Atsushi Nishizawa

List of Publications by Year
in descending order

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106 papers	7,824 citations	76196 40 h-index	48187 88 g-index
107 all docs	107 docs citations	107 times ranked	5879 citing authors

#	Article	IF	Citations
1	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	1.5	1,029
2	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	15.6	825
3	A gravitational wave observatory operating beyond the quantum shot-noise limit. Nature Physics, 2011, 7, 962-965.	6.5	716
4	The Japanese space gravitational wave antenna: DECIGO. Classical and Quantum Gravity, 2011, 28, 094011.	1.5	456
5	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
6	The Japanese space gravitational wave antennaâ€"DECIGO. Classical and Quantum Gravity, 2006, 23, S125-S131.	1.5	388
7	KAGRA: 2.5 generation interferometric gravitational wave detector. Nature Astronomy, 2019, 3, 35-40.	4.2	331
8	Overview of KAGRA: Detector design and construction history. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	198
9	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	1.6	155
10	Current status of space gravitational wave antenna DECIGO and B-DECIGO. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	150
11	The status of DECIGO. Journal of Physics: Conference Series, 2017, 840, 012010.	0.3	148
12	Probing nontensorial polarizations of stochastic gravitational-wave backgrounds with ground-based laser interferometers. Physical Review D, 2009, 79, .	1.6	144
13	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	1.6	125
14	Generalized framework for testing gravity with gravitational-wave propagation. I. Formulation. Physical Review D, 2018, 97, .	1.6	121
15	eLISA eccentricity measurements as tracers of binary black hole formation. Physical Review D, 2016, 94, .	1.6	115
16	Generalized framework for testing gravity with gravitational-wave propagation. II. Constraints on Horndeski theory. Physical Review D, 2018, 97, .	1.6	113
17	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	1.6	104
18	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. Astrophysical Journal, 2010, 715, 1453-1461.	1.6	90

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19	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€“Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	2.9	87
20	Constraining stellar binary black hole formation scenarios with<i>eLISA</i>eccentricity measurements. Monthly Notices of the Royal Astronomical Society, 2017, 465, 4375-4380.	1.6	85
21	Search for a Stochastic Background of 100-MHz Gravitational Waves with Laser Interferometers. Physical Review Letters, 2008, 101, 101101.	2.9	77
22	Space gravitational-wave antennas DECIGO and B-DECIGO. International Journal of Modern Physics D, 2019, 28, 1845001.	0.9	73
23	Laser-interferometric detectors for gravitational wave backgrounds at 100ÂMHz: Detector design and sensitivity. Physical Review D, 2008, 77, .	1.6	70
24	Cosmology with space-based gravitational-wave detectors: Dark energy and primordial gravitational waves. Physical Review D, 2012, 85, .	1.6	69
25	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	2.9	68
26	Beyond Concordance Cosmology with Magnification of Gravitational-Wave Standard Sirens. Physical Review Letters, 2013, 110, 151103.	2.9	67
27	Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	66
28	Cosmological test of gravity with polarizations of stochastic gravitational waves around 0.1â€“1ÂHz. Physical Review D, 2010, 81, .	1.6	61
29	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. Astrophysical Journal, 2010, 715, 1438-1452.	1.6	60
30	Evaluation of weak measurements to all orders. Physical Review A, 2012, 85, .	1.0	60
31	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	3.0	57
32	Measuring speed of gravitational waves by observations of photons and neutrinos from compact binary mergers and supernovae. Physical Review D, 2014, 90, .	1.6	56
33	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. Astrophysical Journal Letters, 2011, 734, L35.	3.0	55
34	Parity-violating gravity and GW170817. Physical Review D, 2018, 98, .	1.6	54
35	Model-independent test of gravity with a network of ground-based gravitational-wave detectors. Physical Review D, 2013, 87, .	1.6	49
36	An Early-warning System for Electromagnetic Follow-up of Gravitational-wave Events. Astrophysical Journal Letters, 2020, 905, L25.	3.0	48

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37	The Japanese space gravitational wave antenna - DECIGO. Journal of Physics: Conference Series, 2008, 122, 012006.	0.3	46
38	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	1.6	45
39	First cryogenic test operation of underground km-scale gravitational-wave observatory KAGRA. Classical and Quantum Gravity, 2019, 36, 165008.	1.5	45
40	Tracing the redshift evolution of Hubble parameter with gravitational-wave standard sirens. Physical Review D, 2011, 83, .	1.6	43
41	Anisotropies of Gravitational-Wave Standard Sirens as a New Cosmological Probe without Redshift Information. Physical Review Letters, 2016, 116, 121302.	2.9	42
42	Polarization test of gravitational waves from compact binary coalescences. Physical Review D, 2018, 98, .	1.6	40
43	Generalized framework for testing gravity with gravitational-wave propagation. III. Future prospect. Physical Review D, 2019, 99, .	1.6	38
44	Weak-value amplification in a shot-noise-limited interferometer. Physical Review A, 2012, 85, .	1.0	36
45	The Japanese space gravitational wave antenna; DECIGO. Journal of Physics: Conference Series, 2008, 120, 032004.	0.3	34
46	Reheating after<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>R</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 372 Td (stretchy="false">)</mml:m	1.6	32
47	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. Astrophysical Journal Letters, 2021, 913, L27.	3.0	32
48	Overview of KAGRA: KAGRA science. Progress of Theoretical and Experimental Physics, 2021, 2021, .	1.8	31
49	DECIGO: The Japanese space gravitational wave antenna. Journal of Physics: Conference Series, 2009, 154, 012040.	0.3	30
50	Gravitational wave memory: A new approach to study modified gravity. Physical Review D, 2016, 94, .	1.6	28
51	Constraint on reheating after<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>R</mml:mi><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 177 Td (stretchy="false">) 89, .	1.6	27
52	Constraining extra gravitational wave polarizations with Advanced LIGO, Advanced Virgo, and KAGRA and upper bounds from GW170817. Physical Review D, 2019, 100, .	1.6	26
53	Measurement of Hubble constant with stellar-mass binary black holes. Physical Review D, 2017, 96, .	1.6	23
54	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. Classical and Quantum Gravity, 2008, 25, 245008.	1.5	22

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55	Detecting black-hole binary clustering via the second-generation gravitational-wave detectors. Physical Review D, 2016, 94, .	1.6	21
56	Pure polarization test of GW170814 and GW170817 using waveforms consistent with modified theories of gravity. Physical Review D, 2021, 103, .	1.6	21
57	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
58	Prospects for gravitational-wave polarization tests from compact binary mergers with future ground-based detectors. Physical Review D, 2019, 100, .	1.6	19
59	Probing for massive stochastic gravitational-wave background with a detector network. Physical Review D, 2013, 88, .	1.6	18
60	Constraining the propagation speed of gravitational waves with compact binaries at cosmological distances. Physical Review D, 2016, 93, .	1.6	18
61	Impacts of overlapping gravitational-wave signals on the parameter estimation: Toward the search for cosmological backgrounds. Physical Review D, 2021, 104, .	1.6	17
62	Particle swarm optimization of the sensitivity of a cryogenic gravitational wave detector. Physical Review D, 2018, 97, .	1.6	15
63	Measurement of angular antispring effect in optical cavity by radiation pressure. Physical Review D, 2010, 81, .	1.6	14
64	Convergence of Fourier-domain templates for inspiraling eccentric compact binaries. Physical Review D, 2019, 100, .	1.6	13
65	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
66	Prospects for improving the sensitivity of the cryogenic gravitational wave detector KAGRA. Physical Review D, 2020, 102, .	1.6	12
67	Optimization of quantum noise by completing the square of multiple interferometer outputs in quantum locking for gravitational wave detectors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126626.	0.9	12
68	An arm length stabilization system for KAGRA and future gravitational-wave detectors. Classical and Quantum Gravity, 2020, 37, 035004.	1.5	10
69	Search for scalar-tensor mixed polarization modes of gravitational waves. Physical Review D, 2022, 105, .	1.6	10
70	Vibration isolation system with a compact damping system for power recycling mirrors of KAGRA. Classical and Quantum Gravity, 2019, 36, 095015.	1.5	9
71	Cosmological evolution of viable models in the generalized scalar-tensor theory. Physical Review D, 2020, 102, .	1.6	9
72	Optimal location of two laser-interferometric detectors for gravitational wave backgrounds at 100 MHz. Classical and Quantum Gravity, 2008, 25, 225011.	1.5	8

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73	Direct measurement of the positive acceleration of the universe and testing inhomogeneous models under gravitational wave cosmology. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 031-031.	1.9	8
74	Gravitational-wave standard siren without redshift identification. Journal of Physics: Conference Series, 2012, 363, 012052.	0.3	8
75	Weak-value amplification beyond the standard quantum limit in position measurements. Physical Review A, 2015, 92, .	1.0	8
76	Measurement of Schumann Resonance at Kamioka. Journal of Physics: Conference Series, 2016, 716, 012020.	0.3	8
77	Application of independent component analysis to the iKAGRA data. Progress of Theoretical and Experimental Physics, 2020, 2020, .	1.8	7
78	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
79	Development of a Displacement- and Frequency-Noise-Free Interferometer in a 3D Configuration for Gravitational Wave Detection. Physical Review Letters, 2009, 103, 171101.	2.9	6
80	Probing the Inhomogeneous Universe with Gravitational Wave Cosmology. Journal of Physics: Conference Series, 2012, 363, 012056.	0.3	6
81	Experimental investigation of a control scheme for a zero-detuning resonant sideband extraction interferometer for next-generation gravitational-wave detectors. Classical and Quantum Gravity, 2008, 25, 195008.	1.5	5
82	Resonant Speed Meter for Gravitational-Wave Detection. Physical Review Letters, 2008, 101, 081101.	2.9	5
83	DECIGO pathfinder. Journal of Physics: Conference Series, 2008, 120, 032005.	0.3	5
84	Early warning of precessing compact binary merger with third-generation gravitational-wave detectors. Physical Review D, 2021, 104, .	1.6	5
85	Search for an emission line of a gravitational wave background. Physical Review D, 2015, 91, .	1.6	4
86	Gravitational waves: search results, data analysis and parameter estimation. General Relativity and Gravitation, 2015, 47, 11.	0.7	4
87	Testing gravity with pulsar scintillation measurements. Physical Review D, 2017, 95, .	1.6	4
88	Reduction of quantum noise using the quantum locking with an optical spring for gravitational wave detectors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 402, 127365.	0.9	4
89	Early warning of precessing neutron-star black hole binary mergers with the near-future gravitational-wave detectors. Monthly Notices of the Royal Astronomical Society, 2022, 512, 3878-3884.	1.6	4
90	Displacement-noise-free neutron interferometer for gravitational wave detection using a single Mach-Zehnder configuration. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 441, 128150.	0.9	4

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91	Quantum noise in differential-type gravitational-wave interferometer and signal recycling. Physical Review D, 2007, 76, .	1.6	3
92	Development of a detector pair for very high frequency gravitational waves. Journal of Physics: Conference Series, 2008, 122, 012007.	0.3	3
93	Gravitational Wave Physics and Astronomy in the nascent era. Progress of Theoretical and Experimental Physics, 0, , .	1.8	3
94	Neutron displacement noise-free interferometer for gravitational-wave detection. Physical Review D, 2022, 105, .	1.6	2
95	A study for reduction of radiation pressure noise in gravitational wave detectors. Journal of Physics: Conference Series, 2008, 122, 012020.	0.3	1
96	Search method for an emission line of a GW background. Journal of Physics: Conference Series, 2016, 716, 012013.	0.3	1
97	Radiative Cooling of the Thermally Isolated System in KAGRA Gravitational Wave Telescope. Journal of Physics: Conference Series, 2021, 1857, 012002.	0.3	1
98	Demonstration of displacement-noise-free interferometry using bi-directional Machâ€"Zehnder interferometers. Classical and Quantum Gravity, 2008, 25, 114031.	1.5	0
99	Experimental investigation of a control scheme for a tuned resonant sideband extraction interferometer for next-generation gravitational-wave detectors. Journal of Physics: Conference Series, 2008, 122, 012017.	0.3	0
100	Quantum noise in differential-type gravitational-wave interferometer and signal recycling. Journal of Physics: Conference Series, 2008, 122, 012019.	0.3	0
101	Displacement noise free interferometory for gravitational wave detection. Journal of Physics: Conference Series, 2008, 120, 032006.	0.3	0
102	The experimental plan of displacement- and frequency-noise free laser interferometer. Journal of Physics: Conference Series, 2008, 122, 012022.	0.3	0
103	Noise cancellation properties of displacement noise free interferometer. Journal of Physics: Conference Series, 2010, 228, 012026.	0.3	0
104	REHEATING AFTER f(R) INFLATION AND OBSERVATIONAL CONSTRAINTS. , 2015, , .		0
105	Measuring Gravitational-Wave Propagation Speed with Multimessenger Observations. Journal of Physics: Conference Series, 2016, 716, 012018.	0.3	0
106	Cosmological test of gravity with gravitational waves. , 2019, , .		0