

Roman A Konoplya

List of Publications by Year in descending order

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113
papers

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citations

47006

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58581

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114
all docs

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docs citations

114
times ranked

1908
citing authors

#	ARTICLE	IF	CITATIONS
1	Quasinormal modes of black holes: From astrophysics to string theory. <i>Reviews of Modern Physics</i> , 2011, 83, 793-836.	45.6	850
2	Quasinormal behavior of the D -dimensional Schwarzschild black hole and the higher order WKB approach. <i>Physical Review D</i> , 2003, 68, .	4.7	471
3	New method for shadow calculations: Application to parametrized axisymmetric black holes. <i>Physical Review D</i> , 2016, 94, .	4.7	219
4	General parametrization of axisymmetric black holes in metric theories of gravity. <i>Physical Review D</i> , 2016, 93, .	4.7	178
5	Are eikonal quasinormal modes linked to the unstable circular null geodesics?. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 771, 597-602.	4.1	177
6	Quasinormal frequencies of Schwarzschild black holes in anti-de Sitter spacetimes: A complete study of the overtone asymptotic behavior. <i>Physical Review D</i> , 2003, 68, .	4.7	175
7	Shadow of a black hole surrounded by dark matter. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 795, 1-6.	4.1	172
8	Higher order WKB formula for quasinormal modes and grey-body factors: recipes for quick and accurate calculations. <i>Classical and Quantum Gravity</i> , 2019, 36, 155002.	4.0	170
9	Detection of gravitational waves from black holes: Is there a window for alternative theories?. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 756, 350-353.	4.1	167
10	Quasinormal modes of a small Schwarzschild anti-de Sitter black hole. <i>Physical Review D</i> , 2002, 66, .	4.7	152
11	BlackHoleCam: Fundamental physics of the galactic center. <i>International Journal of Modern Physics D</i> , 2017, 26, 1730001.	2.1	148
12	Instabilities of wormholes and regular black holes supported by a phantom scalar field. <i>Physical Review D</i> , 2012, 86, .	4.7	137
13	Quasinormal modes, stability and shadows of a black hole in the 4D Einstein-Gauss-Bonnet gravity. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	121
14	Towards constraining of the Horava-Lifshitz gravities. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2009, 679, 499-503.	4.1	119
15	Gravitational quasinormal radiation of higher-dimensional black holes. <i>Physical Review D</i> , 2003, 68, .	4.7	116
16	Quasinormal modes of the charged black hole in Gauss-Bonnet gravity. <i>Physical Review D</i> , 2005, 71, .	4.7	109
17	Wormholes versus black holes: quasinormal ringing at early and late times. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 043-043.	5.4	99
18	Decay of massive scalar field in a Schwarzschild background. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2005, 609, 377-384.	4.1	96

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19	Stability and quasinormal modes of the massive scalar field around Kerr black holes. Physical Review D, 2006, 73, .	4.7	89
20	(In)stability of D -dimensional black holes in Gauss-Bonnet theory. Physical Review D, 2008, 77, .	4.7	86
21	Instability of Higher-Dimensional Charged Black Holes in the deSitter World. Physical Review Letters, 2009, 103, 161101.	7.8	86
22	Massive charged scalar field in a Reissner-Nordstrom black hole background: quasinormal ringing. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 550, 117-120.	4.1	84
23	Black holes in the four-dimensional Einstein-Lovelock gravity. Physical Review D, 2020, 101, .	4.7	79
24	Stability of multidimensional black holes: Complete numerical analysis. Nuclear Physics B, 2007, 777, 182-202.	2.5	74
25	Scalar field evolution in Gauss-Bonnet black holes. Physical Review D, 2005, 72, .	4.7	73
26	Quasinormal modes of brane-localized standard model fields. Physical Review D, 2006, 73, .	4.7	72
27	Analytical representation for metrics of scalarized Einstein-Maxwell black holes and their shadows. Physical Review D, 2019, 100, .	4.7	70
28	Stability of higher dimensional Reissner-Nordström-anti-de Sitter black holes. Physical Review D, 2008, 78, .	4.7	68
29	Holographic conductivity of zero temperature superconductors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 686, 199-206.	4.1	62
30	Passage of radiation through wormholes of arbitrary shape. Physical Review D, 2010, 81, .	4.7	62
31	Quasinormal modes, scattering, and Hawking radiation in the vicinity of an Einstein-dilaton-Gauss-Bonnet black hole. Physical Review D, 2019, 99, .	4.7	60
32	(In)stability of black holes in the d -dimensional Einstein-Gauss-Bonnet and Einstein-Lovelock gravities. Physics of the Dark Universe, 2020, 30, 100697.	4.9	60
33	Massive charged scalar field in the Kerr-Newman background: Quasinormal modes, late-time tails and stability. Physical Review D, 2013, 88, .	4.7	59
34	Perturbations and quasi-normal modes of black holes in Einstein-Aether theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 644, 186-191.	4.1	58
35	Gravitational instability of simply rotating AdS black holes in higher dimensions. Physical Review D, 2009, 79, .	4.7	58
36	Non-Schwarzschild black-hole metric in four dimensional higher derivative gravity: Analytical approximation. Physical Review D, 2017, 96, .	4.7	57

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37	Grey-body factors and Hawking radiation of black holes in 4D Einstein-Gauss-Bonnet gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 810, 135793.	4.1	57
38	Scalar field perturbations of the Schwarzschild black hole in the Gödel universe. Physical Review D, 2005, 71, .	4.7	56
39	Massive vector field perturbations in the Schwarzschild background: Stability and quasinormal spectrum. Physical Review D, 2006, 73, .	4.7	55
40	Echoes of compact objects: New physics near the surface and matter at a distance. Physical Review D, 2019, 99, .	4.7	55
41	Quantum corrected black holes: Quasinormal modes, scattering, shadows. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 804, 135363.	4.1	54
42	Ringing wormholes. Physical Review D, 2005, 71, .	4.7	51
43	Evolution of perturbations of squashed Kaluza-Klein black holes: Escape from instability. Physical Review D, 2008, 77, .	4.7	51
44	The portrait of eikonal instability in Lovelock theories. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 050-050.	5.4	51
45	Einstein-scalar-Gauss-Bonnet black holes: Analytical approximation for the metric and applications to calculations of shadows. Physical Review D, 2020, 101, .	4.7	49
46	Entropic force, holography and thermodynamics for static space-times. European Physical Journal C, 2010, 69, 555-562.	3.9	48
47	Quasinormal modes and a new instability of Einstein-Gauss-Bonnet black holes in the de Sitter world. Physical Review D, 2016, 93, .	4.7	48
48	Quasinormal modes of black holes immersed in a strong magnetic field. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 659, 375-379.	4.1	47
49	Charged scalar field instability between the event and cosmological horizons. Physical Review D, 2014, 90, .	4.7	47
50	Echoes in brane worlds: Ringing at a black hole-wormhole transition. Physical Review D, 2020, 101, .	4.7	47
51	Letter: Quasinormal Modes of the Electrically Charged Dilaton Black Hole. General Relativity and Gravitation, 2002, 34, 329-335.	2.0	46
52	How to tell the shape of a wormhole by its quasinormal modes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 43-49.	4.1	45
53	Traversable Wormholes in General Relativity. Physical Review Letters, 2022, 128, 091104.	7.8	45
54	Superradiant instability for black holes immersed in a magnetic field. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 666, 283-287.	4.1	44

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55	Decay of a charged scalar and Dirac fields in the Kerr-Newman-de Sitter background. <i>Physical Review D</i> , 2007, 76, .	4.7	41
56	Late time tails of the massive vector field in a black hole background. <i>Physical Review D</i> , 2007, 75, .	4.7	40
57	Eikonal instability of Gauss-Bonnet“(anti-)”de Sitter black holes. <i>Physical Review D</i> , 2017, 95, .	4.7	40
58	General parametrization of wormhole spacetimes and its application to shadows and quasinormal modes. <i>Physical Review D</i> , 2021, 103, .	4.7	40
59	Quasinormal modes of brane-localized standard model fields. II. Kerr black holes. <i>Physical Review D</i> , 2006, 74, .	4.7	39
60	Long life of Gauss-Bonnet corrected black holes. <i>Physical Review D</i> , 2010, 82, .	4.7	38
61	Quasinormal modes of Gauss-Bonnet-AdS black holes: towards holographic description of finite coupling. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	38
62	Axisymmetric black holes allowing for separation of variables in the Klein-Gordon and Hamilton-Jacobi equations. <i>Physical Review D</i> , 2018, 97, .	4.7	37
63	Gravitational spectrum of black holes in the Einstein”Aether theory. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 648, 236-239.	4.1	36
64	Arbitrarily long-lived quasinormal modes in a wormhole background. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 802, 135207.	4.1	36
65	Influence of the back reaction of the Hawking radiation upon black hole quasinormal modes. <i>Physical Review D</i> , 2004, 70, .	4.7	35
66	Quasinormal modes, scattering, and Hawking radiation of Kerr-Newman black holes in a magnetic field. <i>Physical Review D</i> , 2011, 83, .	4.7	34
67	Looking at the Gregory-Laflamme instability through quasinormal modes. <i>Physical Review D</i> , 2008, 78, .	4.7	33
68	No stable wormholes in Einstein-dilaton-Gauss-Bonnet theory. <i>Physical Review D</i> , 2018, 98, .	4.7	33
69	Shadows of parametrized axially symmetric black holes allowing for separation of variables. <i>Physical Review D</i> , 2021, 103, .	4.7	33
70	Gravitational stability of simply rotating Myers-Perry black holes: Tensorial perturbations. <i>Physical Review D</i> , 2010, 81, .	4.7	32
71	Analytical approximation for the Einstein-dilaton-Gauss-Bonnet black hole metric. <i>Physical Review D</i> , 2017, 96, .	4.7	32
72	Quasinormal modes and Hawking radiation of black holes in cubic gravity. <i>Physical Review D</i> , 2020, 102, .	4.7	32

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73	General parametrization of black holes: The only parameters that matter. <i>Physical Review D</i> , 2020, 101, .	4.7	32
74	Wormholes without exotic matter: quasinormal modes, echoes and shadows. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 010.	5.4	32
75	High overtones of Dirac perturbations of a Schwarzschild black hole. <i>Physical Review D</i> , 2005, 71, .	4.7	31
76	Hawking radiation of non-Schwarzschild black holes in higher derivative gravity: A crucial role of grey-body factors. <i>Physical Review D</i> , 2019, 99, .	4.7	31
77	Magnetised black hole as a gravitational lens. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 644, 219-223.	4.1	30
78	Particle motion around magnetized black holes: Preston-Poisson space-time. <i>Physical Review D</i> , 2006, 74, .	4.7	28
79	Graviton emission in the bulk by a simply rotating black hole. <i>Physical Review D</i> , 2009, 80, .	4.7	28
80	Stable Schwarzschild stars as black-hole mimickers. <i>Physical Review D</i> , 2019, 100, .	4.7	28
81	Instability of D -dimensional extremally charged Reissner-Nordström (-de Sitter) black holes: Extrapolation to arbitrary D . <i>Physical Review D</i> , 2014, 89, .	4.7	27
82	Solutions of the Einstein Equations for a Black Hole Surrounded by a Galactic Halo. <i>Astrophysical Journal</i> , 2022, 933, 166.	4.5	27
83	Quasinormal modes of massive fermions in Kerr spacetime: Long-lived modes and the fine structure. <i>Physical Review D</i> , 2018, 97, .	4.7	26
84	Black holes in galactic centers: Quasinormal ringing, grey-body factors and Unruh temperature. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 823, 136734.	4.1	25
85	Massive nonminimally coupled scalar field in Reissner-Nordström spacetime: Long-lived quasinormal modes and instability. <i>Physical Review D</i> , 2018, 98, .	4.7	23
86	Iron line spectroscopy with Einstein-Gauss-Bonnet black holes. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 781, 626-632.	4.1	23
87	Quasinormal modes of a scalar field in the Einstein-Gauss-Bonnet-AdS black hole background: Perturbative and nonperturbative branches. <i>Physical Review D</i> , 2017, 95, .	4.7	23
88	BTZ black holes with higher curvature corrections in the 3D Einstein-Lovelock gravity. <i>Physical Review D</i> , 2020, 102, .	4.7	22
89	Superluminal neutrinos and the tachyon stability in the rotating Universe. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 706, 451-455.	4.1	20
90	4D Einstein-Lovelock black holes: Hierarchy of orders in curvature. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 807, 135607.	4.1	20

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91	Superradiance and instability of the charged Myers-Perry black holes in the Gödel universe. Physical Review D, 2011, 84, .	4.7	18
92	Bifurcation of the quasinormal spectrum and zero damped modes for rotating dilatonic black holes. Physical Review D, 2015, 92, .	4.7	17
93	Analytic formula for quasinormal modes in the near-extreme Kerr-Newman-de Sitter spacetime governed by a non-Pöschl-Teller potential. Physical Review D, 2022, 105, .	4.7	17
94	Erratum to "Superradiant instability for black holes immersed in a magnetic field" [Phys. Lett. B 666 (2008) 283]. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 670, 459.	4.1	16
95	Blandford-Znajek mechanism in the general stationary axially-symmetric black-hole spacetime. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 002.	5.4	16
96	Split structures in general relativity and the Kaluza-Klein theories. Journal of Mathematical Physics, 1999, 40, 955-979.	1.1	13
97	Radiation processes in the vicinity of non-Schwarzschild and non-Kerr black holes. Physical Review D, 2013, 87, .	4.7	13
98	Quantum corrections to the noncommutative kink. Journal of High Energy Physics, 2008, 2008, 068-068.	4.7	12
99	Inverse problem for Hawking radiation. Physical Review D, 2019, 99, .	4.7	10
100	Conformal Weyl gravity via two stages of quasinormal ringing and late-time behavior. Physical Review D, 2021, 103, .	4.7	10
101	Perturbations of Schwarzschild black holes in laboratories. Classical and Quantum Gravity, 2007, 24, 5901-5909.	4.0	8
102	AdS-like spectrum of the asymptotically Gödel space-times. Physical Review D, 2011, 84, .	4.7	8
103	Motion of charged particles and quasinormal modes around the magnetically and tidally deformed black hole. Physical Review D, 2012, 86, .	4.7	8
104	Quasinormal ringing of general spherically symmetric parametrized black holes. Physical Review D, 2022, 105, .	4.7	8
105	Massive charged scalar field in the Kerr-Newman background: Hawking radiation. Physical Review D, 2014, 89, .	4.7	7
106	Stability of tardyons and tachyons in the rotating and expanding Universe. Physical Review D, 2012, 86, .	4.7	6
107	Simply rotating higher dimensional black holes in Einstein-Gauss-Bonnet theory. Physical Review D, 2020, 102, .	4.7	6
108	General parametrization of higher-dimensional black holes and its application to Einstein-Lovelock theory. Physical Review D, 2020, 102, .	4.7	5

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109	Massive particles in the Einstein–Lovelock anti-de Sitter black hole spacetime. <i>Classical and Quantum Gravity</i> , 2021, 38, 045015.	4.0	3
110	Small perturbations in general relativity: tensor harmonics of arbitrary symmetry. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2000, 268, 37-44.	2.1	2
111	High overtones of dirac perturbations of a Schwarzschild black hole and the area spectrum of quantum black holes. <i>Brazilian Journal of Physics</i> , 2005, 35, 1149-1150.	1.4	2
112	The generalized Casimir operator and tensor representations of groups. <i>Journal of Mathematical Physics</i> , 2000, 41, 2299-2309.	1.1	0
113	Holographic Picture Of Quantum Matter: From Black Holes To Quark-gluon Plasma. , 2017, , .		0