

# Hideo Nagatomo

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8180169/publications.pdf>

Version: 2024-02-01

88  
papers

960  
citations

430874

18  
h-index

477307

29  
g-index

88  
all docs

88  
docs citations

88  
times ranked

888  
citing authors

#	ARTICLE	IF	CITATIONS
1	Pulse duration constraint of whistler waves in magnetized dense plasma. <i>Physical Review E</i> , 2021, 104, 035205.	2.1	0
2	Enhancement of Ablative Rayleigh-Taylor Instability Growth by Thermal Conduction Suppression in a Magnetic Field. <i>Physical Review Letters</i> , 2021, 127, 165001.	7.8	13
3	Direct-drive implosion experiment of diamond capsules fabricated with hot filament chemical vapor deposition technique. <i>Physics of Plasmas</i> , 2021, 28, 104501.	1.9	3
4	Improvement of ignition and burning target design for fast ignition scheme. <i>Nuclear Fusion</i> , 2021, 61, 126032.	3.5	0
5	Preliminary Cryogenic Layering by the Infrared Heating Method Modified with Cone Temperature Control for the Polystyrene Shell FIREX Target. <i>Plasma and Fusion Research</i> , 2021, 16, 1404099-1404099.	0.7	1
6	The role of hot electrons on ultrahigh pressure generation relevant to shock ignition conditions. <i>High Energy Density Physics</i> , 2020, 37, 100892.	1.5	3
7	Surface structure on diamond foils generated by spatially nonuniform laser irradiation. <i>Scientific Reports</i> , 2020, 10, 9017.	3.3	1
8	Intensification of laser-produced relativistic electron beam using converging magnetic fields for ignition in fast ignition laser fusion. <i>High Energy Density Physics</i> , 2020, 36, 100841.	1.5	7
9	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. <i>Physical Review Letters</i> , 2020, 124, 035001.	7.8	26
10	Study of fast ignition target design for ignition and burning experiments. <i>Nuclear Fusion</i> , 2019, 59, 106055.	3.5	8
11	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. <i>Communications Physics</i> , 2019, 2, .	5.3	11
12	Evaluation of neutron pulse width in laser-driven neutron source using organic scintillator. , 2019, , .		0
13	Direct observation of imploded core heating via fast electrons with super-penetration scheme. <i>Nature Communications</i> , 2019, 10, 5614.	12.8	8
14	Effect of equation of state on laser imprinting by comparing diamond and polystyrene foils. <i>Physics of Plasmas</i> , 2018, 25, 032706.	1.9	9
15	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. <i>Nature Communications</i> , 2018, 9, 3937.	12.8	75
16	Characteristics of Laser-Driven Neutron Sources. <i>The Review of Laser Engineering</i> , 2018, 46, 564.	0.0	0
17	Boosting laser-ion acceleration with multi-picosecond pulses. <i>Scientific Reports</i> , 2017, 7, 42451.	3.3	71
18	Validation of thermal conductivity in magnetized plasmas using particle-in-cell simulations. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	5

#	ARTICLE	IF	CITATIONS
19	Compression and electron beam heating of solid target under the external magnetic field for fast ignition. Nuclear Fusion, 2017, 57, 086009.	3.5	7
20	Magnetohydrodynamics of laser-produced high-energy-density plasma in a strong external magnetic field. Physical Review E, 2017, 95, 053204.	2.1	29
21	Fast ion acceleration in a foil plasma heated by a multi-picosecond high intensity laser. Physics of Plasmas, 2017, 24, .	1.9	29
22	Assessing infrared intensity using the evaporation rate of liquid hydrogen inside a cryogenic integrating sphere for laser fusion targets. Review of Scientific Instruments, 2017, 88, 075103.	1.3	2
23	Confirmation of hot electron preheat with a Cu foam sphere on GEKKO-LFEX laser facility. Physics of Plasmas, 2017, 24, 112709.	1.9	1
24	Asymmetric implosion of a cone-guided target irradiated by Gekko XII laser. Laser and Particle Beams, 2015, 33, 367-378.	1.0	9
25	Computational study of magnetic field compression by laser-driven implosion. Nuclear Fusion, 2015, 55, 093028.	3.5	17
26	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. Physical Review E, 2015, 91, 063102.	2.1	23
27	Self-generated magnetic dipoles in weakly magnetized beam-plasma system. Physical Review E, 2015, 91, 023107.	2.1	7
28	Control of an electron beam using strong magnetic field for efficient core heating in fast ignition. Nuclear Fusion, 2015, 55, 053022.	3.5	37
29	Energy Transportation by MeV Hot Electrons in Fast Ignition Plasma Driven with LFEX PW Laser. Plasma and Fusion Research, 2014, 9, 1404118-1404118.	0.7	0
30	Stabilization of radiation reaction with vacuum polarization. Progress of Theoretical and Experimental Physics, 2014, 2014, 43A01-0.	6.6	8
31	Implosion Simulation by Hydro Code Coupled with Laser Absorption using New Raytrace Algorithm. Plasma and Fusion Research, 2014, 9, 3404090-3404090.	0.7	0
32	Effects of laser profiles on fast electron generation under the same laser energy. Laser and Particle Beams, 2013, 31, 371-377.	1.0	3
33	Extremely high-pressure generation and compression with laser implosion plasmas. Applied Physics Letters, 2013, 102, .	3.3	4
34	Simulation analysis of the effects of an initial cone position and opening angle on a cone-guided implosion. Physics of Plasmas, 2013, 20, 102703.	1.9	1
35	Hot Electron Spectra in Plain, Cone and Integrated Targets for FIREX-I using Electron Spectrometer. Plasma and Fusion Research, 2013, 8, 2404125-2404125.	0.7	2
36	X-ray backlight measurement of preformed plasma by kJ-class petawatt LFEX laser. Journal of Applied Physics, 2012, 112, 063301.	2.5	10

#	ARTICLE	IF	CITATIONS
37	Generation of pre-formed plasma and its reduction for fast-ignition. Laser and Particle Beams, 2012, 30, 95-102.	1.0	18
38	Effects of long rarefied plasma on fast electron generation for FIREX-I targets. Laser and Particle Beams, 2012, 30, 103-109.	1.0	5
39	High-energy-density plasmas generation on GEKKO-LFEX laser facility for fast-ignition laser fusion studies and laboratory astrophysics. Plasma Physics and Controlled Fusion, 2012, 54, 124042.	2.1	40
40	Effects of CH foam preplasma on fast ignition. Laser and Particle Beams, 2012, 30, 189-197.	1.0	4
41	Theoretical Study of Ultra-Relativistic Laser Electron Interaction with Radiation Reaction by Quantum Description. Plasma and Fusion Research, 2012, 7, 2404010-2404010.	0.7	2
42	Progress of impact ignition. , 2011, , .		0
43	Fast ignition integrated experiments on GEKKO-LFEX laser facility. , 2011, , .		0
44	Equation of motion with radiation reaction in ultrarelativistic laser-electron interactions. Physics of Plasmas, 2011, 18, 123101.	1.9	11
45	Magnetic collimation of fast electrons in specially engineered targets irradiated by ultraintense laser pulses. Physics of Plasmas, 2011, 18, .	1.9	13
46	Theoretical Study of Ultra-Relativistic Laser Electron Interaction in the Strong Radiation Reaction Regime. Plasma and Fusion Research, 2011, 6, 2404099-2404099.	0.7	5
47	Proton Generation and Terahertz Radiation from A Thin-Foil Target with A High-Intensity Laser. The Review of Laser Engineering, 2010, 38, 702-705.	0.0	0
48	FIREX Project and Effects of Self-generated Electric and Magnetic Fields on Electron Driven Fast Ignition. , 2010, , .		0
49	Prepulse effects on the generation of high energy electrons in fast ignition scheme. Physics of Plasmas, 2010, 17, .	1.9	38
50	Diagnostic of laser contrast using target reflectivity. Applied Physics Letters, 2009, 94, .	3.3	33
51	Experimental and computational characterization of hydrodynamic expansion of a preformed plasma from thin-foil target for laser-driven proton acceleration. Journal of Plasma Physics, 2009, 75, 609-617.	2.1	6
52	X-ray polarization spectroscopy to study energy transport in ultra-high intensity laser produced plasmas. , 2009, , .		0
53	On-Target Contrast Diagnostic via Specular Reflectivity Measurement. , 2009, , .		0
54	Polarized He[ <sub>sub</sub> $\hat{1}\pm$ ] Radiation by Anisotropic Fast Electron Transport in Ultra-Intense Laser Produced Plasmas. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
55	High-intensity laser-driven particle and electromagnetic wave sources for science, industry, and medicine. <i>Frontiers of Optoelectronics in China</i> , 2009, 2, 299-303.	0.2	0
56	Control of laser-accelerated proton beams by modifying the target density with ASE. <i>European Physical Journal D</i> , 2009, 55, 421-425.	1.3	4
57	Shock Hugoniot and temperature data for polystyrene obtained with quartz standard. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	46
58	Study of ultraintense laser propagation in overdense plasmas for fast ignition. <i>Physics of Plasmas</i> , 2009, 16, 056307.	1.9	25
59	Ion Acceleration Using Temporally-Controlled High-Intensity Laser Pulses. <i>The Review of Laser Engineering</i> , 2009, 37, 449-454.	0.0	0
60	Advanced Target Design for the FIREX-I Project. <i>Plasma and Fusion Research</i> , 2009, 4, S1001-S1001.	0.7	1
61	Simultaneous Generation of UV Harmonics and Protons From a Thin-Foil Target With a High-Intensity Laser. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 1812-1816.	1.3	4
62	Rayleigh-Taylor instability growth on low-density foam targets. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	14
63	Generation and confinement of high energy electrons generated by irradiation of ultra-intense short laser pulses onto cone targets. <i>Laser and Particle Beams</i> , 2008, 26, 207-212.	1.0	20
64	Laser ion acceleration by a near-critical density target. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
65	Probing of nonlinear evolution of laser wakefield by Raman scattering of laser light. <i>Physics of Plasmas</i> , 2008, 15, 093107.	1.9	8
66	Efficient production of a collimated MeV proton beam from a polyimide target driven by an intense femtosecond laser pulse. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	42
67	High Intensity Laser Propagation through Overdense Plasmas. <i>The Review of Laser Engineering</i> , 2008, 36, 1139-1141.	0.0	0
68	Particle-in-Cell Simulation of the Measurement of Laser Wakefields with Raman Scattering of Probe Laser Light. <i>Plasma and Fusion Research</i> , 2008, 3, 063-063.	0.7	0
69	Proton Acceleration in the Interaction of an Intense Laser Light with a Cone Plasma Target and Coated Proton Layer. <i>Plasma and Fusion Research</i> , 2008, 3, 062-062.	0.7	0
70	Holistic Simulation for FIREX Project with $F_{I<sup>3</sup>}$ . <i>Laser and Particle Beams</i> , 2007, 25, 621-629.	1.0	34
71	Relativistic Electron Fluid Simulation and Studies on Electric Shock Wave Formation. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 044502.	1.6	0
72	Recent results and future prospects of laser fusion research at ILE, Osaka. <i>European Physical Journal D</i> , 2007, 44, 259-264.	1.3	11

#	ARTICLE	IF	CITATIONS
73	High Energy Electron Generation by Laser-Cone Interaction. Plasma and Fusion Research, 2007, 2, 018-018.	0.7	4
74	Characterization of Thin-Foil Preformed Plasmas for High-Intensity Laser Plasma Interactions. Acta Physica Hungarica A Heavy Ion Physics, 2006, 26, 327-333.	0.4	1
75	Dynamics of Self-Generated Magnetic Fields in Stagnation Phase and their Effects on Hot Spark Formation. Plasma and Fusion Research, 2006, 1, 020-020.	0.7	6
76	The formation of high-density core plasma in non-spherical implosion using high-resolution two-dimensional integrated implosion code. Journal of Plasma Physics, 2006, 72, 791.	2.1	7
77	Computational Studies and Designs for Fast Ignition. AIP Conference Proceedings, 2006, , .	0.4	2
78	Fast ignition integrated interconnecting code project for cone-guided targets. Laser and Particle Beams, 2006, 24, 191-198.	1.0	45
79	Generation and transport of fast electrons inside cone targets irradiated by intense laser pulses. Laser and Particle Beams, 2006, 24, 5-8.	1.0	22
80	Present Status of Fast Ignition Research and Prospects of FIREX Project. Fusion Science and Technology, 2005, 47, 662-666.	1.1	22
81	Multi-imaging x-ray streak camera for ultrahigh-speed two-dimensional x-ray imaging of imploded core plasmas (invited). Review of Scientific Instruments, 2004, 75, 3921-3925.	1.3	18
82	Characterization of Extreme UV Radiation from Laser Produced Spherical Tin Plasmas for Use in Lithography. Journal of Plasma and Fusion Research, 2004, 80, 325-330.	0.4	10
83	Advances in Plasma and Fusion Simulation and Prospects for the Future Progress of Laser Fusion Simulations and Network Computing. Journal of Plasma and Fusion Research, 2004, 80, 396-400.	0.4	0
84	Integration of Individual Simulation Codes for Fast Ignition. The Review of Laser Engineering, 2004, 32, 324-329.	0.0	0
85	Design of foam-buffered high gain target with Fokker-Planck implosion simulation for thermal insulation and imprint mitigation. Physics of Plasmas, 2003, 10, 2608-2611.	1.9	2
86	Numerical Simulation of Non-spherical Implosion Related to Fast Ignition. AIP Conference Proceedings, 2003, , .	0.4	5
87	Prospect for Multiple Time and Spatial Scale Simulation Research of Laser Fusion Plasmas. Journal of Plasma and Fusion Research, 2003, 79, 489-495.	0.4	1
88	Nonlinear Evolution of Single Spike Structure and Vortex in the Richtmyer-Meshkov Instability. Journal of Plasma and Fusion Research, 1999, 75-CD, 201-210.	0.4	1