Kouji Nakamura

List of Publications by Year
in descending order

71	4,916	28	67
papers	citations	h-index	g-index
		185998	98622

75	75	75	4213
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	8.2	808
2	Detector configuration of KAGRAâ€"the Japanese cryogenic gravitational-wave detector. Classical and Quantum Gravity, 2012, 29, 124007.	1.5	726
3	The Japanese space gravitational wave antenna: DECIGO. Classical and Quantum Gravity, 2011, 28, 094011.	1.5	456
4	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	8.2	447
5	The Japanese space gravitational wave antennaâ€"DECIGO. Classical and Quantum Gravity, 2006, 23, S125-S131.	1.5	388
6	KAGRA: 2.5 generation interferometric gravitational wave detector. Nature Astronomy, 2019, 3, 35-40.	4.2	331
7	Overview of KAGRA: Detector design and construction history. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	198
8	Current status of space gravitational wave antenna DECIGO and B-DECIGO. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	150
9	The status of DECIGO. Journal of Physics: Conference Series, 2017, 840, 012010.	0.3	148
10	Second-Order Gauge Invariant Cosmological Perturbation Theory. Progress of Theoretical Physics, 2007, 117, 17-74.	2.0	108
11	Construction of KAGRA: an underground gravitational-wave observatory. Progress of Theoretical and Experimental Physics, 2018, 2018, .	1.8	73
12	Space gravitational-wave antennas DECIGO and B-DECIGO. International Journal of Modern Physics D, 2019, 28, 1845001.	0.9	73
13	Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	66
14	Evaluation of weak measurements to all orders. Physical Review A, 2012, 85, .	1.0	60
15	Critical Behavior of Black Hole Formation in a Scalar Wave Collapse. Progress of Theoretical Physics, 1994, 91, 1265-1270.	2.0	54
16	Gauge Invariant Variables in Two-Parameter Nonlinear Perturbations. Progress of Theoretical Physics, 2003, 110, 723-755.	2.0	54
17	Gauge-invariant formulation of second-order cosmological perturbations. Physical Review D, 2006, 74, .	1.6	50
18	The Japanese space gravitational wave antenna - DECIGO. Journal of Physics: Conference Series, 2008, 122, 012006.	0.3	46

#	Article	IF	Citations
19	First cryogenic test operation of underground km-scale gravitational-wave observatory KAGRA. Classical and Quantum Gravity, 2019, 36, 165008.	1.5	45
20	DECIGO and DECIGO pathfinder. Classical and Quantum Gravity, 2010, 27, 084010.	1.5	39
21	Second-Order Gauge-Invariant Cosmological Perturbation Theory: Current Status. Advances in Astronomy, 2010, 2010, 1-26.	0.5	36
22	Weak-value amplification in a shot-noise-limited interferometer. Physical Review A, 2012, 85, .	1.0	36
23	The Japanese space gravitational wave antenna; DECIGO. Journal of Physics: Conference Series, 2008, 120, 032004.	0.3	34
24	Second-Order Gauge Invariant Perturbation Theory: -- Perturbative Curvatures in the Two-Parameter Case --. Progress of Theoretical Physics, 2005, 113, 481-511.	2.0	33
25	SEARCH FOR NEUTRINOS IN SUPER-KAMIOKANDE ASSOCIATED WITH GRAVITATIONAL-WAVE EVENTS GW150914 AND GW151226. Astrophysical Journal Letters, 2016, 830, L11.	3.0	32
26	Surface gravity in dynamical spherically symmetric spacetimes. Physical Review D, 1996, 54, 3882-3891.	1.6	31
27	Overview of KAGRA: KAGRA science. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	31
28	DECIGO: The Japanese space gravitational wave antenna. Journal of Physics: Conference Series, 2009, 154, 012040.	0.3	30
29	A SEARCH FOR ELECTRON ANTINEUTRINOS ASSOCIATED WITH GRAVITATIONAL-WAVE EVENTS GW150914 AND GW151226 USING KAMLAND. Astrophysical Journal Letters, 2016, 829, L34.	3.0	21
30	Perturbations of matter fields in the second-order gauge-invariant cosmological perturbation theory. Physical Review D, 2009, 80, .	1.6	20
31	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
32	DECIGO pathfinder. Classical and Quantum Gravity, 2009, 26, 094019.	1.5	18
33	Dynamics of a string coupled to gravitational waves: Gravitational wave scattering by a Nambu-Goto straight string. Physical Review D, 2000, 62, .	1.6	16
34	Dynamics of a string coupled to gravitational waves. II. Perturbations propagate along an infinite Nambu-Goto string. Physical Review D, 2001, 63, .	1.6	14
35	Causal structure and gravitational waves in brane world cosmology. Physical Review D, 2004, 70, .	1.6	14
36	The Current Status and Future Prospects of KAGRA, the Large-Scale Cryogenic Gravitational Wave Telescope Built in the Kamioka Underground. Galaxies, 2022, 10, 63.	1.1	13

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37	The status of KAGRA underground cryogenic gravitational wave telescope. Journal of Physics: Conference Series, 2020, 1342, 012014.	0.3	12
38	Relativistic Zelâ€™dovich approximation in a spherically symmetric model. Physical Review D, 1998, 57, 6094-6103.	1.6	11
39	Comparing two different formulations of metric cosmological perturbation theory. Classical and Quantum Gravity, 2011, 28, 225024.	1.5	11
40	Quantum Fluctuations of Black Hole Geometry. Progress of Theoretical Physics, 1993, 90, 861-870.	2.0	10
41	Consistency of Equations in the Second-Order Gauge- Invariant Cosmological Perturbation Theory. Progress of Theoretical Physics, 2009, 121, 1321-1360.	2.0	10
42	An arm length stabilization system for KAGRA and future gravitational-wave detectors. Classical and Quantum Gravity, 2020, 37, 035004.	1.5	10
43	Quantum formation of black holes and wormholes in the gravitational collapse of a dust shell. Physical Review D, 1996, 53, 4356-4365.	1.6	9
44	Vibration isolation system with a compact damping system for power recycling mirrors of KAGRA. Classical and Quantum Gravity, 2019, 36, 095015.	1.5	9
45	The hoop conjecture and cosmic censorship in the brane-world. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 564, 143-148.	1.5	8
46	Comparison of the Oscillatory Behavior of a Gravitating Nambu-Goto String and a Test String. Progress of Theoretical Physics, 2003, 110, 201-232.	2.0	7
47	General formulation of general-relativistic higher-order gauge-invariant perturbation theory. Classical and Quantum Gravity, 2011, 28, 122001.	1.5	7
48	Application of independent component analysis to the iKAGRA data. Progress of Theoretical and Experimental Physics, 2020, 2020, .	1.8	7
49	Vibration isolation systems for the beam splitter and signal recycling mirrors of the KAGRA gravitational wave detector. Classical and Quantum Gravity, 2021, 38, 065011.	1.5	7
50	Construction of gauge-invariant variables of linear metric perturbations on an arbitrary background spacetime. Progress of Theoretical and Experimental Physics, 2013, 2013, 43E02-0.	1.8	6
51	DECIGO pathfinder. Journal of Physics: Conference Series, 2008, 120, 032005.	0.3	5
52	Recursive structure in the definitions of gauge-invariant variables for any order perturbations. Classical and Quantum Gravity, 2014, 31, 135013.	1.5	5
53	Theory and Applications of Physical Science Vol. 3. , 2020, , .		5
54	Does a Nambu-Goto wall emit gravitational waves? Cylindrical Nambu-Goto wall as an example of gravitating nonspherical walls. Physical Review D, 2002, 66, .	1.6	4

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55	Evaporation of a Collapsing Shell with Scalar Field Production. Progress of Theoretical Physics, 1993, 89, 77-87.	2.0	3
56	Initial condition of a gravitating thick loop cosmic string and linear perturbations. Classical and Quantum Gravity, 2002, 19, 783-797.	1.5	3
57	Hoop Conjecture and Black Holes on a Brane. Progress of Theoretical Physics Supplement, 2002, 148, 291-297.	0.2	2
58	The continuous limit of the multiple lens effect and the optical scalar equation. Monthly Notices of the Royal Astronomical Society, 2005, 358, 39-48.	1.6	2
59	GAUGE-INVARIANT VARIABLES IN GENERAL-RELATIVISTIC PERTURBATIONS: GLOBALIZATION AND ZERO-MODE PROBLEM. International Journal of Modern Physics D, 2012, 21, 1242004.	0.9	2
60	Reinterpretations of an experiment on the backaction in a weak measurement. Physical Review A, 2013, 88, .	1.0	2
61	Proposal of a gauge-invariant treatment of l = 0, 1-mode perturbations on Schwarzschild background spacetime. Classical and Quantum Gravity, 2021, 38, 145010.	1.5	2
62	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
63	A renormalization scheme for the strong-coupling Î³Ï•4 theory. Il Nuovo Cimento A, 1968, 54, 512-515.	0.2	1
64	Critical behavior near the singularity in a scalar field collapse. Physical Review D, 1996, 54, 1540-1547.	1.6	1
65	Neutrino-driven supernova explosions powered by nuclear reactions. Proceedings of the International Astronomical Union, 2011, 7, 365-366.	0.0	1
66	Torsion-bar antenna in the proper reference frame with rotation. Physical Review D, 2014, 90, .	1.6	1
67	Extension of the inputâ€“output relation for a Michelson interferometer to arbitrary coherent-state light sources: Gravitational-wave detector and weak-value amplification. Annals of Physics, 2018, 392, 71-92.	1.0	1
68	Radiative Cooling of the Thermally Isolated System in KAGRA Gravitational Wave Telescope. Journal of Physics: Conference Series, 2021, 1857, 012002.	0.3	1
69	Weak Value in Wave Function of Detector. Journal of the Physical Society of Japan, 2010, 79, 125003.	0.7	0
70	CONSTRUCTION OF GAUGE-INVARIANT VARIABLES FOR LINEAR-ORDER METRIC PERTURBATIONS ON AN ARBITRARY BACKGROUND SPACETIME. , 2015, , .		0
71	Formal Solutions of Any-Order Mass, Angular-Momentum, andDipole Perturbations on the Schwarzschild Background Spacetime. Letters in High Energy Physics, 0, 2021, .	1.0	0