Yoichi Aso

List of Publications by Year
in descending order

126 papers	10,034 citations	61984 43 h-index	33894 99 g-index
129 all docs	129 docs citations	129 times ranked	5783 citing authors

#	Article	IF	Citations
1	LIGO: the Laser Interferometer Gravitational-Wave Observatory. Reports on Progress in Physics, 2009, 72, 076901.	20.1	971
2	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. Classical and Quantum Gravity, 2010, 27, 173001.	4.0	956
3	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
4	Interferometer design of the KAGRA gravitational wave detector. Physical Review D, 2013, 88, .	4.7	722
5	The Japanese space gravitational wave antenna: DECIGO. Classical and Quantum Gravity, 2011, 28, 094011.	4.0	456
6	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	26.7	447
7	The Japanese space gravitational wave antennaâ€"DECIGO. Classical and Quantum Gravity, 2006, 23, S125-S131.	4.0	388
8	KAGRA: 2.5 generation interferometric gravitational wave detector. Nature Astronomy, 2019, 3, 35-40.	10.1	331
9	An upper limit on the stochastic gravitational-wave background of cosmological origin. Nature, 2009, 460, 990-994.	27.8	303
10	Stable Operation of a 300-m Laser Interferometer with Sufficient Sensitivity to Detect Gravitational-Wave Events within Our Galaxy. Physical Review Letters, 2001, 86, 3950-3954.	7.8	255
11	Overview of KAGRA: Detector design and construction history. Progress of Theoretical and Experimental Physics, 2021, 2021, .	6.6	198
12	Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgoâ€™s third observing run. Physical Review D, 2021, 104, .	4.7	192
13	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. Astrophysical Journal, 2008, 683, L45-L49.	4.5	160
14	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	4.5	155
15	The status of DECIGO. Journal of Physics: Conference Series, 2017, 840, 012010.	0.4	148
16	Observation of a kilogram-scale oscillator near its quantum ground state. New Journal of Physics, 2009, 11, 073032.	2.9	123
17	Search for gravitational waves from low mass binary coalescences in the first year of LIGOâ€™s S5 data. Physical Review D, 2009, 79, .	4.7	120
18	Calibration of the LIGO gravitational wave detectors in the fifth science run. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 223-240.	1.6	120

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19	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. Physical Review D, 2010, 82, .	4.7	111
20	All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run. Physical Review D, 2010, 81, .	4.7	107
21	Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGOâ€™s fifth science run. Physical Review D, 2009, 80, .	4.7	105
22	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	4.5	104
23	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	7.8	94
24	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.	4.5	90
25	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€“Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	7.8	87
26	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. Physical Review D, 2011, 83, .	4.7	85
27	All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. Physical Review Letters, 2009, 102, 111102.	7.8	83
28	Einstein@Home search for periodic gravitational waves in LIGO S4 data. Physical Review D, 2009, 79, .	4.7	83
29	Search for gravitational-wave bursts in the first year of the fifth LIGO science run. Physical Review D, 2009, 80, .	4.7	79
30	Einstein@Home search for periodic gravitational waves in early S5 LIGO data. Physical Review D, 2009, 80, .	4.7	78
31	Construction of KAGRA: an underground gravitational-wave observatory. Progress of Theoretical and Experimental Physics, 2018, 2018, .	6.6	73
32	Space gravitational-wave antennas DECIGO and B-DECIGO. International Journal of Modern Physics D, 2019, 28, 1845001.	2.1	73
33	Search for Gravitational-Wave Bursts from Soft Gamma Repeaters. Physical Review Letters, 2008, 101, 211102.	7.8	69
34	Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. Progress of Theoretical and Experimental Physics, 2021, 2021, .	6.6	66
35	Frequency-Dependent Squeezed Vacuum Source for Broadband Quantum Noise Reduction in Advanced Gravitational-Wave Detectors. Physical Review Letters, 2020, 124, 171101.	7.8	63
36	Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgoâ€™s first three observing runs. Physical Review D, 2021, 104, .	4.7	62

#	ARTICLE	IF	CITATIONS
37	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.	4.5	60
38	Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. Physical Review D, 2011, 83, .	4.7	54
39	Upper limits from the LIGO and TAMA detectors on the rate of gravitational-wave bursts. Physical Review D, 2005, 72, .	4.7	49
40	The Japanese space gravitational wave antenna - DECIGO. Journal of Physics: Conference Series, 2008, 122, 012006.	0.4	46
41	First LIGO search for gravitational wave bursts from cosmic (super)strings. Physical Review D, 2009, 80, .	4.7	45
42	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	4.5	45
43	First cryogenic test operation of underground km-scale gravitational-wave observatory KAGRA. Classical and Quantum Gravity, 2019, 36, 165008.	4.0	45
44	Present status of large-scale cryogenic gravitational wave telescope. Classical and Quantum Gravity, 2004, 21, S1161-S1172.	4.0	43
45	Demonstration of Displacement Sensing of a mg-Scale Pendulum for mm- and mg-Scale Gravity Measurements. Physical Review Letters, 2019, 122, 071101.	7.8	43
46	All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. Physical Review D, 2021, 104, .	4.7	42
47	Joint LIGO and TAMA300 search for gravitational waves from inspiralling neutron star binaries. Physical Review D, 2006, 73, .	4.7	40
48	DECIGO and DECIGO pathfinder. Classical and Quantum Gravity, 2010, 27, 084010.	4.0	39
49	Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 921, 80.	4.5	39
50	Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data. Physical Review D, 2009, 80, .	4.7	38
51	Upper Limit on Gravitational Wave Backgrounds at 0.2 Hz with a Torsion-Bar Antenna. Physical Review Letters, 2011, 106, 161101.	7.8	36
52	The Japanese space gravitational wave antenna; DECIGO. Journal of Physics: Conference Series, 2008, 120, 032004.	0.4	34
53	The Seismic Attenuation System (SAS) for the Advanced LIGO gravitational wave interferometric detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 598, 737-753.	1.6	34
54	Search method for coincident events from LIGO and IceCube detectors. Classical and Quantum Gravity, 2008, 25, 114039.	4.0	33

#	Article	IF	Citations
55	All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	4.7	33
56	Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run. Astrophysical Journal, 2022, 932, 133.	4.5	33
57	Search for high frequency gravitational-wave bursts in the first calendar year of LIGOâ€™s fifth science run. Physical Review D, 2009, 80, .	4.7	32
58	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. Astrophysical Journal Letters, 2021, 913, L27.	8.3	32
59	Overview of KAGRA: KAGRA science. Progress of Theoretical and Experimental Physics, 2021, 2021, .	6.6	31
60	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. Physical Review D, 2022, 105, .	4.7	31
61	DECIGO: The Japanese space gravitational wave antenna. Journal of Physics: Conference Series, 2009, 154, 012040.	0.4	30
62	Constraints on dark photon dark matter using data from LIGOâ€™s and Virgoâ€™s third observing run. Physical Review D, 2022, 105, .	4.7	27
63	Astrophysically triggered searches for gravitational waves: status and prospects. Classical and Quantum Gravity, 2008, 25, 114051.	4.0	26
64	Observation results by the TAMA300 detector on gravitational wave bursts from stellar-core collapses. Physical Review D, 2005, 71, .	4.7	24
65	5-mg suspended mirror driven by measurement-induced backaction. Physical Review A, 2015, 92, .	2.5	24
66	Estimation of losses in a 300Âm filter cavity and quantum noise reduction in the KAGRA gravitational-wave detector. Physical Review D, 2016, 93, .	4.7	24
67	Three Successive and Interacting Shock Waves Generated by a Solar Flare. Astrophysical Journal, 2008, 684, L45-L49.	4.5	23
68	JOINT SEARCHES BETWEEN GRAVITATIONAL-WAVE INTERFEROMETERS AND HIGH-ENERGY NEUTRINO TELESCOPES: SCIENCE REACH AND ANALYSIS STRATEGIES. International Journal of Modern Physics D, 2009, 18, 1655-1659.	2.1	23
69	Search for a stochastic gravitational-wave background using a pair of torsion-bar antennas. Physical Review D, 2014, 89, .	4.7	23
70	Stabilization of a Fabryâ€"Perot interferometer using aÂsuspension-point interferometer. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 327, 1-8.	2.1	22
71	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. Classical and Quantum Gravity, 2008, 25, 245008.	4.0	22
72	Current status of large-scale cryogenic gravitational wave telescope. Classical and Quantum Gravity, 2003, 20, S871-S884.	4.0	21

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73	New Limit on Lorentz Violation Using a Double-Pass Optical Ring Cavity. Physical Review Letters, 2013, 110, 200401.	7.8	20
74	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
75	All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	4.7	19
76	DECIGO pathfinder. Classical and Quantum Gravity, 2009, 26, 094019.	4.0	18
77	All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGOâ€™s and Advanced Virgoâ€™s first three observing runs. Physical Review D, 2022, 105, .	4.7	18
78	Coincidence analysis to search for inspiraling compact binaries using TAMA300 and LISM data. Physical Review D, 2004, 70, .	4.7	16
79	Ground-based low-frequency gravitational-wave detector with multiple outputs. Physical Review D, 2017, 95, .	4.7	15
80	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGOâ€“Virgo Run O3b. Astrophysical Journal, 2022, 928, 186.	4.5	15
81	Study of quality factor and hysteresis associated with the state-of-the-art passive seismic isolation system for Gravitational Wave Interferometric Detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 538, 526-537.	1.6	14
82	Optically trapped mirror for reaching the standard quantum limit. Optics Express, 2014, 22, 12915.	3.4	14
83	Mirror actuation design for the interferometer control of the KAGRA gravitational wave telescope. Classical and Quantum Gravity, 2017, 34, 225001.	4.0	14
84	Measurement of optical losses in a high-finesse 300Âm filter cavity for broadband quantum noise reduction in gravitational-wave detectors. Physical Review D, 2018, 98, .	4.7	13
85	The Current Status and Future Prospects of KAGRA, the Large-Scale Cryogenic Gravitational Wave Telescope Built in the Kamioka Underground. Galaxies, 2022, 10, 63.	3.0	13
86	Calculation method for light scattering caused by multilayer coated mirrors in gravitational wave detectors. Optics Express, 2017, 25, 4741.	3.4	12
87	The status of KAGRA underground cryogenic gravitational wave telescope. Journal of Physics: Conference Series, 2020, 1342, 012014.	0.4	12
88	Results of the search for inspiraling compact star binaries from TAMA300â€™s observation in 2000â€“2004. Physical Review D, 2006, 74, .	4.7	11
89	Characterization of the room temperature payload prototype for the cryogenic interferometric gravitational wave detector KAGRA. Review of Scientific Instruments, 2016, 87, 034501.	1.3	10
90	An arm length stabilization system for KAGRA and future gravitational-wave detectors. Classical and Quantum Gravity, 2020, 37, 035004.	4.0	10

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91	Vibration isolation system with a compact damping system for power recycling mirrors of KAGRA. Classical and Quantum Gravity, 2019, 36, 095015.	4.0	9
92	Methods to characterize non-Gaussian noise in TAMA. Classical and Quantum Gravity, 2003, 20, S697-S709.	4.0	8
93	Upper limits on gravitational-wave bursts radiated from stellar-core collapses in our galaxy. Classical and Quantum Gravity, 2005, 22, S1283-S1291.	4.0	8
94	Optical cavity limits on higher order Lorentz violation. Physical Review D, 2013, 88, .	4.7	8
95	Measuring scattering light distributions on high-absorptive surfaces for stray-light reduction in gravitational-wave detectors. Optics Express, 2019, 27, 16890.	3.4	8
96	Recent results of a seismically isolated optical table prototype designed for advanced LIGO. Journal of Physics: Conference Series, 2008, 122, 012010.	0.4	7
97	Opportunity to test non-Newtonian gravity using interferometric sensors with dynamic gravity field generators. Physical Review D, 2011, 84, .	4.7	7
98	Application of independent component analysis to the iKAGRA data. Progress of Theoretical and Experimental Physics, 2020, 2020, .	6.6	7
99	Optical loss study of molecular layer for a cryogenic interferometric gravitational-wave detector. Physical Review D, 2020, 102, .	4.7	7
100	Vibration isolation systems for the beam splitter and signal recycling mirrors of the KAGRA gravitational wave detector. Classical and Quantum Gravity, 2021, 38, 065011.	4.0	7
101	Analysis methods for burst gravitational waves with TAMA data. Classical and Quantum Gravity, 2004, 21, S1679-S1684.	4.0	6
102	Length sensing and control strategies for the LCGT interferometer. Classical and Quantum Gravity, 2012, 29, 124008.	4.0	6
103	DECIGO pathfinder. Journal of Physics: Conference Series, 2008, 120, 032005.	0.4	5
104	Accurate measurement of the time delay in the response of the LIGO gravitational wave detectors. Classical and Quantum Gravity, 2009, 26, 055010.	4.0	5
105	Direct measurement of optical-trap-induced decoherence. Physical Review A, 2016, 94, .	2.5	5
106	Compact integrated optical sensors and electromagnetic actuators for vibration isolation systems in the gravitational-wave detector KAGRA. Review of Scientific Instruments, 2020, 91, 115001.	1.3	5
107	Analysis for burst gravitational waves with TAMA300 data. Classical and Quantum Gravity, 2004, 21, S735-S740.	4.0	4
108	Publisherâ€™s Note: All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run [Phys. Rev. D81, 102001 (2010)]. Physical Review D, 2012, 85, .	4.7	3

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109	Active damping performance of the KAGRA seismic attenuation system prototype. Journal of Physics: Conference Series, 2016, 716, 012022.	0.4	3
110	Active vibration isolation using a Suspension Point Interferometer. Journal of Physics: Conference Series, 2006, 32, 451-456.	0.4	2
111	Publisherâ€™s Note: Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar [Phys. Rev. D83, 042001 (2011)]. Physical Review D, 2012, 85, .	4.7	2
112	Publisherâ€™s Note: Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1 [Phys. Rev. D82, 102001 (2010)]. Physical Review D, 2012, 85, .	4.7	2
113	Method to reduce excess noise of a detuned cavity for application in KAGRA. Classical and Quantum Gravity, 2014, 31, 095003.	4.0	2
114	Progress and challenges in advanced ground-based gravitational-wave detectors. General Relativity and Gravitation, 2014, 46, 1.	2.0	2
115	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
116	Improving the stability of frequency-dependent squeezing with bichromatic control of filter cavity length, alignment, and incident beam pointing. Physical Review D, 2022, 105, .	4.7	2
117	Search for a Stochastic Gravitational-wave Background with Torsion-bar Antennas. Journal of Physics: Conference Series, 2012, 363, 012017.	0.4	1
118	Optical loss study of the cryogenic molecular layer using a folded cavity for future gravitational-wave detectors. Optics Express, 2021, 29, 6780.	3.4	1
119	Publisherâ€™s Note: Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar [Phys. Rev. D83, 042001 (2011)]. Physical Review D, 2011, 83, .	4.7	0
120	Prospects for frequency comparison of Sr and Hg optical lattice clocks toward 10^{−18} uncertainties. , 2012, , .		0
121	Publisherâ€™s Note: Search for gravitational waves from binary black hole inspiral, merger, and ringdown [Phys. Rev. D83, 122005 (2011)]. Physical Review D, 2012, 85, .	4.7	0
122	DECIGO: THE JAPANESE SPACE GRAVITATIONAL WAVE ANTENNA. , 2008, , .		0
123	Optical Configuration and Control of Ultra-sensitive Gravitational Wave Detectors. Journal of the Vacuum Society of Japan, 2011, 54, 597-603.	0.3	0
124	TESTING LORENTZ INVARIANCE WITH A DOUBLE-PASS OPTICAL RING CAVITY. , 2014, , 216-219.		0
125	Higher order test of Lorentz invariance with an optical ring cavity. , 2017, , .		0
126	Research and Development for Third-Generation Gravitational Wave Detectors. , 2022, , 301-360.		0