

# Hiroaki Nishimura

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/11813817/hiroaki-nishimura-publications-by-year.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100  
papers

1,253  
citations

21  
h-index

33  
g-index

104  
ext. papers

1,398  
ext. citations

2.6  
avg, IF

3.09  
L-index

#	Paper	IF	Citations
100	Direct evaluation of high neutron density environment using (n,2n) reaction induced by laser-driven neutron source. <i>Physical Review C</i> , <b>2021</b> , 104,	2.7	5
99	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. <i>Communications Physics</i> , <b>2019</b> , 2,	5.4	8
98	Efficient and Repetitive Neutron Generation by Double-Laser-Pulse Driven Photonuclear Reaction. <i>Plasma and Fusion Research</i> , <b>2018</b> , 13, 2404009-2404009	0.5	2
97	Thomson Scattering Measurement of Laser-Produced Plasma in a Magnetic Thrust Chamber. <i>Plasma and Fusion Research</i> , <b>2018</b> , 13, 1306016-1306016	0.5	1
96	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. <i>Nature Communications</i> , <b>2018</b> , 9, 3937	17.4	53
95	Note: A Laue crystal imager for high energy quasi-monochromatic x-ray. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 096106	1.7	
94	High-space resolution imaging plate analysis of extreme ultraviolet (EUV) light from tin laser-produced plasmas. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 033506	1.7	5
93	Control of unsteady laser-produced plasma-flow with a multiple-coil magnetic nozzle. <i>Scientific Reports</i> , <b>2017</b> , 7, 8910	4.9	7
92	Fast ion acceleration in a foil plasma heated by a multi-picosecond high intensity laser. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 073111	2.1	22
91	Impulse and mass removal rate of aluminum target by nanosecond laser ablation in a wide range of ambient pressure. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 233304	2.5	5
90	The Measurement of Plasma Structure in a Magnetic Thrust Chamber. <i>Plasma and Fusion Research</i> , <b>2016</b> , 11, 3406012-3406012	0.5	4
89	Development of Compton X-ray spectrometer for high energy resolution single-shot high-flux hard X-ray spectroscopy. <i>Review of Scientific Instruments</i> , <b>2016</b> , 87, 043502	1.7	8
88	Far-infrared-light shadowgraphy for high extraction efficiency of extreme ultraviolet light from a CO <sub>2</sub> -laser-generated tin plasma. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 051104	3.4	3
87	Spectroscopic observation of ablation plasma generated with a laser-driven extreme ultraviolet light source. <i>Applied Physics B: Lasers and Optics</i> , <b>2015</b> , 119, 421-425	1.9	4
86	A laser-plasma-produced soft X-ray laser at 89 eV generates DNA double-strand breaks in human cancer cells. <i>Journal of Radiation Research</i> , <b>2015</b> , 56, 633-8	2.4	1
85	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. <i>Physical Review E</i> , <b>2015</b> , 91, 063102	2.4	23
84	Correlation between laser absorption and radiation conversion efficiency in laser produced tin plasma. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121103	3.4	10

83	High-Intensity Neutron Generation via Laser-Driven Photonuclear Reaction. <i>Plasma and Fusion Research</i> , <b>2015</b> , 10, 2404003-2404003	0.5	13
82	Density and x-ray emission profile relationships in highly ionized high-Z laser-produced plasmas. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 121109	3.4	6
81	Preface to Special Issue on Laser Driven Neutron Sources and Applications. <i>The Review of Laser Engineering</i> , <b>2015</b> , 43, 70	0	
80	Neutron Generation by Laser-Driven Photonuclear Reaction. <i>The Review of Laser Engineering</i> , <b>2015</b> , 43, 98	0	
79	Spatial Resolution Evaluation of ZnO Scintillator as an In-situ Imaging Device in EUV Region. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 462-466	1.7	4
78	Energy Transportation by MeV Hot Electrons in Fast Ignition Plasma Driven with LFEX PW Laser. <i>Plasma and Fusion Research</i> , <b>2014</b> , 9, 1404118-1404118	0.5	
77	Accuracy evaluation of a Compton X-ray spectrometer with bremsstrahlung X-rays generated by a 6 MeV electron bunch. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 11D634	1.7	5
76	Hot Electron Spectra in Plain, Cone and Integrated Targets for FIREX-I using Electron Spectrometer. <i>Plasma and Fusion Research</i> , <b>2013</b> , 8, 2404125-2404125	0.5	2
75	Potential High-Spatial Resolution In-Situ Imaging of Soft X-Ray Laser Pulses With ZnO Crystal. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 2294-2297	1.7	8
74	X-ray backlight measurement of preformed plasma by kJ-class petawatt LFEX laser. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 063301	2.5	9
73	Fast-Response and Low-Afterglow Cerium-Doped Lithium 6 Fluoro-Oxide Glass Scintillator for Laser Fusion-Originated Down-Scattered Neutron Detection. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 2256-2259	1.7	5
72	Condition of MeV Electron Bunch Generated from Argon Gas-Jet Target in the Self-Modulated Laser Wakefield Regime. <i>Journal of the Physical Society of Japan</i> , <b>2011</b> , 80, 105001	1.5	6
71	Evaluation of Soft X-ray Laser with In situ Imaging Device of High Spatial Resolution ZnO Scintillator. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 122202	1.4	4
70	Effect of Nd:YAG Laser Energy on Multilayer Hollow Nanofiber Target's Extreme Ultraviolet Conversion Efficiency. <i>Journal of Macromolecular Science - Physics</i> , <b>2011</b> , 50, 1761-1770	1.4	1
69	Two-Facing Irradiation of Laser Pulses to Suppress Position Shift of Expanded Tin Microsphere for Extreme Ultraviolet Light Source. <i>Applied Physics Express</i> , <b>2011</b> , 4, 056201	2.4	2
68	Evaluation of Soft X-ray Laser with In situ Imaging Device of High Spatial Resolution ZnO Scintillator. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 122202	1.4	5
67	Comparative and quantitative study of neutral debris emanated from tin plasmas produced by neodymium-doped yttrium-aluminum-garnet and carbon dioxide laser pulses. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 111502	3.4	1
66	Characteristic measurements of silicon dioxide aerogel plasmas generated in a Planckian radiation environment. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 012701	2.1	5

65	Systematic Study on Ce:LuLiF <sub>4</sub> as a Fast Scintillator Using Storage Ring Free-Electron Lasers. <i>Japanese Journal of Applied Physics</i> , <b>2010</b> , 49, 122602	1.4	2
64	Monochromatic X-Ray Emission from Laser Produced Plasma with A Clean Ultra-Short Laser Pulse. <i>The Review of Laser Engineering</i> , <b>2010</b> , 38, 698-701	0	1
63	Application of Laser-Driven Monochromatic X-Ray to Radiobiology. <i>The Review of Laser Engineering</i> , <b>2010</b> , 38, 981-986	0	
62	Fabrication of the hollow SnO <sub>2</sub> nanoparticles contained spheres as extreme ultraviolet (EUV) target. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2010</b> , 358, 88-92	5.1	3
61	Development of Laser Plasma X-ray Microbeam Irradiation System and Radiation Biological Application. <i>IEEJ Transactions on Electronics, Information and Systems</i> , <b>2010</b> , 130, 1800-1805	0.1	
60	Development of focused laser plasma x-ray beam for radiobiological applications <b>2009</b> ,		1
59	Oriented and low-density tin dioxide film by sol-gel mineralizing tin-contained hydroxypropyl cellulose lyotropic liquid crystal for laser-induced extreme ultraviolet emission. <i>Journal of Polymer Science Part A</i> , <b>2009</b> , 47, 4566-4576	2.5	7
58	X-ray astronomy in the laboratory with a miniature compact object produced by laser-driven implosion. <i>Nature Physics</i> , <b>2009</b> , 5, 821-825	16.2	92
57	Hydrothermal-method-grown ZnO single crystal as fast EUV scintillator for future lithography. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 875-877	1.6	26
56	Laser Production of Extreme Ultraviolet Light Source for the Next Generation Lithography Application. <i>Plasma and Fusion Research</i> , <b>2009</b> , 4, 048-048	0.5	1
55	Advanced Target Design for the FIREX-I Project. <i>Plasma and Fusion Research</i> , <b>2009</b> , 4, S1001-S1001	0.5	1
54	Titanium dioxide nanofiber-cotton targets for efficient multi-keV x-ray generation. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 051505	3.4	32
53	Dry tin dioxide hollow microshells and extreme ultraviolet radiation induced by CO <sub>2</sub> laser illumination. <i>Langmuir</i> , <b>2008</b> , 24, 10402-6	4	9
52	Experimental evidence and theoretical analysis of photoionized plasma under x-ray radiation produced by an intense laser. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 073108	2.1	25
51	Temperature dependence of scintillation properties for a hydrothermal-method-grown zinc oxide crystal evaluated by nickel-like silver laser pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2008</b> , 25, B118	1.7	23
50	Plasma physics and radiation hydrodynamics in developing an extreme ultraviolet light source for lithography). <i>Physics of Plasmas</i> , <b>2008</b> , 15, 056708	2.1	110
49	Fine Structures of Laser-Driven Punched-Out Tin Fuels Observed with Extreme Ultraviolet Backlight Imaging. <i>Japanese Journal of Applied Physics</i> , <b>2008</b> , 47, 293-296	1.4	7
48	Pure-tin microdroplets irradiated with double laser pulses for efficient and minimum-mass extreme-ultraviolet light source production. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 241502	3.4	67

47	Absolute evaluation of out-of-band radiation from laser-produced tin plasmas for extreme ultraviolet lithography. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 111503	3.4	23
46	Neutral Debris Mitigation in Laser Produced Extreme Ultraviolet Light Source by the Use of Minimum-Mass Tin Target. <i>Applied Physics Express</i> , <b>2008</b> , 1, 056001	2.4	17
45	Development of Extreme-Ultraviolet Light Source by Laser-Produced Plasma. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 1125-1128	0	2
44	Atomic Model and Optimization of EUV Light Source. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 690-699	0	0
43	Basic Research on EUV Source Development. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 700-707	0	0
42	Extreme Ultraviolet (EUV) Radiation from Punched-Out Target. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 736-741	0	0
41	ZnO as Fast Scintillators Evaluated with Ni-like Ag Laser. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 1028-1030	0	0
40	Time-Domain Spectroscopy of Solid by using EUV Laser. <i>The Review of Laser Engineering</i> , <b>2008</b> , 36, 77-78	0	0
39	Line analysis of EUV Spectra from Molybdenum and Tungsten Injected with Impurity Pellets in LHD. <i>Plasma and Fusion Research</i> , <b>2007</b> , 2, S1060-S1060	0.5	36
38	Integral cross section with magnetic sublevels and polarization degree of He-like Cl ions by electron impact. <i>Physical Review A</i> , <b>2007</b> , 75,	2.6	22
37	Elastic- and inelastic-scattering collision strengths between magnetic sublevels for electron impact on He-like Cu ions. <i>Physical Review A</i> , <b>2007</b> , 75,	2.6	14
36	Development of Bunching-Out Target to Generate Extreme Ultraviolet (EUV) Light. <i>Fusion Science and Technology</i> , <b>2007</b> , 51, 769-771	1.1	2
35	Hydrothermal method grown large-sized zinc oxide single crystal as fast scintillator for future extreme ultraviolet lithography. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 231117	3.4	48
34	X-Ray Polarization Spectroscopy of He Line Emission for Diagnosis of the Anisotropy of Hot Electrons. <i>Plasma and Fusion Research</i> , <b>2007</b> , 2, 013-013	0.5	3
33	Monochromatic X-Ray Sampling Imager for Laser-Imploded Core Plasma Observation with Highly Spatial, Temporal, and Spectral Resolutions. <i>Plasma and Fusion Research</i> , <b>2007</b> , 2, S1017-S1017	0.5	1
32	Low-density tin targets for efficient extreme ultraviolet light emission from laser-produced plasmas. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 161501	3.4	55
31	Angular distribution control of extreme ultraviolet radiation from laser-produced plasma by manipulating the nanostructure of low-density SnO <sub>2</sub> targets. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 094102	3.4	21
30	Optimum laser pulse duration for efficient extreme ultraviolet light generation from laser-produced tin plasmas. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 151501	3.4	54

29	Development of Tin Droplet Target for 13.5 nm Lithography. <i>Plasma and Fusion Research</i> , <b>2006</b> , 1, 055-055		2
28	Tin-Polymer Composite on a Rotating Drum as a High Repetition Rate Laser Target for Extreme Ultraviolet Generation. <i>Fusion Science and Technology</i> , <b>2006</b> , 49, 691-694	1.1	4
27	Present Status and Future Prospect of Highly Bright Radiation Sources by Laser-Produced Plasma. <i>IEEJ Transactions on Fundamentals and Materials</i> , <b>2006</b> , 126, 1195-1198	0.2	
26	Properties of ion debris emitted from laser-produced mass-limited tin plasmas for extreme ultraviolet light source applications. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 241503	3.4	68
25	Preparation of Low-Density Macrocellular Tin Dioxide Foam with Variable Window Size. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 1115-1122	9.6	30
24	Opacity effect on extreme ultraviolet radiation from laser-produced tin plasmas. <i>Physical Review Letters</i> , <b>2005</b> , 95, 235004	7.4	119
23	Properties of EUV and particle generations from laser-irradiated solid- and low-density tin targets <b>2005</b> ,		7
22	Characterization of extreme ultraviolet emission using the fourth harmonic of a Nd:YAG laser. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 181107	3.4	35
21	Absolute calibration of extreme ultraviolet optical components with an x-ray-induced fluorescence source. <i>Review of Scientific Instruments</i> , <b>2005</b> , 76, 113109	1.7	3
20	Temperature-Dependent EUV Spectra of Xenon Plasmas Observed in the Compact Helical System. <i>Journal of Plasma and Fusion Research</i> , <b>2005</b> , 81, 480-481		3
19	Dependence of EUV emission properties on laser wavelength <b>2004</b> ,		3
18	Properties of EUV emissions from laser-produced tin plasmas <b>2004</b> , 5374, 912		5
17	Characterization of Extreme UV Radiation from Laser Produced Spherical Tin Plasmas for Use in Lithography. <i>Journal of Plasma and Fusion Research</i> , <b>2004</b> , 80, 325-330		10
16	Laser Produced Plasma for EUV Light Source For Lithography. <i>The Review of Laser Engineering</i> , <b>2004</b> , 32, 330-336	0	2
15	Suppression of Rayleigh-Taylor Instability Using High-Z Doped Plastic Targets for Inertial Fusion Energy. <i>Journal of Plasma and Fusion Research</i> , <b>2004</b> , 80, 597-604		
14	Features of Radiation Hydrodynamics in LPP-EUV Light Source Plasmas. <i>The Review of Laser Engineering</i> , <b>2004</b> , 32, 769-778	0	
13	Time- and Space-Resolved Spectroscopic Imaging Diagnostics of Laser-Produced Plasmas X-Ray Monochromatic Framing Imager and Observation of Dynamical Temperature-Density Profiles of Laser Imploded Core Plasmas. <i>Journal of Plasma and Fusion Research</i> , <b>2003</b> , 79, 355-361		
12	Progress of Advanced Fusion Energy Studies with Ultra-Intense Lasers.. <i>Journal of Plasma and Fusion Research</i> , <b>2002</b> , 78, 792-798		1

11	Implosion experiments of gas-filled plastic-shell targets with [ell] = 1 drive nonuniformity at the Gekko-XII glass laser. <i>Laser and Particle Beams</i> , <b>2001</b> , 19, 267-284	0.9	4
10	High Power Laser Astrophysics. <i>The Review of Laser Engineering</i> , <b>2001</b> , 29, 82-83	0	
9	Spectral Sensitivity Calibration of a Back-Illuminated CCD Using a Laser-Plasma X-Ray Source.. <i>The Review of Laser Engineering</i> , <b>1998</b> , 26, 700-704	0	2
8	Soft X ray radiation confinement in laser fusion.. <i>Kakuyō Kenkyū</i> , <b>1990</b> , 63, 219-234		2
7	Indirect-drive Implosion by Lasers. <i>Kakuyō Kenkyū</i> , <b>1987</b> , 58, 255-264		
6	Report on CLEO/IQEC'86 II. <i>The Review of Laser Engineering</i> , <b>1986</b> , 14, 717-720	0	
5	Survey of the Laser Fusion. <i>The Review of Laser Engineering</i> , <b>1986</b> , 14, 1003-1017	0	
4	Plasma calorimeter for absorption measurement of laser produced plasma. <i>Review of Scientific Instruments</i> , <b>1985</b> , 56, 1867-1869	1.7	4
3	Improvement of Absorption and Hydrodynamic Efficiency by Using a Double-Foil Target with a Pinhole. <i>Journal of the Physical Society of Japan</i> , <b>1982</b> , 51, 280-285	1.5	5
2	Laser Fusion Target Alignment by HARTMANN Mask Method. <i>The Review of Laser Engineering</i> , <b>1978</b> , 6, 192-199	0	1
1	Electron Beam Controlled CO2 Laser. <i>The Review of Laser Engineering</i> , <b>1975</b> , 3, 96-103	0	