-2729.	2.1	183
3	Shadows of spherically symmetric black holes and naked singularities. Monthly Notices of the Royal Astronomical Society, 2019, 482, 52-64.	4.4	167
4	Distinguishing black holes from naked singularities through their accretion disc properties. Classical and Quantum Gravity, 2014, 31, 015002.	4.0	124
5	Why do naked singularities form in gravitational collapse?. Physical Review D, 2002, 65, .	4.7	119
6	The final fate of spherical inhomogeneous dust collapse. Classical and Quantum Gravity, 1996, 13, 559-571.	4.0	110
7	On the nature of naked singularities in Vaidya spacetimes. Classical and Quantum Gravity, 1989, 6, 1599-1606.	4.0	109
8	Circular geodesics and accretion disks in the Janis-Newman-Winicour and gamma metric spacetimes. Physical Review D, 2012, 85, .	4.7	104
9	Gravitational collapse: The story so far. Pramana - Journal of Physics, 2000, 55, 529-544.	1.8	101
10	Quantum Evaporation of a Naked Singularity. Physical Review Letters, 2006, 96, 031302.	7.8	94
11	Equilibrium configurations from gravitational collapse. Classical and Quantum Gravity, 2011, 28, 235018.	4.0	94
12	The structure of naked singularity in self-similar gravitational collapse. Communications in Mathematical Physics, 1992, 146, 333-342.	2.2	88
13	Role of initial data in the gravitational collapse of inhomogeneous dust. Physical Review D, 1995, 51, 6778-6782.	4.7	83
14	Kerr naked singularities as particle accelerators. Classical and Quantum Gravity, 2011, 28, 235012.	4.0	82
15	Initial data and the end state of spherically symmetric gravitational collapse. Classical and Quantum Gravity, 1999, 16, 41-59.	4.0	81
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	On the occurrence of naked singularity in spherically symmetric gravitational collapse. Communications in Mathematical Physics, 1994, 166, 117-128.	2.2	68
18	Cosmic censorship violation in non-self-similar Tolman-Bondi models. Classical and Quantum Gravity, 1992, 9, L69-L75.	4.0	65

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19	The final fate of spherical inhomogeneous dust collapse: II. Initial data and causal structure of the singularity. Classical and Quantum Gravity, 1996, 13, 3057-3067.	4.0	64
20	Can strong gravitational lensing distinguish naked singularities from black holes?. Physical Review D, 2012, 86, .	4.7	61
21	Spherical gravitational collapse in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>dimensions. Physical Review D, 2007, 76, .	4.7	58
22	Naked strong curvature singularities in Szekeres spacetimes. Classical and Quantum Gravity, 1996, 13, 3069-3074.	4.0	53
23	Destroying a near-extremal Kerr black hole with a charged particle: Can a test magnetic field serve as a cosmic censor?. Physical Review D, 2015, 91, .	4.7	50
24	Distinguishing Kerr naked singularities and black holes using the spin precession of a test gyro in strong gravitational fields. Physical Review D, 2017, 95, .	4.7	49
25	Naked singularities as particle accelerators. Physical Review D, 2010, 82, .	4.7	47
26	High energy particle collisions in superspinning Kerr geometry. Physical Review D, 2011, 84, .	4.7	46
27	Shadow of a naked singularity without photon sphere. Physical Review D, 2020, 102, .	4.7	46
28	On the nature of naked singularities in Vaidya spacetimes: II. Classical and Quantum Gravity, 1991, 8, 1339-1348.	4.0	44
29	Cosmic censorship and the role of pressure in gravitational collapse. Classical and Quantum Gravity, 1997, 14, 2195-2201.	4.0	44
30	Naked singularities as particle accelerators. II.. Physical Review D, 2011, 83, .	4.7	44
31	Nature of Singularity in Einstein-Massless Scalar Theory. International Journal of Modern Physics D, 1997, 06, 357-361.	2.1	43
32	Physical nature of the central singularity in spherical collapse. Physical Review D, 1999, 59, .	4.7	43
33	Acceleration of particles and shells by Reissner-NordstrÃ¶m naked singularities. Physical Review D, 2012, 86, .	4.7	42
34	Timelike geodesics in naked singularity and black hole spacetimes. Physical Review D, 2019, 100, .	4.7	42
35	Initial data and the final fate of inhomogeneous dust collapse. Classical and Quantum Gravity, 1997, 14, 1223-1236.	4.0	40
36	Gravitational collapse and the cosmological constant. Physical Review D, 2001, 63, .	4.7	40

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37	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
38	Shadows and negative precession in non-Kerr spacetime. Physical Review D, 2021, 103, .	4.7	37
39	Ultrahigh energy particle collisions in a regular spacetime without black holes or naked singularities. Physical Review D, 2012, 86, .	4.7	35
40	Acceleration of particles by Janis-Newman-Winicour singularities. Physical Review D, 2012, 85, .	4.7	34
41	Why do naked singularities form in gravitational collapse? II. Physical Review D, 2004, 70, .	4.7	33
42	Shadow of nulllike and timelike naked singularities without photon spheres. Physical Review D, 2021, 103, .	4.7	32
43	Spin precession in a black hole and naked singularity spacetimes. Physical Review D, 2017, 95, .	4.7	31
44	Cosmic censorship in higher dimensions. Physical Review D, 2004, 69, .	4.7	30
45	On the Global Visibility of the Singularity in Quasi-Spherical Collapse. General Relativity and Gravitation, 1998, 30, 1477-1499.	2.0	29
46	Optimal Design of Unitized Structures Using Response Surface Approaches. Journal of Aircraft, 2010, 47, 1898-1906.	2.4	29
47	Thin accretion disk in the Simpson-Visser black-bounce and wormhole spacetimes. Physical Review D, 2022, 105, .	4.7	29
48	Time delay between relativistic images as a probe of cosmic censorship. Physical Review D, 2013, 88, .	4.7	28
49	Gravitational collapse of an isentropic perfect fluid with a linear equation of state. Classical and Quantum Gravity, 2004, 21, 3645-3653.	4.0	27
50	The structure of naked singularity in self-similar gravitational collapse: II. Letters in Mathematical Physics, 1993, 27, 235-238.	1.1	25
51	Initial data and spherical dust collapse. Physical Review D, 2000, 62, .	4.7	25
52	Vibro-Acoustic Optimization of Turbulent Boundary Layer Excited Panel with Curvilinear Stiffeners. Journal of Aircraft, 2012, 49, 52-65.	2.4	25
53	Infinite efficiency of the collisional Penrose process: Can a overspinning Kerr geometry be the source of ultrahigh-energy cosmic rays and neutrinos?. Physical Review D, 2016, 93, .	4.7	24
54	Design Optimization for Minimum Sound Radiation from Point-Excited Curvilinearly Stiffened Panel. Journal of Aircraft, 2010, 47, 1100-1110.	2.4	23

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55	GENERICITY ASPECTS IN GRAVITATIONAL COLLAPSE TO BLACK HOLES AND NAKED SINGULARITIES. International Journal of Modern Physics D, 2012, 21, 1250066.	2.1	23
56	Perihelion precession and shadows near black holes and naked singularities. Physical Review D, 2020, 102, .	4.7	23
57	Black hole formation in perfect fluid collapse. Physical Review D, 2004, 69, .	4.7	22
58	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
59	Strong curvature naked singularities in spherically symmetric perfect fluid collapse. Physical Review D, 2020, 101, .	4.7	22
60	COSMIC CENSORSHIP: A CURRENT PERSPECTIVE. Modern Physics Letters A, 2002, 17, 1067-1079.	1.2	21
61	Spherical dust collapse in higher dimensions. Physical Review D, 2004, 69, .	4.7	21
62	Gravitational collapse in asymptotically antiâ€“de Sitter or de Sitter backgrounds. Physical Review D, 2005, 72, .	4.7	21
63	Strong curvature naked singularities in non-self-similar gravitational collapse. General Relativity and Gravitation, 1992, 24, 129-137.	2.0	20
64	GAMMA-RAY BURSTS AS THE BIRTH-CRIES OF BLACK HOLES. Modern Physics Letters A, 2000, 15, 991-995.	1.2	19
65	Role of initial data in spherical collapse. Physical Review D, 2004, 69, .	4.7	19
66	GRAVITATIONAL COLLAPSE OF A SELF-INTERACTING SCALAR FIELD. Modern Physics Letters A, 2007, 22, 65-74.	1.2	18
67	NAKED SINGULARITIES AS CANDIDATES FOR GAMMA-RAY BURSTERS. International Journal of Modern Physics D, 1994, 03, 647-651.	2.1	16
68	Timelike naked singularity. Physical Review D, 2004, 70, .	4.7	16
69	GRAVITATIONAL COLLAPSE WITH TANGENTIAL PRESSURE. International Journal of Modern Physics D, 2011, 20, 463-495.	2.1	16
70	Precession of timelike bound orbits in Kerr spacetime. European Physical Journal C, 2021, 81, 1.	3.9	16
71	Shadows and precession of orbits in rotating Janisâ€“Newmanâ€“Winicour spacetime. European Physical Journal C, 2022, 82, 1.	3.9	16
72	On reflecting spacetimes. Classical and Quantum Gravity, 1988, 5, 19-25.	4.0	15

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73	Instability of black hole formation in gravitational collapse. Physical Review D, 2011, 83, .	4.7	15
74	Ultrahigh energy collision with neither black hole nor naked singularity. Physical Review D, 2013, 87, .	4.7	15
75	Global visibility of a strong curvature singularity in nonmarginally bound dust collapse. Physical Review D, 2020, 102, .	4.7	15
76	On almost causality. Journal of Mathematical Physics, 1981, 22, 1243-1247.	1.1	14
77	Accretion disks around naked singularities. Classical and Quantum Gravity, 2021, 38, 035012.	4.0	14
78	Naked singularities in non-self-similar gravitational collapse of radiation shells. Physical Review D, 1992, 45, 2147-2150.	4.7	12
79	Reply to Unnikrishnan on naked singularities. General Relativity and Gravitation, 1995, 27, 921-932.	2.0	12
80	On trapped surface formation in gravitational collapse. Classical and Quantum Gravity, 2007, 24, 2917-2928.	4.0	12
81	COLLAPSE AND DISPERSAL IN MASSLESS SCALAR FIELD MODELS. International Journal of Modern Physics D, 2011, 20, 1123-1133.	2.1	12
82	On the stability of a superspinar. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 410-413.	4.1	12
83	Gravitomagnetism and pulsar beam precession near a Kerr black hole. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3262-3286.	4.4	12
84	Light cone cuts of null infinity in Schwarzschild geometry. Journal of Mathematical Physics, 1983, 24, 2490-2497.	1.1	11
85	Instability of black hole formation under small pressure perturbations. General Relativity and Gravitation, 2013, 45, 305-317.	2.0	11
86	SHELL-CROSSINGS IN GRAVITATIONAL COLLAPSE. International Journal of Modern Physics D, 2013, 22, 1350027.	2.1	11
87	Spacetime Singularities. Springer Handbooks, 2014, , 409-436.	0.6	11
88	Gravitational collapse from smooth initial data with vanishing radial pressure. Classical and Quantum Gravity, 2005, 22, 271-282.	4.0	10
89	Naked Singularities. Scientific American, 2009, 300, 36-43.	1.0	10
90	Particle acceleration by Majumdarâ€“Papapetrou di-hole. General Relativity and Gravitation, 2014, 46, 1.	2.0	10

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91	Globally visible singularity in an astrophysical setup. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4743-4750.	4.4	10
92	Cosmic censorship and topology change in general relativity. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 111-114.	2.1	9
93	Structure of nonspacelike geodesics in dust collapse. Physical Review D, 2000, 63, .	4.7	9
94	Gravitational collapse in a constant potential bath. Physical Review D, 2001, 63, .	4.7	9
95	Appearance of the central singularity in spherical collapse. Physical Review D, 2002, 65, .	4.7	9
96	On higher order causality violations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 85, 319-320.	2.1	8
97	Tolman-Bondi-Lemaitre cell model for the universe and gravitational collapse. Physical Review D, 2001, 63, .	4.7	8
98	On the genericity of spacetime singularities. Pramana - Journal of Physics, 2007, 69, 119-135.	1.8	8
99	Accelerated cosmic expansion in a scalar-field universe. Physical Review D, 2010, 81, .	4.7	8
100	Gravitational collapse in (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 T	4.7	8
101	Causal functions in general relativity. General Relativity and Gravitation, 1983, 15, 553-565.	2.0	7
102	Constraints on the structure of naked singularities in classical general relativity. Annals of Physics, 1988, 182, 112-119.	2.8	7
103	Glueing Reissner-Nordstrom spacetimes along charged shells of matter. Classical and Quantum Gravity, 1990, 7, 41-49.	4.0	7
104	Strengths of naked singularities in radiation collapse with nonlinear mass functions. Journal of Mathematical Physics, 1991, 32, 2167-2168.	1.1	7
105	Compact objects from gravitational collapse: an analytical toy model. European Physical Journal C, 2015, 75, 1.	3.9	7
106	Black hole physics in globally hyperbolic space-times. Pramana - Journal of Physics, 1982, 18, 385-396.	1.8	6
107	Quantum effects near the singularity in a general cosmological scenario. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 121, 334-336.	2.1	6
108	Cosmic censorship in higher dimensions. II.. Physical Review D, 2005, 72, .	4.7	6

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109	Interior dynamics of neutral and charged black holes. Physical Review D, 2015, 92, .	4.7	6
110	All black holes in LemaÃ®treâ€“Tolmanâ€“Bondi inhomogeneous dust collapse. Classical and Quantum Gravity, 2015, 32, 145004.	4.0	6
111	Genericity aspects of black hole formation in the collapse of spherically symmetric slightly inhomogeneous perfect fluids. International Journal of Modern Physics D, 2016, 25, 1650023.	2.1	6
112	Upper bounds on neutrino masses from the large-scale structure of space-time. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 85, 131-134.	2.1	5
113	Bounds on vacuum energy density in a general cosmological scenario. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 115-118.	2.1	5
114	Visibility of a spacetime singularity. Physical Review D, 2007, 75, .	4.7	5
115	How small can an over-spinning body be in general relativity?. Physical Review D, 2014, 90, .	4.7	5
116	Timescale for trans-Planckian collisions in Kerr spacetime. Europhysics Letters, 2015, 110, 30004.	2.0	5
117	Finite escape fraction for ultrahigh energy collisions around Kerr naked singularity. Pramana - Journal of Physics, 2015, 84, 491-501.	1.8	5
118	Spherical vacuum and scalar collapse for the Starobinsky<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>R</mml:mi><mml:mn>2</mml:mn></mml:msup></mml:math>model. Physical Review D, 2016, 94, .	4.7	5
119	Gravitational collapse of baryonic and dark matter. Arabian Journal of Mathematics, 2019, 8, 269-292.	0.9	5
120	Light-cone cuts of I+ for charged-Kerr geometry. General Relativity and Gravitation, 1984, 16, 1157-1162.	2.0	4
121	Quantum effects near the black hole singularity. Classical and Quantum Gravity, 1988, 5, L191-L195.	4.0	4
122	Critical Collapse of Einstein Cluster. Progress of Theoretical Physics, 2007, 118, 865-878.	2.0	4
123	Strength of the naked singularity in critical collapse. European Physical Journal C, 2020, 80, 1.	3.9	4
124	Causal structure of singularity in non-spherical gravitational collapse. European Physical Journal C, 2022, 82, .	3.9	4
125	Quantum effects in a homogeneous dust cloud collapse. General Relativity and Gravitation, 1987, 19, 1033-1042.	2.0	3
126	Causal functions in general relativity. II. General Relativity and Gravitation, 1989, 21, 1227-1231.	2.0	3

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127	Singularity resolution in gravitational collapse. Physical Review D, 2022, 105, .	4.7	3
128	Space-time singularities and microwave background radiation. Pramana - Journal of Physics, 1980, 15, 225-230.	1.8	2
129	Quantum effects near the singularity in a general cosmological scenario. II. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 125, 181-183.	2.1	2
130	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
131	Singularities in a new class of inhomogeneous cosmological models. Physical Review Letters, 1991, 67, 2109-2109.	7.8	2
132	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
133	Mass inflation and curvature divergence near the central singularity in spherical collapse. Physical Review D, 2015, 92, .	4.7	2
134	Key problems in black hole physics today. , 2011, , 101-119.		1
135	STATIC SPHERICALLY SYMMETRIC SCALAR FIELD SPACETIMES WITH C⁰ MATCHING. Modern Physics Letters A, 2011, 26, 1281-1290.	1.2	1
136	Black Hole Paradoxes. Journal of Physics: Conference Series, 2016, 759, 012060.	0.4	1
137	An approach to stability analyses in general relativity via symplectic geometry. Arabian Journal of Mathematics, 2019, 8, 315-333.	0.9	1
138	Neutrinos of non-zero mass in Friedmann universes. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 85, 135-137.	2.1	0
139	Causality conditions and the lengths of nonspacelike curves. General Relativity and Gravitation, 1981, 13, 913-922.	2.0	0
140	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
141	Cosmic censorship. , 0, , 135-209.		0
142	Spherical collapse. , 0, , 60-134.		0
143	The spacetime manifold. , 0, , 10-59.		0
144	Final fate of a massive star. , 0, , 210-254.		0

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145	Interior Dynamics of Neutral and Charged Black Holes in f(R) Gravity. Universe, 2015, 1, 239-291.	2.5	0
146	Self-similarity and Criticality in Gravitational Collapse. Fundamental Theories of Physics, 2017, , 117-126.	0.3	0