Mitsuo Nakai

List of Publications by Year in Descending Order

226 papers	3,496 citations	30 h-index	50 g-index
251 ext. papers	3,825 ext. citations	2.4 avg, IF	3.8 L-index

#	Paper	IF	Citations
226	Non-destructive inspection of water or high-pressure hydrogen gas in metal pipes by the flash of neutrons and x rays generated by laser. *AIP Advances*, **2022**, 12, 045220	1.5	0
225	Super-strong magnetic field-dominated ion beam dynamics in focusing plasma devices.. *Scientific Reports*, **2022**, 12, 6876	4.9	0
224	Preliminary Cryogenic Layering by the Infrared Heating Method Modified with Cone Temperature Control for the Polystyrene Shell FIREX Target. *Plasma and Fusion Research*, **2021**, 16, 1404099-1404099	0.5	
223	Dosimetric calibration of GafChromic HD-V2, MD-V3, and EBT3 films for dose ranges up to 100 kGy. *Review of Scientific Instruments*, **2021**, 92, 063301	1.7	3
222	Direct evaluation of high neutron density environment using (n,2n) reaction induced by laser-driven neutron source. *Physical Review C*, **2021**, 104,	2.7	5
221	Single shot radiography by a bright source of laser-driven thermal neutrons and x-rays. *Applied Physics Express*, **2021**, 14, 106001	2.4	4
220	Development of Tritium Tracer Doped Liquid Fuel Target for Inertial Confinement Fusion at the Gekko XII-LFEX Facility. *Fusion Science and Technology*, **2020**, 76, 464-470	1.1	2
219	Surface structure on diamond foils generated by spatially nonuniform laser irradiation. *Scientific Reports*, **2020**, 10, 9017	4.9	1
218	The conceptual design of 1-ps time resolution neutron detector for fusion reaction history measurement at OMEGA and the National Ignition Facility. *Review of Scientific Instruments*, **2020**, 91, 063304	1.7	3
217	Production of relativistic electrons at subrelativistic laser intensities. *Physical Review E*, **2020**, 101, 031201	2.4	13
216	The avalanche image intensifier panel for fast neutron radiography by using laser-driven neutron sources. *High Energy Density Physics*, **2020**, 36, 100833	1.2	3
215	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. *Physical Review Letters*, **2020**, 124, 035001	7.4	13
214	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
213	Proof-of-principle experiment for laser-driven cold neutron source. *Scientific Reports*, **2020**, 10, 20157	4.9	7
212	Relativistic magnetic reconnection in laser laboratory for testing an emission mechanism of hard-state black hole system. *Physical Review E*, **2020**, 102, 033202	2.4	6
211	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. *Communications Physics*, **2019**, 2,	5.4	8
210	Enhancing laser beam performance by interfering intense laser beamlets. *Nature Communications*, **2019**, 10, 2995	17.4	11

209	Efficient and Repetitive Neutron Generation by Double-Laser-Pulse Driven Photonuclear Reaction. *Plasma and Fusion Research*, **2018**, 13, 2404009-2404009	0.5	2
208	Effect of equation of state on laser imprinting by comparing diamond and polystyrene foils. *Physics of Plasmas*, **2018**, 25, 032706	2.1	7
207	Whispering Gallery Effect in Relativistic Optics. *JETP Letters*, **2018**, 107, 351-354	1.2	4
206	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	
205	Whispering gallery effect in relativistic optics, "[redacted] *Journal of Experimental and Theoretical Physics Letters*, **2018**, 366-367	1.3	
204	A large-aperture high-sensitivity avalanche image intensifier panel. *Review of Scientific Instruments*, **2018**, 89, 10I128	1.7	2
203	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. *Nature Communications*, **2018**, 9, 3937	17.4	53
202	A multichannel gated neutron detector with reduced afterpulse for low-yield neutron measurements in intense hard X-ray backgrounds. *Review of Scientific Instruments*, **2018**, 89, 10I114	1.7	1
201	Boosting laser-ion acceleration with multi-picosecond pulses. *Scientific Reports*, **2017**, 7, 42451	4.9	51
200	Large aperture fast neutron imaging detector with 10-ns time resolution **2017**,		2
199	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
198	Plasma mirror implementation on LFEX laser for ion and fast electron fast ignition. *Nuclear Fusion*, **2017**, 57, 126018	3.3	4
197	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	1.7	2
196	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
195	Evaluation of laser-driven ion energies for fusion fast-ignition research. *Progress of Theoretical and Experimental Physics*, **2017**, 2017,	5.4	2
194	Cool-down performance of the new apparatus for fuel layering demonstrations of FIREX targets. *Journal of Physics: Conference Series*, **2016**, 688, 012037	0.3	1
193	Ultrahigh-contrast kilojoule-class petawatt LFEX laser using a plasma mirror **2016**, 55, 6850		25
192	The diagnostics of the energy coupling efficiency in the Fast Ignition integrated experiment. *Journal of Physics: Conference Series*, **2016**, 688, 012004	0.3	

191	Quantitative K□ine spectroscopy for energy transport in ultra-intense laser plasma interaction. *Journal of Physics: Conference Series*, **2016**, 688, 012132	0.3	
190	Mechanical design of experimental apparatus for FIREX cryo-target cooling. *Journal of Physics: Conference Series*, **2016**, 717, 012098	0.3	1
189	Development of Compton X-ray spectrometer for high energy resolution single-shot high-flux hard X-ray spectroscopy. *Review of Scientific Instruments*, **2016**, 87, 043502	1.7	8
188	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
187	Experimental Test of the Polarization Persistence in Inertial Confinement Fusion. *Journal of Physics: Conference Series*, **2016**, 688, 012015	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	Progress Towards a Laser Produced Relativistic Electron-Positron Pair Plasma. *Journal of Physics: Conference Series*, **2016**, 688, 012010	0.3	3
184	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
183	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
182	Quantitative K□ine spectroscopy for energytransport in fast ignition plasma driven with LFEX PW laser. *High Energy Density Physics*, **2015**, 15, 78-81	1.2	1
181	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. *Physical Review E*, **2015**, 91, 063102	2.4	23
180	High-Intensity Neutron Generation via Laser-Driven Photonuclear Reaction. *Plasma and Fusion Research*, **2015**, 10, 2404003-2404003	0.5	13
179	Response measurement of single-crystal chemical vapor deposition diamond radiation detector for intense X-rays aiming at neutron bang-time and neutron burn-history measurement on an inertial confinement fusion with fast ignition. *Review of Scientific Instruments*, **2015**, 86, 053503	1.7	0
178	Development of the High Energy Bremsstrahlung X-Ray Spectrometer by Using (□n) Reaction. *Plasma and Fusion Research*, **2014**, 9, 4404112-4404112	0.5	
177	The Development of the Neutron Detector for the Fast Ignition Experiment by using LFEX and Gekko XII Facility. *Plasma and Fusion Research*, **2014**, 9, 4404105-4404105	0.5	1
176	The Neutron Imaging Diagnostics and Reconstructing Technique for Fast Ignition. *Plasma and Fusion Research*, **2014**, 9, 4404108-4404108	0.5	
175	Development of Multichannel Time-of-Flight Neutron Spectrometer for the Fast Ignition Experiment. *Plasma and Fusion Research*, **2014**, 9, 4404110-4404110	0.5	3
174	Development of Compton X-Ray Spectrometer for Fast Ignition Experiment . *Plasma and Fusion Research*, **2014**, 9, 4405109-4405109	0.5	4

173	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	
172	Development of multichannel low-energy neutron spectrometer. *Review of Scientific Instruments*, **2014**, 85, 11E125	1.7	3
171	Accuracy evaluation of a Compton X-ray spectrometer with bremsstrahlung X-rays generated by a 6 MeV electron bunch. *Review of Scientific Instruments*, **2014**, 85, 11D634	1.7	5
170	Characterizing a fast-response, low-afterglow liquid scintillator for neutron time-of-flight diagnostics in fast ignition experiments. *Review of Scientific Instruments*, **2014**, 85, 11E126	1.7	7
169	Development of x-ray radiography for high energy density physics. *Physics of Plasmas*, **2014**, 21, 102712	2.1	28
168	Photonuclear reaction based high-energy x-ray spectrometer to cover from 2 MeV to 20 MeV. *Review of Scientific Instruments*, **2014**, 85, 11D629	1.7	5
167	Stabilization of radiation reaction with vacuum polarization. *Progress of Theoretical and Experimental Physics*, **2014**, 2014, 43A01-0	5.4	8
166	Luminescence properties of Nd3+ and Er3+ doped glasses in the VUV region. *Optical Materials*, **2013**, 35, 1962-1964	3.3	16
165	Implosion and heating experiments of fast ignition targets by Gekko-XII and LFEX lasers. *EPJ Web of Conferences*, **2013**, 59, 01008	0.3	2
164	Quantitative measurement of hard X-ray spectra from laser-driven fast ignition plasma. *High Energy Density Physics*, **2013**, 9, 435-438	1.2	5
163	Pr or Ce-doped, fast-response and low-afterglow cross-section-enhanced scintillator with 6Li for down-scattered neutron originated from laser fusion. *Journal of Crystal Growth*, **2013**, 362, 288-290	1.6	17
162	Present status of fast ignition realization experiment and inertial fusion energy development. *Nuclear Fusion*, **2013**, 53, 104021	3.3	21
161	New insights into the laser produced electron–positron pairs. *New Journal of Physics*, **2013**, 15, 065010	2.9	22
160	Electronic States of Trivalent Praseodymium Ion Doped in 20Al(PO3)3–80LiF Glass. *Japanese Journal of Applied Physics*, **2013**, 52, 062402	1.4	5
159	FIREX foam cryogenic target development: residual void reduction and estimation with solid hydrogen refractive index measurements. *Nuclear Fusion*, **2013**, 53, 083009	3.3	9
158	Development of time-of-flight neutron detector with fast-decay and low-afterglow scintillator for fast ignition experiment. *EPJ Web of Conferences*, **2013**, 59, 13012	0.3	
157	Recent progress of fuel layering study for FIREX cryogenic target. *EPJ Web of Conferences*, **2013**, 59, 12002	0.3	1
156	Multichannel down-scattered neutron detector for areal density measurement. *EPJ Web of Conferences*, **2013**, 59, 13011	0.3	1

155	Integrated experiments of fast ignition targets by Gekko-XII and LFEX lasers. *High Energy Density Physics*, **2012**, 8, 227-230	1.2	18
154	The photonuclear neutron and gamma-ray backgrounds in the fast ignition experiment. *Review of Scientific Instruments*, **2012**, 83, 10D909	1.7	11
153	Fast-Response and Low-Afterglow Cerium-Doped Lithium 6 Fluoro-Oxide Glass Scintillator for Laser Fusion-Originated Down-Scattered Neutron Detection. *IEEE Transactions on Nuclear Science*, **2012**, 59, 2256-2259	1.7	5
152	Fast ignition integrated experiments with Gekko and LFEX lasers. *Plasma Physics and Controlled Fusion*, **2011**, 53, 124029	2	46
151	Optical and scintillation properties of Pr-doped Li-glass for neutron detection in inertial confinement fusion process. *Journal of Non-Crystalline Solids*, **2011**, 357, 910-914	3.9	14
150	Optical properties and structure of Pr3+-doped Al(PO3)3LiF glasses as scattered neutron scintillator for nuclear fusion diagnostics. *IOP Conference Series: Materials Science and Engineering*, **2011**, 18, 112006	0.4	4
149	Development of Glass Scintillator Material for Measurement of Scattered Neutron Originated from Inertial Confi nement Fusion. *The Review of Laser Engineering*, **2011**, 39, 312-318	0	
148	Leakage Control of Tritium Through Heat Cycles of Conceptual-Design, Laser-Fusion Reactor KOYO-F. *Fusion Science and Technology*, **2011**, 60, 893-896	1.1	5
147	Recent Developments in Fabrication of New Conceptual Gold Cone and Machining of Polystyrene Shell for Fast Ignition Target. *Fusion Science and Technology*, **2011**, 59, 276-278	1.1	4
146	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
145	Fast-response, Low-Afterglow 4,4$₱$-Bis[(2-butyloctyl)oxy]-1,1$₱:4$₱,1$₱:4$₱,1$₱-quarterphenyl Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. *Japanese Journal of Applied Physics*, **2011**, 50, 080208	1.4	7
144	Laser-shock compression and Hugoniot measurements of liquid hydrogen to 55 GPa. *Physical Review B*, **2011**, 83,	3.3	32
143	Fast-response, Low-Afterglow 4,4₱Bis[(2-butyloctyl)oxy]-1,1₱4₱1₱4₱1₱quarterphenyl Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. *Japanese Journal of Applied Physics*, **2011**, 50, 080208	1.4	3
142	Note: Light output enhanced fast response and low afterglow 6Li glass scintillator as potential down-scattered neutron diagnostics for inertial confinement fusion. *Review of Scientific Instruments*, **2010**, 81, 106105	1.7	10
141	Down-scattered neutron imaging detector for areal density measurement of inertial confinement fusion. *Review of Scientific Instruments*, **2010**, 81, 10D303	1.7	7
140	Measurement of preheating due to radiation and nonlocal electron heat transport in laser-irradiated targets. *Physics of Plasmas*, **2010**, 17, 032702	2.1	7
139	Custom-Designed Fast-Response Praseodymium-Doped Lithium 6 Fluoro-Oxide Glass Scintillator With Enhanced Cross-Section for Scattered Neutron Originated From Inertial Confinement Fusion. *IEEE Transactions on Nuclear Science*, **2010**, 57, 1426-1429	1.7	13
138	Hugoniot and temperature measurements of liquid hydrogen by laser-shock compression. *Journal of Physics: Conference Series*, **2010**, 244, 042018	0.3	2

137	Laser machining for fabrication of targets used in the FIREX-I project. *Journal of Physics: Conference Series*, **2010**, 244, 032038	0.3	2
136	A scattered-neutron detector for areal density measurement. *Journal of Physics: Conference Series*, **2010**, 244, 032041	0.3	1
135	Industrial applications of laser neutron source. *Journal of Physics: Conference Series*, **2010**, 244, 042027	0.3	4
134	High-speed monochromatic x-ray imager for electron temperature mapping of fast igniter plasmas. *Journal of Physics: Conference Series*, **2010**, 244, 032060	0.3	
133	Study on possible fuel layering sequence for FIREX target. *Journal of Physics: Conference Series*, **2010**, 244, 032039	0.3	4
132	Custom-designed scintillator for laser fusion diagnostics Pr3+-doped fluoro-phosphate lithium glass scintillator. *Optical Materials*, **2010**, 32, 1393-1396	3.3	7
131	Ultrathin amorphization of single-crystal silicon by ultraviolet femtosecond laser pulse irradiation. *Journal of Applied Physics*, **2009**, 105, 064909	2.5	21
130	Plasma physics and laser development for the Fast-Ignition Realization Experiment (FIREX) Project. *Nuclear Fusion*, **2009**, 49, 104024	3.3	41
129	Fabrication of aerogel capsule, bromine-doped capsule, and modified gold cone in modified target for the Fast Ignition Realization Experiment (FIREX) Project. *Nuclear Fusion*, **2009**, 49, 095028	3.3	29
128	Pr3+-doped fluoro-oxide lithium glass as scintillator for nuclear fusion diagnostics. *Review of Scientific Instruments*, **2009**, 80, 113504	1.7	32
127	Shock Hugoniot and temperature data for polystyrene obtained with quartz standard. *Physics of Plasmas*, **2009**, 16, 062702	2.1	40
126	Experimental evidence of impact ignition: 100-fold increase of neutron yield by impactor collision. *Physical Review Letters*, **2009**, 102, 235002	7.4	39
125	Temperature Control in a Cryogenic Target with a Conical Laser Guide for Fuel Layering. *Fusion Science and Technology*, **2009**, 56, 427-431	1.1	1
124	Smooth Membrane Formation on Resorcinol-Formaldehyde Aerogel Balls Gelated Using a Basic Phase-Transfer Catalyst. *Fusion Science and Technology*, **2009**, 55, 465-471	1.1	4
123	Advanced Target Design for the FIREX-I Project. *Plasma and Fusion Research*, **2009**, 4, S1001-S1001	0.5	1
122	Manufacturing and Leak Check of Shell Targets for the FIREX-I Project. *Plasma and Fusion Research*, **2009**, 4, S1010-S1010	0.5	4
121	A Proposed Procedure for Temperature Control of the Cryogenic Target for the FIREX Project. *Plasma and Fusion Research*, **2009**, 4, S1007-S1007	0.5	
120	RayleighTaylor instability growth on low-density foam targets. *Physics of Plasmas*, **2008**, 15, 092109	2.1	12

119	Study on a fuel layering sequence of the foam target for the FIREX project. *Journal of Physics: Conference Series*, **2008**, 112, 032067	0.3	3
118	Thin shell aerogel fabrication for FIREX-I targets using high viscosity (phloroglucinol carboxylic acid)/formaldehyde solution. *Laser and Particle Beams*, **2008**, 26, 449-453	0.9	16
117	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
116	Development of TOF neutron spectrometer for the measurement of degenerated plasma in fast ignition experiment. *Journal of Physics: Conference Series*, **2008**, 112, 032079	0.3	3
115	Fabrication and characterization of planar cryogenic targets for GEKKO-XII. *Journal of Physics: Conference Series*, **2008**, 112, 032068	0.3	
114	Solution viscosity adjustable phloroglucinolcarboxylic acid/formaldehyde applied in extremely thin shell fusion target fabrication. *Journal of Physics: Conference Series*, **2008**, 112, 032069	0.3	
113	Temperature measurement of preheated planar-cryogenic targets. *Journal of Physics: Conference Series*, **2008**, 112, 022012	0.3	
112	Application of bubble detector in FIREX program. *Journal of Physics: Conference Series*, **2008**, 112, 032080	0.3	
111	Fast response neutron scintillation detector for FIRE-X. *Journal of Physics: Conference Series*, **2008**, 112, 032082	0.3	1
110	Experimental investigation of aerosol formation in laser fusion reactor chamber by discharge method. *Journal of Physics: Conference Series*, **2008**, 112, 032040	0.3	1
109	Developments of characterization of the foam shell target for fast ignition realization experiment-I (FIREX-I). *Journal of Physics: Conference Series*, **2008**, 112, 032066	0.3	3
108	Recent results and future prospects of laser fusion research at ILE, Osaka. *European Physical Journal D*, **2007**, 44, 259-264	1.3	9
107	Comprehensive diagnosis of growth rates of the ablative Rayleigh-Taylor instability. *Physical Review Letters*, **2007**, 98, 045002	7.4	54
106	Reduction of the Rayleigh-Taylor instability growth with cocktail color irradiation. *Physics of Plasmas*, **2007**, 14, 122702	2.1	19
105	Foam Structure of Xerogel Prepared Via Ring-Opening Reaction Between Epoxy Groups Attached on the Side Chain of Polystyrene. *Fusion Science and Technology*, **2007**, 51, 665-672	1.1	3
104	Preliminary Results of Fuel Layering on the Cryogenic Target for the FIREX Project. *Fusion Science and Technology*, **2007**, 51, 753-757	1.1	4
103	Laser Machining of RF Foam by Second Harmonics of Nd:YAG Laser. *Fusion Science and Technology*, **2007**, 51, 677-681	1.1	15
102	Fabrication of Low-Density Solid Xenon as Laser-Produced Plasma Extreme Ultraviolet Source. *Japanese Journal of Applied Physics*, **2006**, 45, L884-L886	1.4	2

101	Low-Density-Plastic-Foam Capsule of Resorcinol/Formalin and (Phloroglucinolcarboxylic Acid)/Formalin Resins for Fast-Ignition Realization Experiment (FIREX) in Laser Fusion Research. *Japanese Journal of Applied Physics*, **2006**, 45, L335-L338	1.4	19
100	Ultrafast x-ray imaging with sliced sampling streak cameras. *Review of Scientific Instruments*, **2006**, 77, 026105	1.7	1
99	Angular distribution control of extreme ultraviolet radiation from laser-produced plasma by manipulating the nanostructure of low-density SnO2 targets. *Applied Physics Letters*, **2006**, 88, 094102	3.4	21
98	Hugoniot measurement of diamond under laser shock compression up to 2TPa. *Physics of Plasmas*, **2006**, 13, 052705	2.1	47
97	Optimization of Gelation to Prepare Hollow Foam Shell of Resorcinol-Formalin Using a Phase-Transfer Catalyst. *Fusion Science and Technology*, **2006**, 49, 663-668	1.1	9
96	Polystyrene Based Foam Materials for Cryogenic Targets of Fast Ignition Realization Experiment (FIREX). *Fusion Science and Technology*, **2006**, 49, 695-700	1.1	4
95	Tin-Polymer Composite on a Rotating Drum as a High Repetition Rate Laser Target for Extreme Ultraviolet Generation. *Fusion Science and Technology*, **2006**, 49, 691-694	1.1	4
94	Electrochemical Fabrication of Low Density Metal Foam with Mono-Dispersed-Sized Micro- and Submicro-Meter Pore. *Fusion Science and Technology*, **2006**, 49, 686-690	1.1	20
93	Cool-down performance of the apparatus for the cryogenic target of the FIREX project. *Fusion Engineering and Design*, **2006**, 81, 1647-1652	1.7	14
92	Polymorphic tin dioxide synthesis via sol–gel mineralization of ethyl–cyanoethyl cellulose lyotropic liquid crystals. *Colloid and Polymer Science*, **2006**, 284, 429-434	2.4	5
91	Characterization of density profile of laser-produced Sn plasma for 13.5nm extreme ultraviolet source. *Applied Physics Letters*, **2005**, 86, 201501	3.4	30
90	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
89	Equation-of-state measurements for polystyrene at multi-TPa pressures in laser direct-drive experiments. *Physics of Plasmas*, **2005**, 12, 124503	2.1	23
88	Opacity effect on extreme ultraviolet radiation from laser-produced tin plasmas. *Physical Review Letters*, **2005**, 95, 235004	7.4	119
87	Foam materials for cryogenic targets of fast ignition realization experiment (FIREX). *Nuclear Fusion*, **2005**, 45, 1277-1283	3.3	30
86	Present Status of Fast Ignition Research and Prospects of FIREX Project. *Fusion Science and Technology*, **2005**, 47, 662-666	1.1	16
85	Resorcinol-Formalin Foam Balls Via Gelation of Emulsion Using Phase-Transfer Catalysts. *Macromolecular Chemistry and Physics*, **2005**, 206, 2171-2176	2.6	14
84	Towards realization of hyper-velocities for impact fast ignition. *Plasma Physics and Controlled Fusion*, **2005**, 47, B815-B822	2	24

83	Dynamic imaging of 13.5 nm extreme ultraviolet emission from laser-produced Sn plasmas. *Applied Physics Letters*, **2005**, 87, 241502	3.4	13
82	Petawatt-laser direct heating of uniformly imploded deuterated-polystyrene shell target. *Physical Review E*, **2005**, 71, 016403	2.4	21
81	Temperature-Dependent EUV Spectra of Xenon Plasmas Observed in the Compact Helical System. *Journal of Plasma and Fusion Research*, **2005**, 81, 480-481		3
80	Suppression of the Rayleigh□Taylor instability and its implication for the impact ignition. *Plasma Physics and Controlled Fusion*, **2004**, 46, B245-B254	2	6
79	Suppression of Rayleigh□Taylor instability due to radiative ablation in brominated plastic targets. *Physics of Plasmas*, **2004**, 11, 2814-2822	2.1	28
78	Temporally resolved Schwarzschild microscope for the characterization of extreme ultraviolet emission in laser-produced plasmas. *Review of Scientific Instruments*, **2004**, 75, 5173-5176	1.7	12
77	Present Status and Future Prospects of Laser Fusion Research at ILE Osaka University. *Plasma Science and Technology*, **2004**, 6, 2179-2184	1.5	2
76	Suppression of the Rayleigh-Taylor instability due to self-radiation in a multiablation target. *Physical Review Letters*, **2004**, 92, 195001	7.4	67
75	GEKKO/HIPER-driven shock waves and equation-of-state measurements at ultrahigh pressures. *Physics of Plasmas*, **2004**, 11, 1600-1608	2.1	35
74	Fast plasma heating in a cone-attached geometry□owards fusion ignition. *Nuclear Fusion*, **2004**, 44, S276-S283	3.3	35
73	Estimation of emission efficiency for laser-produced EUV plasmas **2004**,		5
72	Properties of EUV emissions from laser-produced tin plasmas **2004**, 5374, 912		5
71	Study on EUV emission properties of laser-produced plasma at ILE, Osaka **2004**,		6
70	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
69	Characterization of GEKKO/HIPER-Driven Shock Waves for Equation-of-State Experiments in Ultra-High-Pressure Regime. *Journal of Plasma and Fusion Research*, **2004**, 80, 486-491		1
68	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		
67	X-ray imaging diagnostics for laser-driven hydrodynamic instability experiments. *Review of Scientific Instruments*, **2003**, 74, 2194-2197	1.7	4
66	High-speed x-ray radiographic measurement of laser-driven hydrodynamic instability **2003**, 4948, 425		

65	Side-on measurement of hydrodynamics of laser-driven plasmas with high space- and time-resolution x-ray imaging technique. *Review of Scientific Instruments*, **2003**, 74, 2198-2201	1.7	10
64	Experimental technique for launching miniature flying plates using laser pulses. *International Journal of Impact Engineering*, **2003**, 29, 497-502	4	14
63	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
62	Temporal evolution of temperature and density profiles of a laser compressed core (invited). *Review of Scientific Instruments*, **2003**, 74, 1683-1687	1.7	13
61	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
60	Fast heating scalable to laser fusion ignition. *Nature*, **2002**, 418, 933-4	50.4	398
59	Imprint reduction in a plasma layer preformed with x-ray irradiation. *Physics of Plasmas*, **2002**, 9, 1381-1391	2.1	11
58	Single spatial mode experiments on initial laser imprint on direct-driven planar targets. *Physics of Plasmas*, **2002**, 9, 1734-1744	2.1	15
57	Perturbation transfer from the front to rear surface of laser-irradiated targets. *Physical Review E*, **2002**, 65, 045401	2.4	3
56	Ablative Rayleigh-Taylor instability at short wavelengths observed with moir interferometry. *Physical Review Letters*, **2002**, 88, 145003	7.4	46
55	Penumbral imaging for measurement of the ablation density in laser-driven targets. *Review of Scientific Instruments*, **2002**, 73, 2588-2596	1.7	16
54	Rayleigh Taylor and Laser Imprinting Diagnostics **2002**, 169-176		
53	Density profile of the ablating plasma produced by soft x-ray irradiation. *Review of Scientific Instruments*, **2001**, 72, 653-656	1.7	2
52	Monochromatic x-ray imaging with bent crystals for laser fusion research. *Review of Scientific Instruments*, **2001**, 72, 744-747	1.7	15
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