Atsushi Sunahara

List of Publications by Year in Descending Order

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

246 papers	4,006 citations	32 h-index	57 g-index
277 ext. papers	4,389 ext. citations	2.1 avg, IF	4.27 L-index

#	Paper	IF	Citations
246	Dynamics of ultrafast heated radiative plasmas driven by petawatt laser light. *Plasma Physics and Controlled Fusion*, **2022**, 64, 035004	2	
245	Time-resolved two-dimensional measurements of the electron density, electron temperature, and drift velocity of laser-produced carbon plasmas using the ion feature of collective laser Thomson scattering. *Applied Physics Express*, **2021**, 14, 066001	2.4	0
244	Hot Electron and Ion Spectra in Axial and Transverse Laser Irradiation in the GXII-LFEX Direct Fast Ignition Experiment. *Plasma and Fusion Research*, **2021**, 16, 2404076-2404076	0.5	0
243	Adaptation of TCAD simulation in excimer laser doping. *Japanese Journal of Applied Physics*, **2021**, 60, 086502	1.4	2
242	Intensification of laser-produced relativistic electron beam using converging magnetic fields for ignition in fast ignition laser fusion. *High Energy Density Physics*, **2020**, 36, 100841	1.2	2
241	Observation of water-window soft x-ray emission from laser-produced Au plasma under optically thin condition. *High Energy Density Physics*, **2020**, 37, 100845	1.2	0
240	PIC simulation for dense high Z plasma formation with ultrashort petawatt laser including radiation processes. *High Energy Density Physics*, **2020**, 36, 100816	1.2	2
239	Electron temperature and soft x-ray intensity scaling in laser heavy element plasma interaction. *AIP Advances*, **2020**, 10, 065306	1.5	2
238	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. *Physical Review Letters*, **2020**, 124, 035001	7.4	13
237	Monte Carlo particle collision model for qualitative analysis of neutron energy spectra from anisotropic inertial confinement fusion. *High Energy Density Physics*, **2020**, 36, 100803	1.2	2
236	Numerical analysis on a conical shaped target for laser fusion rocket. *High Energy Density Physics*, **2020**, 37, 100894	1.2	
235	A numerical study on the pulse duration dependence of a magnetic field generated using a laser-driven capacitor-coil target. *High Energy Density Physics*, **2020**, 36, 100818	1.2	1
234	Charge-separated spectra of suprathermal highly charged bismuth ions in a dual laser-produced plasma soft x-ray source. *Review of Scientific Instruments*, **2020**, 91, 086103	1.7	0
233	Verification of fast heating of core plasmas produced by counter-illumination of implosion lasers. *High Energy Density Physics*, **2020**, 37, 100890	1.2	0
232	Silicon twisted cone structure produced by optical vortex pulse with structure evaluation by radiation hydrodynamic simulation. *Scientific Reports*, **2020**, 10, 20512	4.9	0
231	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. *Communications Physics*, **2019**, 2,	5.4	8
230	Enhanced heat transport in ablation plasma under transverse magnetic field by upper hybrid resonance heating. *High Energy Density Physics*, **2019**, 30, 8-12	1.2	1

229	A spherical shell pellet injection system for repetitive laser engagement. *Nuclear Fusion*, **2019**, 59, 096022	3.3	1
228	Kinetic model for color-center formation in TiO2 film using femtosecond laser irradiation. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 031512	2.9	0
227	Enhancement of water-window soft x-ray emission from laser-produced Au plasma under low-pressure nitrogen atmosphere. *Optics Letters*, **2019**, 44, 1439-1442	3	5
226	Optimized highly charged ion production for strong soft x-ray sources obeying a quasi-Moseley□ law. *AIP Advances*, **2019**, 9, 115315	1.5	4
225	Efficient laser acceleration of deuteron ions through optimization of pre-plasma formation for neutron source development. *Plasma Physics and Controlled Fusion*, **2019**, 61, 025002	2	6
224	Modification of single-crystalline yttria-stabilised zirconia induced by radiation heating from laser-produced plasma. *Journal Physics D: Applied Physics*, **2019**, 52, 105202	3	1
223	1-Hz Bead-Pellet Injection System for Fusion Reaction Engaged by a Laser HAMA Using Ultra-Intense Counter Beams. *Fusion Science and Technology*, **2019**, 75, 36-48	1.1	5
222	Effects of Equation of State on Fluid Simulations for Laser-Produced Plasmas. *Springer Proceedings in Physics*, **2018**, 213-217	0.2	
221	Modeling of Ablation of the Target Material for the Plasma for Coherent and Incoherent EUV Sources. *Springer Proceedings in Physics*, **2018**, 373-376	0.2	
220	Experimental demonstration of ion extraction from magnetic thrust chamber for laser fusion rocket. *Japanese Journal of Applied Physics*, **2018**, 57, 050303	1.4	1
219	Influence of short pulse duration of carbon dioxide lasers on extreme ultraviolet emission from laser-produced plasmas. *Japanese Journal of Applied Physics*, **2018**, 57, 070311	1.4	4
218	Emission of water-window soft x-rays under optically thin conditions using low-density foam targets. *Optics Letters*, **2018**, 43, 3750-3753	3	9
217	Thomson Scattering Measurement of Laser-Produced Plasma in a Magnetic Thrust Chamber. *Plasma and Fusion Research*, **2018**, 13, 1306016-1306016	0.5	1
216	Whispering Gallery Effect in Relativistic Optics. *JETP Letters*, **2018**, 107, 351-354	1.2	4
215	3 □108 D-D Neutron Generation by High-Intensity Laser Irradiation onto the Inner Surface of Spherical CD Shells. *Plasma and Fusion Research*, **2018**, 13, 2401028-2401028	0.5	
214	Intense water-window soft x-ray emission by spectral control using dual laser pulses. *Optics Express*, **2018**, 26, 27748-27756	3.3	6
213	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. *Nature Communications*, **2018**, 9, 3937	17.4	53
212	Numerical analysis of pulsed magnetic field diffusion dynamics in gold cone target. *Physics of Plasmas*, **2018**, 25, 094505	2.1	7

211	Improvement in the heating efficiency of fast ignition inertial confinement fusion through suppression of the preformed plasma. *Nuclear Fusion*, **2017**, 57, 066022	3.3	3
210	Validation of thermal conductivity in magnetized plasmas using particle-in-cell simulations. *Physics of Plasmas*, **2017**, 24, 042117	2.1	3
209	Compression and electron beam heating of solid target under the external magnetic field for fast ignition. *Nuclear Fusion*, **2017**, 57, 086009	3.3	5
208	Time-resolved two-dimensional profiles of electron density and temperature of laser-produced tin plasmas for extreme-ultraviolet lithography light sources. *Scientific Reports*, **2017**, 7, 12328	4.9	17
207	Control of unsteady laser-produced plasma-flow with a multiple-coil magnetic nozzle. *Scientific Reports*, **2017**, 7, 8910	4.9	7
206	A numerical model for investigation of emission of particle debris from laser-irradiated metal targets. *AIP Advances*, **2017**, 7, 095005	1.5	
205	Fast heating of fuel assembled in a spherical deuterated polystyrene shell target by counter-irradiating tailored laser pulses delivered by a HAMA 1 Hz ICF driver. *Nuclear Fusion*, **2017**, 57, 116031	3.3	6
204	Integrated simulation of magnetic-field-assist fast ignition laser fusion. *Plasma Physics and Controlled Fusion*, **2017**, 59, 014045	2	15
203	Production of intense, pulsed, and point-like neutron source from deuterated plastic cavity by mono-directional kilo-joule laser irradiation. *Applied Physics Letters*, **2017**, 111, 233506	3.4	8
202	Direct heating of a laser-imploded core using ultraintense laser LFEX. *Nuclear Fusion*, **2017**, 57, 076030	3.3	0
201	Ultrahigh-contrast kilojoule-class petawatt LFEX laser using a plasma mirror **2016**, 55, 6850		25
200	Characteristics of the soft X-ray emission from laser-produced highly charged platinum plasmas. *Applied Physics Express*, **2016**, 9, 066201	2.4	6
199	The Measurement of Plasma Structure in a Magnetic Thrust Chamber. *Plasma and Fusion Research*, **2016**, 11, 3406012-3406012	0.5	4
198	Electron beam guiding by external magnetic fields in imploded fuel plasma. *Journal of Physics: Conference Series*, **2016**, 717, 012025	0.3	1
197	Magntohydrodynamic behavior of capacitor-coil target toward alternative inertial confinement fusion. *Journal of Physics: Conference Series*, **2016**, 717, 012078	0.3	
196	The diagnostics of the energy coupling efficiency in the Fast Ignition integrated experiment. *Journal of Physics: Conference Series*, **2016**, 688, 012004	0.3	
195	Enhancement of fast electron energy deposition by external magnetic fields. *Journal of Physics: Conference Series*, **2016**, 688, 012033	0.3	3
194	Electron beam guiding by strong longitudinal magnetic fields. *Journal of Physics: Conference Series*, **2016**, 688, 012041	0.3	4

193	Quantitative K-line spectroscopy for energy transport in ultra-intense laser plasma interaction. *Journal of Physics: Conference Series*, **2016**, 688, 012132	0.3	
192	Modeling of initial interaction between the laser pulse and Sn droplet target and pre-plasma formation for the LPP EUV source **2016**,		1
191	Repetitive Solid Spherical Pellet Injection and Irradiation toward the Repetitive-mode Fast-Ignition Fusion miniReactor CANDY.. *Journal of Physics: Conference Series*, **2016**, 688, 012026	0.3	1
190	Mitigation of Laser Imprinting with Diamond Ablator for Direct-Drive Inertial Confinement Fusion Targets. *Journal of Physics: Conference Series*, **2016**, 688, 012107	0.3	1
189	Direct heating of imploded plasma in the fast ignition. *Journal of Physics: Conference Series*, **2016**, 688, 012114	0.3	1
188	Effects of the irradiation of a finite number of laser beams on the implosion of a cone-guided target. *Journal of Physics: Conference Series*, **2016**, 688, 012127	0.3	
187	Spectroscopic measurements of ablation plasma generated with laser-driven intense extreme ultraviolet (EUV) light. *Journal of Physics: Conference Series*, **2016**, 688, 012122	0.3	1
186	Electron transport estimated from electron spectra using electron spectrometer in LFEX laser target experiments. *Journal of Physics: Conference Series*, **2016**, 717, 012043	0.3	0
185	Hot electron spectra on advanced targets in FIREX. *Journal of Physics: Conference Series*, **2016**, 688, 012083	0.3	
184	Progress toward a unified kJ-machine CANDY. *Journal of Physics: Conference Series*, **2016**, 688, 012049	0.3	1
183	Dependence of Ablative Rayleigh-Taylor Instability on High-Z Dopant Concentration. *Journal of Physics: Conference Series*, **2016**, 688, 012109	0.3	1
182	High-density implosion via suppression of Rayleigh-Taylor instability. *Journal of Physics: Conference Series*, **2016**, 717, 012051	0.3	1
181	Energy distribution of fast electrons accelerated by high intensity laser pulse depending on laser pulse duration. *Journal of Physics: Conference Series*, **2016**, 717, 012102	0.3	5
180	An optimum design of implosion with external magnetic field for electron beam guiding in fast ignition. *Journal of Physics: Conference Series*, **2016**, 717, 012041	0.3	4
179	Plasma structure and energy dependence in a magnetic thrust chamber system. *Journal of Physics: Conference Series*, **2016**, 717, 012071	0.3	4
178	Simulation analysis for ion assisted fast ignition using structured targets. *Journal of Physics: Conference Series*, **2016**, 717, 012046	0.3	
177	Target Monitoring and Plasma Diagnosis using 2-probe beam for CANDY. *Journal of Physics: Conference Series*, **2016**, 688, 012036	0.3	1
176	Upgrade of repetitive fast-heating fusion driver HAMA to implode a shell target by using diode pumped solid state laser. *Journal of Physics: Conference Series*, **2016**, 688, 012070	0.3	3

175	Integrated simulations for ion beam assisted fast ignition. *Journal of Physics: Conference Series*, **2016**, 688, 012096	0.3	
174	Atomic processes and equation of state of high Z plasmas for EUV sources and their effects on the spatial and temporal evolution of the plasmas. *Journal of Physics: Conference Series*, **2016**, 688, 012099	0.3	
173	Direct heating of compressed core by ultra-intense laser. *Journal of Physics: Conference Series*, **2016** , 717, 012055	0.3	1
172	Development of 4.5 keV monochromatic X-ray radiography using the high-energy, picosecond LFEX laser. *Journal of Physics: Conference Series*, **2016**, 717, 012112	0.3	4
171	Amorphous nanostructuralization in HOPG by 1014W cm-2laser. *Journal of Physics: Conference Series*, **2016**, 717, 012073	0.3	1
170	Investigation of the ionization balance of bismuth-to-tin plasmas for the extreme ultraviolet light source based on a computer-generated collisional radiative model. *AIP Advances*, **2016**, 6, 105002	1.5	6
169	Fast ignition realization experiment with high-contrast kilo-joule peta-watt LFEX laser and strong external magnetic field. *Physics of Plasmas*, **2016**, 23, 056308	2.1	44
168	Flash K□radiography of laser-driven solid sphere compression for fast ignition. *Applied Physics Letters*, **2016**, 108, 254101	3.4	22
167	Experimental demonstration of laser imprint reduction using underdense foams. *Physics of Plasmas* , **2016**, 23, 042701	2.1	17
166	Numerical demonstration of high-Z doping scheme on ignition-relevant scale implosion. *Physics of Plasmas*, **2016**, 23, 122705	2.1	2
165	Magnetized Fast ignition (MFI) and Laser Plasma Interactions in Strong Magnetic Field. *Journal of Physics: Conference Series*, **2016**, 688, 012066	0.3	2
164	Fast Heating of Imploded Core with Counterbeam Configuration. *Physical Review Letters*, **2016**, 117, 055001	7.4	14
163	Simulated ablation of carbon wall by alpha particles for a laser fusion reactor. *Journal of Nuclear Materials*, **2015**, 459, 77-80	3.3	
162	Control of an electron beam using strong magnetic field for efficient core heating in fast ignition. *Nuclear Fusion*, **2015**, 55, 053022	3.3	35
161	Spectroscopic observation of ablation plasma generated with a laser-driven extreme ultraviolet light source. *Applied Physics B: Lasers and Optics*, **2015**, 119, 421-425	1.9	4
160	Direct heating of a laser-imploded core by ultraintense laser-driven ions. *Physical Review Letters*, **2015**, 114, 195002	7.4	19
159	Characterization of material ablation driven by laser generated intense extreme ultraviolet light. *Applied Physics Letters*, **2015**, 107, 114101	3.4	6
158	Asymmetric implosion of a cone-guided target irradiated by Gekko XII laser. *Laser and Particle Beams*, **2015**, 33, 367-378	0.9	7

157	Computational study of magnetic field compression by laser-driven implosion. *Nuclear Fusion*, **2015**, 55, 093028	3.3	15
156	Development of a collective Thomson scattering system for laser-produced tin plasmas for extreme-ultraviolet light sources. *Applied Physics Express*, **2015**, 8, 126101	2.4	15
155	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. *Physical Review E*, **2015**, 91, 063102	2.4	23
154	Correlation between laser absorption and radiation conversion efficiency in laser produced tin plasma. *Applied Physics Letters*, **2015**, 107, 121103	3.4	10
153	Numerical evaluation of a 13.5-nm high-brightness microplasma extreme ultraviolet source. *Journal of Applied Physics*, **2015**, 118, 193301	2.5	7
152	Multilayered polycrystallization in single-crystal YSZ by laser-shock compression. *Journal Physics D: Applied Physics*, **2015**, 48, 325305	3	4
151	Density and x-ray emission profile relationships in highly ionized high-Z laser-produced plasmas. *Applied Physics Letters*, **2015**, 106, 121109	3.4	6
150	Efficient extreme ultraviolet emission from one-dimensional spherical plasmas produced by multiple lasers. *Applied Physics Express*, **2014**, 7, 086202	2.4	24
149	Implosion Simulation by Hydro Code Coupled with Laser Absorption using New Raytrace Algorithm. *Plasma and Fusion Research*, **2014**, 9, 3404090-3404090	0.5	
148	Energy Transportation by MeV Hot Electrons in Fast Ignition Plasma Driven with LFEX PW Laser. *Plasma and Fusion Research*, **2014**, 9, 1404118-1404118	0.5	
147	Laser scattered images observed from carbon plasma stagnation and following molecular formation. *Applied Physics Letters*, **2014**, 104, 244105	3.4	4
146	Note: development of a volume-limited dot target for a high brightness extreme ultraviolet microplasma source. *Review of Scientific Instruments*, **2014**, 85, 116104	1.7	2
145	Effect of Magnetic Field Strength on a Magnetic Thrust Chamber System. *Journal of Propulsion and Power*, **2014**, 30, 54-61	1.8	4
144	Hot electron spectra in hole-cone shell targets and a new proposal of the target for fast ignition in laser fusion. *Physica Scripta*, **2014**, T161, 014025	2.6	2
143	Progress in indirect and direct-drive planar experiments on hydrodynamic instabilities at the ablation front. *Physics of Plasmas*, **2014**, 21, 122702	2.1	15
142	Evolution of laser-produced Sn extreme ultraviolet source diameter for high-brightness source. *Applied Physics Letters*, **2014**, 105, 074103	3.4	8
141	Prepulse and amplified spontaneous emission effects on the interaction of a petawatt class laser with thin solid targets. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2014**, 745, 150-163	1.2	38
140	Repetitive 1 Hz Fast-Heating Fusion Driver HAMA Pumped by Diode Pumped Solid State Laser. *The Review of Laser Engineering*, **2014**, 42, 154	0	

139	Progress of Extreme Ultraviolet (EUV) Source Development for Micro-Lithography. *The Review of Laser Engineering*, **2014**, 42, 14	0	
138	Numerical Simulation for Laser Processing. *Journal of the Japan Society for Precision Engineering*, **2014**, 80, 824-830	0.1	
137	Extremely high-pressure generation and compression with laser implosion plasmas. *Applied Physics Letters*, **2013**, 102, 183501	3.4	3
136	Implosion and heating experiments of fast ignition targets by Gekko-XII and LFEX lasers. *EPJ Web of Conferences*, **2013**, 59, 01008	0.3	2
135	Efficient multi-keV X-ray generation from high-contrast laser plasma interaction. *EPJ Web of Conferences*, **2013**, 59, 18003	0.3	
134	Development of laser ablation plasma by anisotropic self-radiation. *EPJ Web of Conferences*, **2013**, 59, 06005	0.3	
133	Quantitative measurement of hard X-ray spectra from laser-driven fast ignition plasma. *High Energy Density Physics*, **2013**, 9, 435-438	1.2	5
132	Computational study of strong magnetic field generation in a nonspherical, cone-guided implosion. *Nuclear Fusion*, **2013**, 53, 063018	3.3	13
131	1 Hz fast-heating fusion driver HAMA pumped by a 10 J green diode-pumped solid-state laser. *Nuclear Fusion*, **2013**, 53, 073011	3.3	17
130	Present status of fast ignition realization experiment and inertial fusion energy development. *Nuclear Fusion*, **2013**, 53, 104021	3.3	21
129	Simulations of laser imprint reduction using underdense foams and its consequences on the hydrodynamic instability growth. *New Journal of Physics*, **2013**, 15, 085033	2.9	8
128	A Collective Laser Thomson Scattering System for Diagnostics of Laser-Produced Plasmas for Extreme Ultraviolet Light Sources. *Applied Physics Express*, **2013**, 6, 076101	2.4	11
127	Kilotesla magnetic field due to a capacitor-coil target driven by high power laser. *Scientific Reports*, **2013**, 3, 1170	4.9	215
126	First demonstration of laser engagement of 1-Hz-injected flying pellets and neutron generation. *Scientific Reports*, **2013**, 3, 2561	4.9	16
125	Hot Electron Spectra in Plain, Cone and Integrated Targets for FIREX-I using Electron Spectrometer. *Plasma and Fusion Research*, **2013**, 8, 2404125-2404125	0.5	2
124	Radiation hydrodynamics simulation of high-Z doped ICF targets. *Journal of Physics: Conference Series*, **2013**, 454, 012008	0.3	
123	Design of a cone target for fast ignition. *EPJ Web of Conferences*, **2013**, 59, 03009	0.3	4
122	Optimum design of imploded core plasma for effective fast ignition at GXII. *EPJ Web of Conferences* , **2013**, 59, 03007	0.3	1

121	Fast electron beam guiding for effective core heating. *EPJ Web of Conferences*, **2013**, 59, 03010	0.3	6
120	Target Injection and Engagement for Neutron Generation at 1 Hz. *Plasma and Fusion Research*, **2013**, 8, 1205020-1205020	0.5	12
119	Hi-rep. Counter-Illumination Fast Ignition Scheme Fusion. *Plasma and Fusion Research*, **2013**, 8, 3404047-3404047	0.5	67
118	Analysis of Laser Wavelength and Energy Dependences of the Impulse in a Magnetic Thrust Chamber System for a Laser Fusion Rocket. *Transactions of the Japan Society for Aeronautical and Space Sciences*, **2013**, 56, 170-172	0.8	1
117	Experimental evidence of foam homogenization. *Physics of Plasmas*, **2012**, 19, 113105	2.1	30
116	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	35
115	Effects of CH foam preplasma on fast ignition. *Laser and Particle Beams*, **2012**, 30, 189-197	0.9	3
114	Integrated experiments of fast ignition targets by Gekko-XII and LFEX lasers. *High Energy Density Physics*, **2012**, 8, 227-230	1.2	18
113	Experimental Demonstration of Magnetic Thrust Chamber for a Laser Fusion Rocket. *Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan*, **2012**, 10, Pb_109-Pb_114	0.3	1
112	Fusion using fast heating of a compactly imploded CD core. *Physical Review Letters*, **2012**, 108, 155001	7.4	17
111	X-ray backlight measurement of preformed plasma by kJ-class petawatt LFEX laser. *Journal of Applied Physics*, **2012**, 112, 063301	2.5	9
110	Generation of pre-formed plasma and its reduction for fast-ignition. *Laser and Particle Beams*, **2012**, 30, 95-102	0.9	16
109	Effects of long rarefied plasma on fast electron generation for FIREX-I targets. *Laser and Particle Beams*, **2012**, 30, 103-109	0.9	5
108	Material Dependence on Plasma Shielding Induced by Laser Ablation. *Plasma and Fusion Research*, **2012**, 7, 2405065-2405065	0.5	5
107	Fast ignition integrated experiments with Gekko and LFEX lasers. *Plasma Physics and Controlled Fusion*, **2011**, 53, 124029	2	46
106	Efficient multi-keV x-ray generation from a high-Z target irradiated with a clean ultra-short laser pulse. *Optics Express*, **2011**, 19, 4560-5	3.3	17
105	Carbon Plume Stagnation: Platform for Vapor Shield Study. *Fusion Science and Technology*, **2011**, 60, 329-333	1.1	4
104	Present states and future prospect of fast ignition realization experiment (FIREX) with Gekko and LFEX Lasers at ILE. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 653, 84-88	1.2	10

103	Direct measurement of the impulse in a magnetic thrust chamber system for laser fusion rocket. *Applied Physics Letters*, **2011**, 99, 071501	3.4	8
102	Pre-plasma effects on core heating and enhancing heating efficiency by extended double cone for FIREX. *Nuclear Fusion*, **2011**, 51, 073022	3.3	38
101	FIREX project and effects of self-generated electric and magnetic fields on electron-driven fast ignition. *Plasma Physics and Controlled Fusion*, **2010**, 52, 124047	2	8
100	Comparative and quantitative study of neutral debris emanated from tin plasmas produced by neodymium-doped yttrium-aluminum-garnet and carbon dioxide laser pulses. *Applied Physics Letters*, **2010**, 97, 111502	3.4	1
99	Theoretical investigation of the spectrum and conversion efficiency of short wavelength extreme-ultraviolet light sources based on terbium plasmas. *Applied Physics Letters*, **2010**, 97, 231501	3.4	16
98	Measurement of preheating due to radiation and nonlocal electron heat transport in laser-irradiated targets. *Physics of Plasmas*, **2010**, 17, 032702	2.1	7
97	Integrated simulations of core heating in cone-guiding fast ignition, FIREX-I. *Journal of Physics: Conference Series*, **2010**, 244, 022040	0.3	4
96	Laser-produced plasmas as unique x-ray souces for industry and astrophysics. *Journal of Physics: Conference Series*, **2010**, 244, 012001	0.3	3
95	Prepulse effects on the generation of high energy electrons in fast ignition scheme. *Physics of Plasmas*, **2010**, 17, 023106	2.1	36
94	Modeling of radiative properties of Sn plasmas for extreme-ultraviolet source. *Journal of Applied Physics*, **2010**, 107, 113303	2.5	32
93	Laboratory experiments on cluster/aerosol formation by colliding ablation plumes. *Journal of Physics: Conference Series*, **2010**, 244, 032033	0.3	6
92	Controlling dynamics of imploded core plasma for fast ignition. *Journal of Physics: Conference Series* , **2010**, 244, 022050	0.3	
91	A model experiment of a double-cone target using a gap target. *Journal of Physics: Conference Series*, **2010**, 244, 042012	0.3	1
90	Collimation of relativistic laser-generated high energy electron beams via double cone target in fast ignition scheme. *Journal of Physics: Conference Series*, **2010**, 244, 022030	0.3	1
89	Effects of preformed plasma of CH foam on fast electron generation. *Journal of Physics: Conference Series*, **2010**, 244, 022037	0.3	
88	Effects of pre-formed plasma inside a guiding cone in fast ignition scheme. *Journal of Physics: Conference Series*, **2010**, 244, 022079	0.3	3
87	Atomic number Z dependence of dynamics of laser-ablated materials. *Fusion Engineering and Design* , **2010**, 85, 935-939	1.7	14
86	Magnetic Thrust Chamber Propulsion System for Controlling Laser-Produced Plasma by Magnetic Fields. *Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan*, **2010**, 8, Tb_1-Tb_4	0.3	

85	Numerical study of the advanced target design for FIREX-I. *Nuclear Fusion*, **2009**, 49, 075028	3.3	7
84	Plasma physics and laser development for the Fast-Ignition Realization Experiment (FIREX) Project. *Nuclear Fusion*, **2009**, 49, 104024	3.3	41
83	Conceptual design of fast-ignition laser fusion reactor FALCON-D. *Nuclear Fusion*, **2009**, 49, 075006	3.3	5
82	Atomic processes in the LPP and LA-DPP EUV sources **2009**,		2
81	Atomic modeling of the plasma EUV sources. *High Energy Density Physics*, **2009**, 5, 147-151	1.2	8
80	Shock Hugoniot and temperature data for polystyrene obtained with quartz standard. *Physics of Plasmas*, **2009**, 16, 062702	2.1	40
79	Enhancing the number of high-energy electrons deposited to a compressed pellet via double cones in fast ignition. *Physical Review Letters*, **2009**, 102, 245001	7.4	77
78	The atomic model of the Sn plasmas for the EUV source. *Journal of Physics: Conference Series*, **2009**, 163, 012107	0.3	5
77	Plasma physics and radiation hydrodynamics in developing an extreme ultraviolet light source for lithographya). *Physics of Plasmas*, **2008**, 15, 056708	2.1	110
76	RayleighTaylor instability growth on low-density foam targets. *Physics of Plasmas*, **2008**, 15, 092109	2.1	12
75	Two dimensional radiation hydrodynamic simulation for extreme ultra-violet emission from laser-produced tin plasmas. *Journal of Physics: Conference Series*, **2008**, 112, 042048	0.3	19
74	Streaked x-ray backlighting with twin-slit imager for study of density profile and trajectory of low-density foam target filled with deuterium liquid. *Review of Scientific Instruments*, **2008**, 79, 10E916	1.7	1
73	Pure-tin microdroplets irradiated with double laser pulses for efficient and minimum-mass extreme-ultraviolet light source production. *Applied Physics Letters*, **2008**, 92, 241502	3.4	67
72	Absolute evaluation of out-of-band radiation from laser-produced tin plasmas for extreme ultraviolet lithography. *Applied Physics Letters*, **2008**, 92, 111503	3.4	23
71	EUV source design flexibility for lithography. *Journal of Physics: Conference Series*, **2008**, 112, 042065	0.3	1
70	Temperature measurement of preheated planar-cryogenic targets. *Journal of Physics: Conference Series*, **2008**, 112, 022012	0.3	
69	Advanced laser-produced EUV light source for HVM with conversion efficiency of 5-7% and B-field mitigation of ions **2008**,		6
68	Target design for high-density non-spherical implosion in fast ignition. *Journal of Physics: Conference Series*, **2008**, 112, 022053	0.3	1

67	Simulation studies for core heating properties in FIREX-I. *Journal of Physics: Conference Series*, **2008**, 112, 022054	0.3	3
66	EUV light source by high power laser. *Journal of Physics: Conference Series*, **2008**, 112, 042047	0.3	6
65	Optimum laser-produced plasma for extreme ultraviolet light source. *Journal of Physics: Conference Series*, **2008**, 112, 042049	0.3	3
64	Detailed atomic modeling of Sn plasmas for the EUV source. *Journal of Physics: Conference Series*, **2008**, 112, 042062	0.3	3
63	e-Science in high energy density science research. *Fusion Engineering and Design*, **2008**, 83, 525-529	1.7	1
62	Optimization of Extreme Ultraviolet Emission from Laser-Produced Tin Plasmas Based on Radiation Hydrodynamics Simulations. *Plasma and Fusion Research*, **2008**, 3, 043-043	0.5	27
61	Atomic modeling of the plasma EUV sources. *High Energy Density Physics*, **2007**, 3, 250-255	1.2	8
60	Simulation and design study of cryogenic cone shell target for Fast Ignition Realization Experiment projecta). *Physics of Plasmas*, **2007**, 14, 056303	2.1	53
59	Reduction of the Rayleigh-Taylor instability growth with cocktail color irradiation. *Physics of Plasmas*, **2007**, 14, 122702	2.1	19
58	Radiative Properties and Hydrodynamics of Laser Produced Tin Plasma for Efficient Extreme Ultraviolet Light Source **2007**, 607-618		
57	Low-density tin targets for efficient extreme ultraviolet light emission from laser-produced plasmas. *Applied Physics Letters*, **2006**, 88, 161501	3.4	55
56	Optimum laser pulse duration for efficient extreme ultraviolet light generation from laser-produced tin plasmas. *Applied Physics Letters*, **2006**, 89, 151501	3.4	54
55	Non-local electron transport in laser-produced plasmas. *European Physical Journal Special Topics*, **2006**, 133, 193-195		2
54	Energy spectra and charge states of debris emitted from laser-produced minimum mass tin plasmas **2006**, 6151, 1051		6
53	Analysis of the emission spectrum of Xe and Sn **2006**,		9
52	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	2.7	6
51	Computational study of implosion physics and target design for the fast ignition experiment FIREX-I. *European Physical Journal Special Topics*, **2006**, 133, 397-400		9
50	Properties of ion debris emitted from laser-produced mass-limited tin plasmas for extreme ultraviolet light source applications. *Applied Physics Letters*, **2005**, 87, 241503	3.4	68

49	Characterization of density profile of laser-produced Sn plasma for 13.5nm extreme ultraviolet source. *Applied Physics Letters*, **2005**, 86, 201501	3.4	30
48	Characterization of extreme ultraviolet emission from laser-produced spherical tin plasma generated with multiple laser beams. *Applied Physics Letters*, **2005**, 86, 051501	3.4	93
47	Opacity effect on extreme ultraviolet radiation from laser-produced tin plasmas. *Physical Review Letters*, **2005**, 95, 235004	7.4	119
46	Properties of EUV and particle generations from laser-irradiated solid- and low-density tin targets **2005**,		7
45	Characterization of extreme ultraviolet emission using the fourth harmonic of a Nd:YAG laser. *Applied Physics Letters*, **2005**, 86, 181107	3.4	35
44	Petawatt-laser direct heating of uniformly imploded deuterated-polystyrene shell target. *Physical Review E*, **2005**, 71, 016403	2.4	21
43	Suppression of the Rayleigh□Taylor instability and its implication for the impact ignition. *Plasma Physics and Controlled Fusion*, **2004**, 46, B245-B254	2	6
42	Monochromatic imaging and angular distribution measurements of extreme ultraviolet light from laser-produced Sn and SnO2 plasmas. *Applied Physics Letters*, **2004**, 85, 1919-1921	3.4	29
41	Suppression of Rayleigh□Taylor instability due to radiative ablation in brominated plastic targets. *Physics of Plasmas*, **2004**, 11, 2814-2822	2.1	28
40	Present Status and Future Prospects of Laser Fusion Research at ILE Osaka University. *Plasma Science and Technology*, **2004**, 6, 2179-2184	1.5	2
39	Suppression of the Rayleigh-Taylor instability due to self-radiation in a multiablation target. *Physical Review Letters*, **2004**, 92, 195001	7.4	67
38	Fast plasma heating in a cone-attached geometry□towards fusion ignition. *Nuclear Fusion*, **2004**, 44, S276-S283	3.3	35
37	Estimation of emission efficiency for laser-produced EUV plasmas **2004**,		5
36	Dependence of EUV emission properties on laser wavelength **2004**,		3
35	Simulations on laser ablation and its applications **2004**,		2
34	Properties of EUV emissions from laser-produced tin plasmas **2004**, 5374, 912		5
33	Theoretical simulation of extreme UV radiation source for lithography **2004**, 5374, 405		2
32	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		10

31	Suppression of Rayleigh-Taylor Instability Using High-Z Doped Plastic Targets for Inertial Fusion Energy. *Journal of Plasma and Fusion Research*, **2004**, 80, 597-604		
30	Equation-of-state measurements of polyimide at pressures up to 5.8 TPa using low-density foam with laser-driven shock waves. *Physical Review E*, **2003**, 67, 056406	2.4	33
29	Basic and integrated studies for fast ignition. *Physics of Plasmas*, **2003**, 10, 1925-1930	2.1	55
28	Temporal evolution of temperature and density profiles of a laser compressed core (invited). *Review of Scientific Instruments*, **2003**, 74, 1683-1687	1.7	13
27	First observation of density profile in directly laser-driven polystyrene targets for ablative Rayleigh□Taylor instability research. *Physics of Plasmas*, **2003**, 10, 4784-4789	2.1	31
26	Time-dependent electron thermal flux inhibition in direct-drive laser implosions. *Physical Review Letters*, **2003**, 91, 095003	7.4	71
25	Ablative Rayleigh-Taylor instability at short wavelengths observed with moir□nterferometry. *Physical Review Letters*, **2002**, 88, 145003	7.4	46
24	Monochromatic x-ray imaging with bent crystals for laser fusion research. *Review of Scientific Instruments*, **2001**, 72, 744-747	1.7	15
23	Model experiments of fast ignition with coaxial high-power laser beams **2001**,		2
22	Laboratory simulation of the collision of supernova 1987A with its circumstellar ring nebula. *Plasma Physics Reports*, **2001**, 27, 843-851	1.2	13
21	Fast heating of ultrahigh-density plasma as a step towards laser fusion ignition. *Nature*, **2001**, 412, 798-802	42.4	780
20	Fast ignitor research at the Institute of Laser Engineering, Osaka University. *Physics of Plasmas*, **2001**, 8, 2268-2274	2.1	69
19	Blast-wave-sphere interaction using a laser-produced plasma: an experiment motivated by supernova 1987A. *Physical Review E*, **2001**, 64, 047402	2.4	19
18	Implosion experiments of gas-filled plastic-shell targets with [ell] = 1 drive nonuniformity at the Gekko-XII glass laser. *Laser and Particle Beams*, **2001**, 19, 267-284	0.9	4
17	Influence of Residual Gas on the Life of Cryogenic Target and Trajectory of Injected Targets. *Fusion Science and Technology*, **2000**, 38, 28-33		3
16	Time- and space-resolved X-ray spectroscopy for observation of the hot compressed core region in a laser driven implosion. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2000**, 65, 393-404	2.1	5
15	Studies of ultra-intense laser plasma interactions for fast ignition. *Physics of Plasmas*, **2000**, 7, 2014-2022	2.1	103
14	Recent studies of laser produced plasmas. *Plasma Physics and Controlled Fusion*, **1999**, 41, A75-A97	2	34

13	Hydrodynamic simulation for off-center fast ignition model. *Fusion Engineering and Design*, **1999**, 44, 255-259	1.7	1
12	Observation of implosion dynamics by line emissions from direct-drive fusion capsules. *Fusion Engineering and Design*, **1999**, 44, 175-180	1.7	
11	2D simulation of hydrodynamic instability in ICF stagnation phase. *Fusion Engineering and Design*, **1999**, 44, 163-169	1.7	5
10	Target design for ignition and high gain in direct drive ICF. *Fusion Engineering and Design*, **1999**, 44, 105-119	1.7	7
9	Laser Fusion and Laboratory Astrophysics with Intense Lasers. *Astrophysics and Space Science Library*, **1999**, 423-426	0.3	
8	High-convergence uniform implosion of fusion pellets with the new GEKKO laser. *Plasma Physics and Controlled Fusion*, **1997**, 39, A401-A409	2	1
7	Time- and space-resolved X-ray spectroscopic measurements of hot dense plasma created with laser driven implosions. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **1997**, 58, 585-596	2.1	8
6	Shock-Wave-Driven Instability at Material Interface in Laser Driven Implosion. *Japanese Journal of Applied Physics*, **1996**, 35, 5501-5508	1.4	1
5	Effects of Multiple Shock and Thermal Conduction on Mixing Layer Evolution in a Stagnating High-Gain Inertial Confinement Fusion Target. *Japanese Journal of Applied Physics*, **1996**, 35, 6265-6272	1.4	2
4	Study of indirectly driven implosion by x-ray spectroscopic measurements. *Physics of Plasmas*, **1995**, 2, 2063-2074	2.1	39
3	Conversion Efficiency of LPP Sources339-370		11
2			
1	Phase Changes of 4H-SiC in Excimer Laser Doping. *Journal of Electronic Materials*,1	1.9	0