

Daisuke Akamatsu

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

1,597
citations

331670

21
h-index

289244

40
g-index

62
all docs

62
docs citations

62
times ranked

1231
citing authors

#	ARTICLE	IF	CITATIONS
1	Storage and Retrieval of a Squeezed Vacuum. <i>Physical Review Letters</i> , 2008, 100, 093601.	7.8	212
2	Coherent Transfer of Photoassociated Molecules into the Rovibrational Ground State. <i>Physical Review Letters</i> , 2010, 105, 203001.	7.8	204
3	Entanglement on an optical atomic-clock transition. <i>Nature</i> , 2020, 588, 414-418.	27.8	118
4	Rayleigh-Taylor instability and mushroom-pattern formation in a two-component Bose-Einstein condensate. <i>Physical Review A</i> , 2009, 80, .	2.5	96
5	Electromagnetically Induced Transparency with Squeezed Vacuum. <i>Physical Review Letters</i> , 2004, 92, 203602.	7.8	86
6	Near-Unitary Spin Squeezing in $\langle \langle Y_b \rangle \rangle_{171}$. <i>Physical Review Letters</i> , 2019, 122, 223203.	7.8	68
7	Improved Absolute Frequency Measurement of the ^{171}Yb Optical Lattice Clock towards a Candidate for the Redefinition of the Second. <i>Applied Physics Express</i> , 2012, 5, 102401.	2.4	61
8	Generation of a squeezed vacuum resonant on a rubidium D1 line with periodically poled KTiOPO4. <i>Optics Letters</i> , 2006, 31, 2344.	3.3	54
9	Ultraslow Propagation of Squeezed Vacuum Pulses with Electromagnetically Induced Transparency. <i>Physical Review Letters</i> , 2007, 99, 153602.	7.8	48
10	Toward the production of quantum degenerate bosonic polar molecules, $^{41}\text{K}^{87}\text{Rb}$. <i>New Journal of Physics</i> , 2009, 11, 055035.	2.9	48
11	Spectroscopy of ^{171}Yb in an optical lattice based on laser linewidth transfer using a narrow linewidth frequency comb. <i>Optics Express</i> , 2013, 21, 7891.	3.4	46
12	Spectroscopy and frequency measurement of the ^{87}Sr clock transition by laser linewidth transfer using an optical frequency comb. <i>Applied Physics Express</i> , 2014, 7, 012401.	2.4	44
13	A Fabry-Pérot Etalon with an Ultralow Expansion Ceramic Spacer. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 032402.	1.5	43
14	Steep optical-wave group-velocity reduction and ϵ_0 storage of light without on-resonance electromagnetically induced transparency. <i>Physical Review A</i> , 2002, 66, .	2.5	41
15	Frequency ratio measurement of ^{171}Yb and ^{87}Sr optical lattice clocks. <i>Optics Express</i> , 2014, 22, 7898.	3.4	40
16	Coherent transfer of orbital angular momentum from an atomic system to a light field. <i>Physical Review A</i> , 2003, 67, .	2.5	38
17	Improved Frequency Measurement of the $^{13}\text{P}^0$ Clock Transition in ^{87}Sr Using a Cs Fountain Clock as a Transfer Oscillator. <i>Journal of the Physical Society of Japan</i> . 2015, 84, 115002.	1.6	26
18	Narrow linewidth laser system realized by linewidth transfer using a fiber-based frequency comb for the magneto-optical trapping of strontium. <i>Optics Express</i> , 2012, 20, 16010.	3.4	25

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19	Compact iodine-stabilized laser operating at 531 nm with stability at the 10^{-12} level and using a coin-sized laser module. Optics Express, 2015, 23, 20749.	3.4	24
20	Demonstration of the nearly continuous operation of an ^{171}Yb optical lattice clock for half a year. Metrologia, 2020, 57, 065021.	1.2	24
21	A compact light source at 461 nm using a periodically poled LiNbO ₃ waveguide for strontium magneto-optical trapping. Optics Express, 2011, 19, 2046.	3.4	23
22	Observation of electromagnetically induced transparency for a squeezed vacuum with the time domain method. Optics Express, 2007, 15, 11849.	3.4	21
23	Second harmonic generation at 399 nm resonant on the $^1S_0 \rightarrow ^1P_1$ transition of ytterbium using a periodically poled LiNbO ₃ waveguide. Optics Express, 2016, 24, 12142.	3.4	21
24	Absolute frequency measurements and hyperfine structures of the molecular iodine transitions at 578 nm. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 725.	2.1	20
25	Uncertainty Evaluation of an ^{171}Yb Optical Lattice Clock at NMIJ. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 2449-2458.	3.0	17
26	Geometrically asymmetric optical cavity for strong atom-photon coupling. Physical Review A, 2019, 99, .	2.5	17
27	Quantum memory of a squeezed vacuum for arbitrary frequency sidebands. Physical Review A, 2010, 81, .	2.5	16
28	Achieving very-low-loss group velocity reduction without electromagnetically induced transparency. Applied Physics Letters, 2002, 81, 1168-1170.	3.3	14
29	Binary phase oscillation of two mutually coupled semiconductor lasers. Optics Express, 2015, 23, 6029.	3.4	14
30	Development of 8-branch Er: fiber frequency comb for Sr and Yb optical lattice clocks. Optics Express, 2019, 27, 6404.	3.4	14
31	Dual-Mode Operation of an Optical Lattice Clock Using Strontium and Ytterbium Atoms. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1069-1075.	3.0	13
32	Laser-Controlled Cold Ytterbium Atom Source for Transportable Optical Clocks. Journal of the Physical Society of Japan, 2017, 86, 125001.	1.6	10
33	A relocking scheme for optical phase locking using a digital circuit with an electrical delay line. Review of Scientific Instruments, 2019, 90, 103002.	1.3	9
34	A frequency-stabilized light source at 399 nm using an Yb hollow-cathode lamp. Japanese Journal of Applied Physics, 2018, 57, 062501.	1.5	8
35	Improved frequency ratio measurement with ^{87}Sr and ^{171}Yb optical lattice clocks at NMIJ. Metrologia, 2021, 58, 015008.	1.2	8
36	Predicting and verifying transition strengths from weakly bound molecules. Physical Review A, 2011, 83, .	2.5	7

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37	Frequency-filtered parametric fluorescence interacting with an atomic ensemble. Optics Communications, 2006, 259, 789-792.	2.1	3
38	Constancy on quality factor of dual-T quartz crystal resonator circuit. , 2008, , .		3
39	Generation of 116ÂmW output power at 461 nm in a periodically poled lithium niobate waveguide. Japanese Journal of Applied Physics, 2022, 61, 020701.	1.5	2
40	Low-energy scattering of ultracold atoms by a dielectric nanosphere. Physical Review Research, 2021, 3, .	3.6	2
41	The CCL-K11 ongoing key comparison: final report for the year 2010. Metrologia, 2011, 48, 04001-04001.	1.2	1
42	Laser frequency measurement in the short-wavelength region using an intermediate laser and a frequency noise cancellation method. Optics Letters, 2022, 47, 30.	3.3	1
43	Quantum information processing and quantum memory: experimental approach from atomic physics. , 2005, , .		0
44	Toward the Yb/Sr frequency ratio measurement: Development of the Sr optical lattice clock at NMIJ, AIST. , 2010, , .		0
45	Fiber-based frequency combs with millihertz-level relative linewidths for optical lattice clocks. , 2010, , .		0
46	A new clock laser system for an Yb optical lattice clock using a fibre-based frequency comb stabilized to a narrow linewidth laser at 1064 nm. , 2010, , .		0
47	Optical frequency metrology with ytterbium and strontium optical lattice clocks. , 2011, , .		0
48	Current status of the ¹⁷¹ Yb optical lattice clock at NMIJ, AIST. Proceedings of SPIE, 2011, , .	0.8	0
49	Precision measurement with optical frequency combs and clocks. , 2013, , .		0
50	Towards a new clock laser system using a ceramic cavity and laser linewidth transfer technique. , 2013, , .		0
51	Optical frequency measurement comparison using fiber laser combs between CMS and NMIJ. , 2013, , .		0
52	Evaluation of an ultra-stable laser system based on a linewidth transfer method for optical clocks. , 2014, , .		0
53	Sub-Doppler laser spectroscopy of molecular iodine at 578 nm. , 2016, , .		0
54	Optical trap of a nanoparticle in ultra-high vacuum towards a mixture of a nanoparticle and a laser-cooled gas. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
55	Development of an 8-branch optical frequency comb for laser frequency stabilization. , 2017, , .		0
56	Status report on an 171Yb optical lattice clock at NMIJ. , 2019, , .		0
57	Development of an operational Yb optical lattice clock towards contribution to the International Atomic Time. , 2020, , .		0
58	Propagation of squeezed vacuum pulses inside a cold atomic ensemble with electromagnetically induced transparency. , 2007, , .		0
59	Improved Absolute Frequency Measurement of the 171Yb Optical Lattice Clock towards the Redefinition of the Second. , 2013, , .		0
60	A compact iodine-stabilized diode laser at 531 nm. , 2015, , .		0
61	Sr optical lattice clock assisted by optical frequency combs for contribution to International Atomic Time. , 2020, , .		0