

# Yuto Kato

## List of Publications by Year in descending order

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102  
papers

1,718  
citations

394421

19  
h-index

302126

39  
g-index

102  
all docs

102  
docs citations

102  
times ranked

1185  
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Ultrahigh Gradient Electron Acceleration by a Self-Modulated Intense Short Laser Pulse. <i>Physical Review Letters</i> , 1995, 74, 4428-4431.	7.8	341
2	Scalings of implosion experiments for high neutron yield. <i>Physics of Fluids</i> , 1988, 31, 2884.	1.4	165
3	Generation of Small-Divergence Soft X-Ray Laser by Plasma Waveguiding with a Curved Target. <i>Physical Review Letters</i> , 1994, 73, 3215-3218.	7.8	83
4	Long-Scale Jet Formation with Specularly Reflected Light in Ultraintense Laser-Plasma Interactions. <i>Physical Review Letters</i> , 2000, 84, 674-677.	7.8	78
5	Study of Laser-Hole Boring into Overdense Plasmas. <i>Physical Review Letters</i> , 1996, 77, 4906-4909.	7.8	70
6	Stretchable electromagnetic-interference shielding materials made of a long single-walled carbon-nanotube-elastomer composite. <i>RSC Advances</i> , 2017, 7, 10841-10847.	3.6	66
7	Development of a two-dimensional space-resolved high speed sampling camera. <i>Review of Scientific Instruments</i> , 1999, 70, 625-628.	1.3	54
8	Soft x-ray spectra of highly ionized elements with atomic numbers ranging from 57 to 82 produced by compact lasers. <i>Journal of Applied Physics</i> , 1994, 75, 1923-1930.	2.5	42
9	Observation of Polarization of the Soft X-Ray Laser Line in Neonlike Germanium Ions. <i>Physical Review Letters</i> , 1995, 75, 3826-3829.	7.8	42
10	Study of indirectly driven implosion by x-ray spectroscopic measurements. <i>Physics of Plasmas</i> , 1995, 2, 2063-2074.	1.9	42
11	Line x-ray emissions from highly ionized plasmas of various species irradiated by compact solid-state lasers. <i>Journal of Applied Physics</i> , 1992, 72, 3355-3362.	2.5	37
12	Laser-Hole Boring into Overdense Plasmas Measured with Soft X-Ray Laser Probing. <i>Physical Review Letters</i> , 2000, 84, 2405-2408.	7.8	37
13	X-ray emission from high-Z mixture plasmas generated with intense blue laser light. <i>Applied Physics Letters</i> , 1993, 62, 1344-1346.	3.3	35
14	Recent progress of implosion experiments with uniformity-improved GEKKO XII laser facility at the Institute of Laser Engineering, Osaka University. <i>Physics of Plasmas</i> , 1996, 3, 2077-2083.	1.9	34
15	Broadband Permittivity Measurements up to 170-GHz Using Balanced-Type Circular-Disk Resonator Excited by 0.8-mm Coaxial Line. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019, 68, 1796-1805.	4.7	32
16	Temperature mapping of compressed fusion pellets obtained by monochromatic imaging. <i>Review of Scientific Instruments</i> , 1995, 66, 734-736.	1.3	31
17	Laser-imploded core structure observed by using two-dimensional x-ray imaging with 10-ps temporal resolution. <i>Review of Scientific Instruments</i> , 1995, 66, 722-724.	1.3	31
18	Full characterization of a high-gain saturated x-ray laser at 13.9 nm. <i>Physical Review A</i> , 2000, 61, .	2.5	31

#	ARTICLE	IF	CITATIONS
19	3.4â€TW performance of a Nd:phosphate glass laser with output aperture of 20 cm. Applied Physics Letters, 1981, 38, 72-73.	3.3	23
20	cw oscillation in a Ndâ€‰:â€‰phosphate glass laser. Applied Physics Letters, 1979, 34, 273-275.	3.3	19
21	New Permittivity Measurement Methods Using Resonant Phenomena For High-Permittivity Materials. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 1191-1200.	4.7	19
22	D-Band Perfect Anomalous Reflectors for 6G Applications. IEEE Access, 2021, 9, 157512-157521.	4.2	19
23	New Uncertainty Analysis for Permittivity Measurements Using the Transmission/Reflection Method. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1748-1753.	4.7	18
24	Permittivity measurements and associated uncertainties up to 110 GHz in circular-disk resonator method. , 2016, , .		18
25	Ultrathin Perfect Absorbers for Normal Incident Waves Using Dirac Cone Metasurfaces With Critical External Coupling. IEEE Microwave and Wireless Components Letters, 2020, 30, 383-386.	3.2	18
26	Study of laser-imploded core plasmas with an advanced Kirkpatrickâ€“Baez x-ray microscope. Review of Scientific Instruments, 1997, 68, 824-827.	1.3	17
27	Pointâ€source xâ€ray backlighting for highâ€density plasma diagnostics. Applied Physics Letters, 1983, 42, 160-162.	3.3	16
28	Highly damage resistant, broadband, hard antireflection coating for high power lasers in the ultraviolet to nearâ€infrared wavelength regions. Applied Physics Letters, 1985, 47, 911-913.	3.3	16
29	Efficient third-harmonic generation of a picosecond laser pulse with time delay. IEEE Journal of Quantum Electronics, 1996, 32, 127-136.	1.9	16
30	Automated calibration for micro hand using visual information. , 0, , .		12
31	Two-frequency heating technique at the 18 GHz electron cyclotron resonance ion source of the National Institute of Radiological Sciences. Review of Scientific Instruments, 2014, 85, 02A931.	1.3	11
32	Annealing-induced enhancement of electrical conductivity and electromagnetic interference shielding in injection-molded CNT polymer composites. Polymer, 2022, 245, 124680.	3.8	11
33	4.8â€keV xâ€ray backlight framing method for observing images of softâ€xâ€rayâ€driven fusion capsules. Review of Scientific Instruments, 1993, 64, 706-710.	1.3	10
34	Synthesis of endohedral iron-fullerenes by ion implantation. Review of Scientific Instruments, 2014, 85, 02A945.	1.3	10
35	Development of a compact ECR ion source for various ion production. Review of Scientific Instruments, 2016, 87, 02C110.	1.3	10
36	Numerical method for finding uniform irradiation conditions of a fusion capsule driven by X-ray radiation. Laser and Particle Beams, 1992, 10, 421-433.	1.0	9

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37	Measurement of linewidths of Ne-like germanium soft X-ray laser in slab targets. Journal of Applied Physics, 1995, 78, 3610-3616.	2.5	9
38	Novel bromide anion conducting refractory solid electrolytes based on lanthanum oxybromide. Journal of Materials Science, 2005, 40, 6495-6498.	3.7	9
39	Comparison of Calculation Techniques for Q-Factor Determination of Resonant Structures Based on Influence of VNA Measurement Uncertainty. IEICE Transactions on Electronics, 2014, E97.C, 575-582.	0.6	9
40	Recent developments of ion sources for life-science studies at the Heavy Ion Medical Accelerator in Chiba (invited). Review of Scientific Instruments, 2016, 87, 02C107.	1.3	9
41	Broadband Conductivity Measurement Technique at Millimeter-Wave Bands Using a Balanced-Type Circular Disk Resonator. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 861-873.	4.6	9
42	Geometric resonances in the magnetoresistance of hexagonal lateral superlattices. Physical Review B, 2012, 86, .	3.2	8
43	Status of the Bio-Nano electron cyclotron resonance ion source at Toyo University. Review of Scientific Instruments, 2014, 85, 02C317.	1.3	8
44	Properties of an exploding foil neon-like germanium soft X-ray laser. Laser and Particle Beams, 1993, 11, 109-117.	1.0	7
45	Dynamic measurements of moisture content using microwave signal and its verification. , 2016, , .		7
46	Lasertron, a Photocathode Microwave Device Switched by Laser. IEEE Transactions on Nuclear Science, 1985, 32, 2831-2833.	2.0	6
47	Observation of Ultrahigh Gradient Electron Acceleration by a Self-Modulated Intense Short Laser Pulse. Physical Review Letters, 1995, 75, 984-984.	7.8	6
48	Improvement of Transmission/Reflection Method for Permittivity Measurement Using Long Fixtures With Time-Domain Analysis Approach. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 1201-1207.	4.7	6
49	Measurement and detail analysis of gain on balmer- $\alpha$ line of hydrogen-like carbon in wall-confined CO <sub>2</sub> laser-produced plasmas. Journal of Applied Physics, 1991, 69, 4189-4195.	2.5	5
50	Collisional excitation soft X-ray laser at 23.6 nm in a laser-produced cylindrical target. Applied Physics B: Lasers and Optics, 1996, 62, 129-133.	2.2	5
51	Dynamic measurement of moisture content using microwaves for moisture evaluation of agricultural products. IEJ Transactions on Electrical and Electronic Engineering, 2020, 15, 166-171.	1.4	5
52	Measurement of Tritium Partial Pressure in Fueling System for ICF Target by Means of Fluorescent Powder. Fusion Science and Technology, 1988, 14, 845-849.	0.6	4
53	Fullerene-rare gas mixed plasmas in an electron cyclotron resonance ion source. Review of Scientific Instruments, 2014, 85, 02A936.	1.3	4
54	Design of a new electron cyclotron resonance ion source at Oshima National College of Maritime Technology. Review of Scientific Instruments, 2014, 85, 02A940.	1.3	4

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55	Extraordinary Transmission by Double-Sided Hyperbolic Metasurfaces With $\Gamma$ -Point Degeneration at Millimeter-Wave Bands. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3297-3305.	4.6	4
56	Impedance-Matching Technique of Metasurfaces Generating Evanescent Fields for Subwavelength Focusing. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1401-1408.	4.6	4
57	Development of a reliable fast response laser-triggered dielectric switch. Review of Scientific Instruments, 1986, 57, 173-176.	1.3	3
58	In situ measurement of micromass of the fuel in a cryogenic foam target for laser fusion research. Applied Physics Letters, 1989, 55, 2600-2602.	3.3	3
59	Laser Fusion Research at ILE Osaka University. Fusion Science and Technology, 1996, 30, 625-633.	0.6	3
60	Studies on collisional pumping of soft X-ray lasers at ILE. IEEE Journal of Selected Topics in Quantum Electronics, 1999, 5, 1460-1468.	2.9	3
61	Study of reflection effect at fixture interfaces on permittivity measurements using the transmission/reflection method. , 2014, , .		3
62	New uncertainty analysis and simplified verification method for permittivity measurements using the Transmission/Reflection method by utilizing a weighted factor. , 2014, , .		3
63	A study of uncertainty estimation for time-domain analysis by considering incompleteness of TRL calibration kit. , 2015, , .		3
64	Consideration of error model with cable flexure influences on waveguide vector network analyzers at submillimeter-wave frequency. , 2015, , .		3
65	Development of permittivity measurement system at microwave and millimeter wave frequencies for low-loss substrate characterization. , 2017, , .		3
66	Broadband Permittivity Measurements Using a Frequency-Variable Balanced-Type Circular-Disk Resonator. , 2018, , .		3
67	Broadband complex permittivity and conductivity measurements in the millimeter-wave bands over variable temperatures using a balanced-type circular disk resonator. Applied Physics Letters, 2021, 119, 092902.	3.3	3
68	Direct measurement of saturation property of an electron beam pumped KrF laser. AIP Conference Proceedings, 1983, , .	0.4	2
69	Energy transport experiments at Institute of Laser Engineering, Osaka University. Laser and Particle Beams, 1989, 7, 495-504.	1.0	2
70	Radiation-driven cannonball targets for high-convergence implosions. Laser and Particle Beams, 1993, 11, 89-96.	1.0	2
71	Second-harmonic generation with traveling-wave pulses. Applied Physics B: Lasers and Optics, 1996, 63, 237-242.	2.2	2
72	Development of multi channel neutron spectrometer at GEKKO XII laser fusion facility. AIP Conference Proceedings, 1996, , .	0.4	2

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73	Development of a Radiation Detector Based on Silicon Carbide. Journal of Nuclear Science and Technology, 2008, 45, 489-491.	1.3	2
74	Performance evaluations of dielectric waveguide for millimeter-wave on-wafer measurements. , 2016, , .		2
75	Improvement of uncertainty analysis for waveguide VNA measurement at terahertz frequency. , 2016, , .		2
76	Permittivity measurement using a long fixture to eliminate reflection effect at fixture ends. , 2016, , .		2
77	Characteristics of a double-sided dirac cone metamaterial. , 2017, , .		2
78	Examples of Loss Prediction and Measurement of LTCC Circuits Uncertainties of dielectric loss in millimeter waveband. , 2018, , .		2
79	Broadband Conductivity Measurement Method up to 110 GHz Using a Balanced-Type Circular Disk Resonator. , 2020, , .		2
80	Recent results from experiments on x-ray confining cavities (abstract). Review of Scientific Instruments, 1990, 61, 2813-2813.	1.3	1
81	Measurement of absorption distribution by second harmonic and x-ray images. AIP Conference Proceedings, 1996, , .	0.4	1
82	Implosion experiments with uniformity-improved GEKKO XII: Overview. AIP Conference Proceedings, 1996, , .	0.4	1
83	Free wave laser acceleration of electrons and consequences for the Umstadter experiment. , 1997, , .		1
84	First results of the 2.45 GHz Oshima electron cyclotron resonance ion source. Review of Scientific Instruments, 2016, 87, 02A730.	1.3	1
85	Permittivity measurements for high-permittivity materials at NMIJ using resonator methods. , 2016, , .		1
86	Two-chamber configuration of Bio-Nano electron cyclotron resonance ion source for fullerene modification. Review of Scientific Instruments, 2016, 87, 02A720.	1.3	1
87	A Simply Structured Transverse Slot Linear Array Antenna in a Quasi-TEM Mode Waveguide. IEICE Transactions on Electronics, 2017, E100.C, 924-927.	0.6	1
88	Validity Evaluation of Application of TRL Calibration Method to Dielectric Waveguide Measurement by Electromagnetic Simulation. , 2018, , .		1
89	Improvement of Broadband Characterization of Dielectric Waveguide at the \$K\alpha\$ -Band by Using TRL Calibration Method. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 1788-1795.	4.7	1
90	Coherence And Brightness Of Soft X-ray Lasers. , 0, , .		0

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91	Indirect-drive inertial fusion research at the Institute of Laser Engineering. AIP Conference Proceedings, 1994, , .	0.4	0
92	High-intensity x-ray pulses from picosecond glass laser produced plasmas. , 0, , .		0
93	Experiments on the External Coupling Control of a Dirac Cone Metasurface for Extraordinary Transmission. , 2019, , .		0
94	Aperture Efficiency Improvement by Reflectionless Metasurfaces for Large-Aperture Antennas. , 2021, , .		0
95	Novel Method for Measuring Complex Permittivity of Thin Films at Millimeter Frequencies. , 2021, , .		0
96	FACILITIES OF HIGH POWER LASERS IN OSAKA UNIVERSITY. The Review of Laser Engineering, 1977, 4, 71-79.	0.0	0
97	THERMONUCLEAR FUSION PLASMA BY LASERS COUPLING AND IMPLOSION. The Review of Laser Engineering, 1977, 4, 32-50.	0.0	0
98	Experiments on Carbon Balmer-.ALPHA. Soft X-Ray Lasers Pumped with a 12ps KrF Laser.. The Review of Laser Engineering, 1993, 21, 625-633.	0.0	0
99	ãf-ãf¼ã,¶ãf¼ã,“ãfãf«ã,®ãf¼â;œç”. The Review of Laser Engineering, 1995, 23, 99-107,112.	0.0	0
100	ãf-ãf¼ã,¶ãf¼è£...ç½®. The Review of Laser Engineering, 1997, 25, 64-79,84.	0.0	0
101	A 2-D Via-Free Indefinite Anisotropic Medium with LH and RH modes Degenerated at the $\hat{\Gamma}^c$ - Point. , 2018, , .		0
102	Prediction of Transmission Loss Considering Uncertainties of Dielectric Properties in Millimeter Waveband. , 2020, , .		0