

Mitsuo Nakai

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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.

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	Fast heating scalable to laser fusion ignition. <i>Nature</i> , 2002 , 418, 933-4	50.4	398
225	Scalings of implosion experiments for high neutron yield. <i>Physics of Fluids</i> , 1988 , 31, 2884		152
224	High-density compression experiments at ILE, Osaka. <i>Laser and Particle Beams</i> , 1991 , 9, 193-207	0.9	125
223	Opacity effect on extreme ultraviolet radiation from laser-produced tin plasmas. <i>Physical Review Letters</i> , 2005 , 95, 235004	7.4	119
222	Measurements of Rayleigh-Taylor Growth Rate of Planar Targets Irradiated Directly by Partially Coherent Light. <i>Physical Review Letters</i> , 1997 , 78, 250-253	7.4	105
221	High-order harmonics of 248.6-nm KrF laser from helium and neon ions. <i>Physical Review A</i> , 1996 , 53, R312-R314	2.3	100
220	Characterization of extreme ultraviolet emission from laser-produced spherical tin plasma generated with multiple laser beams. <i>Applied Physics Letters</i> , 2005 , 86, 051501	3.4	93
219	Direct-drive hydrodynamic instability experiments on the GEKKO XII laser. <i>Physics of Plasmas</i> , 1997 , 4, 4079-4089	2.1	88
218	Suppression of the Rayleigh-Taylor instability due to self-radiation in a multiablation target. <i>Physical Review Letters</i> , 2004 , 92, 195001	7.4	67
217	Dynamic behavior of rippled shock waves and subsequently induced areal-density-perturbation growth in laser-irradiated foils. <i>Physical Review Letters</i> , 1995 , 74, 3608-3611	7.4	57
216	Comprehensive diagnosis of growth rates of the ablative Rayleigh-Taylor instability. <i>Physical Review Letters</i> , 2007 , 98, 045002	7.4	54
215	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. <i>Nature Communications</i> , 2018 , 9, 3937	17.4	53
214	Boosting laser-ion acceleration with multi-picosecond pulses. <i>Scientific Reports</i> , 2017 , 7, 42451	4.9	51
213	Laser implosion of high-aspect-ratio targets produces thermonuclear neutron yields exceeding 10 ¹² by use of shock multiplexing. <i>Physical Review Letters</i> , 1986 , 56, 1575-1578	7.4	49
212	Hugoniot measurement of diamond under laser shock compression up to 2TPa. <i>Physics of Plasmas</i> , 2006 , 13, 052705	2.1	47
211	Fast ignition integrated experiments with Gekko and LFEX lasers. <i>Plasma Physics and Controlled Fusion</i> , 2011 , 53, 124029	2	46
210	Ablative Rayleigh-Taylor instability at short wavelengths observed with moiré interferometry. <i>Physical Review Letters</i> , 2002 , 88, 145003	7.4	46

209	Fast ignition realization experiment with high-contrast kilo-joule peta-watt LFEX laser and strong external magnetic field. <i>Physics of Plasmas</i> , 2016 , 23, 056308	2.1	44
208	Plasma physics and laser development for the Fast-Ignition Realization Experiment (FIREX) Project. <i>Nuclear Fusion</i> , 2009 , 49, 104024	3.3	41
207	Shock Hugoniot and temperature data for polystyrene obtained with quartz standard. <i>Physics of Plasmas</i> , 2009 , 16, 062702	2.1	40
206	Experimental evidence of impact ignition: 100-fold increase of neutron yield by impactor collision. <i>Physical Review Letters</i> , 2009 , 102, 235002	7.4	39
205	Multiframe x-ray imaging system for temporally and spatially resolved measurements of imploding inertial confinement fusion targets. <i>Review of Scientific Instruments</i> , 1991 , 62, 124-129	1.7	36
204	GEKKO/HIPER-driven shock waves and equation-of-state measurements at ultrahigh pressures. <i>Physics of Plasmas</i> , 2004 , 11, 1600-1608	2.1	35
203	Fast plasma heating in a cone-attached geometry towards fusion ignition. <i>Nuclear Fusion</i> , 2004 , 44, S276-S283	3.3	35
202	Equation-of-state measurements of polyimide at pressures up to 5.8 TPa using low-density foam with laser-driven shock waves. <i>Physical Review E</i> , 2003 , 67, 056406	2.4	33
201	Recent progress of implosion experiments with uniformity-improved GEKKO XII laser facility at the Institute of Laser Engineering, Osaka University. <i>Physics of Plasmas</i> , 1996 , 3, 2077-2083	2.1	33
200	Laser-shock compression and Hugoniot measurements of liquid hydrogen to 55 GPa. <i>Physical Review B</i> , 2011 , 83,	3.3	32
199	Pr ³⁺ -doped fluoro-oxide lithium glass as scintillator for nuclear fusion diagnostics. <i>Review of Scientific Instruments</i> , 2009 , 80, 113504	1.7	32
198	First observation of density profile in directly laser-driven polystyrene targets for ablative Rayleigh-Taylor instability research. <i>Physics of Plasmas</i> , 2003 , 10, 4784-4789	2.1	31
197	Characterization of density profile of laser-produced Sn plasma for 13.5nm extreme ultraviolet source. <i>Applied Physics Letters</i> , 2005 , 86, 201501	3.4	30
196	Foam materials for cryogenic targets of fast ignition realization experiment (FIREX). <i>Nuclear Fusion</i> , 2005 , 45, 1277-1283	3.3	30
195	Fabrication of aerogel capsule, bromine-doped capsule, and modified gold cone in modified target for the Fast Ignition Realization Experiment (FIREX) Project. <i>Nuclear Fusion</i> , 2009 , 49, 095028	3.3	29
194	Development of x-ray radiography for high energy density physics. <i>Physics of Plasmas</i> , 2014 , 21, 102712	2.1	28
193	Suppression of Rayleigh-Taylor instability due to radiative ablation in brominated plastic targets. <i>Physics of Plasmas</i> , 2004 , 11, 2814-2822	2.1	28
192	Ultrahigh-contrast kilojoule-class petawatt LFEX laser using a plasma mirror 2016 , 55, 6850		25

191	Towards realization of hyper-velocities for impact fast ignition. <i>Plasma Physics and Controlled Fusion</i> , 2005 , 47, B815-B822	2	24
190	Indirect-direct hybrid target experiments with the GEKKO XII laser. <i>Nuclear Fusion</i> , 2000 , 40, 547-556	3.3	24
189	Areal density measurement of imploded cryogenic target by energy peak shift of DD-produced protons. <i>Physical Review Letters</i> , 1995 , 75, 3130-3133	7.4	24
188	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. <i>Physical Review E</i> , 2015 , 91, 063102	2.4	23
187	Equation-of-state measurements for polystyrene at multi-TPa pressures in laser direct-drive experiments. <i>Physics of Plasmas</i> , 2005 , 12, 124503	2.1	23
186	New insights into the laser produced electron-positron pairs. <i>New Journal of Physics</i> , 2013 , 15, 065010	2.9	22
185	Hydrodynamic instability in an ablatively imploded target irradiated by high power green lasers. <i>Physics of Fluids</i> , 1988 , 31, 2875		22
184	Present status of fast ignition realization experiment and inertial fusion energy development. <i>Nuclear Fusion</i> , 2013 , 53, 104021	3.3	21
183	Ultrathin amorphization of single-crystal silicon by ultraviolet femtosecond laser pulse irradiation. <i>Journal of Applied Physics</i> , 2009 , 105, 064909	2.5	21
182	Angular distribution control of extreme ultraviolet radiation from laser-produced plasma by manipulating the nanostructure of low-density SnO ₂ targets. <i>Applied Physics Letters</i> , 2006 , 88, 094102	3.4	21
181	Petawatt-laser direct heating of uniformly imploded deuterated-polystyrene shell target. <i>Physical Review E</i> , 2005 , 71, 016403	2.4	21
180	Feed-out of rear surface perturbation due to rarefaction wave in laser-irradiated targets. <i>Physical Review Letters</i> , 2000 , 84, 5331-4	7.4	21
179	Electrochemical Fabrication of Low Density Metal Foam with Mono-Dispersed-Sized Micro- and Submicro-Meter Pore. <i>Fusion Science and Technology</i> , 2006 , 49, 686-690	1.1	20
178	Time-resolved ten-channel monochromatic imaging of inertial confinement fusion plasmas. <i>Applied Optics</i> , 2000 , 39, 5865-71	1.7	20
177	Low-Density-Plastic-Foam Capsule of Resorcinol/Formalin and (Phloroglucinolcarboxylic Acid)/Formalin Resins for Fast-Ignition Realization Experiment (FIREX) in Laser Fusion Research. <i>Japanese Journal of Applied Physics</i> , 2006 , 45, L335-L338	1.4	19
176	Reduction of the Rayleigh-Taylor instability growth with cocktail color irradiation. <i>Physics of Plasmas</i> , 2007 , 14, 122702	2.1	19
175	Integrated experiments of fast ignition targets by Gekko-XII and LFEX lasers. <i>High Energy Density Physics</i> , 2012 , 8, 227-230	1.2	18
174	Pr or Ce-doped, fast-response and low-afterglow cross-section-enhanced scintillator with ⁶ Li for down-scattered neutron originated from laser fusion. <i>Journal of Crystal Growth</i> , 2013 , 362, 288-290	1.6	17

173	Luminescence properties of Nd ³⁺ and Er ³⁺ doped glasses in the VUV region. <i>Optical Materials</i> , 2013 , 35, 1962-1964	3.3	16
172	Thin shell aerogel fabrication for FIREX-I targets using high viscosity (phloroglucinol carboxylic acid)/formaldehyde solution. <i>Laser and Particle Beams</i> , 2008 , 26, 449-453	0.9	16
171	Present Status of Fast Ignition Research and Prospects of FIREX Project. <i>Fusion Science and Technology</i> , 2005 , 47, 662-666	1.1	16
170	Penumbra imaging for measurement of the ablation density in laser-driven targets. <i>Review of Scientific Instruments</i> , 2002 , 73, 2588-2596	1.7	16
169	Fabrication of a cryogenic foam target for inertial confinement fusion experiments. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 3144-3147	2.9	16
168	Study of laser-imploded core plasmas with an advanced KirkpatrickBaez x-ray microscope. <i>Review of Scientific Instruments</i> , 1997 , 68, 824-827	1.7	15
167	Laser Machining of RF Foam by Second Harmonics of Nd:YAG Laser. <i>Fusion Science and Technology</i> , 2007 , 51, 677-681	1.1	15
166	Monochromatic x-ray imaging with bent crystals for laser fusion research. <i>Review of Scientific Instruments</i> , 2001 , 72, 744-747	1.7	15
165	Single spatial mode experiments on initial laser imprint on direct-driven planar targets. <i>Physics of Plasmas</i> , 2002 , 9, 1734-1744	2.1	15
164	Cryogenic deuterium target experiments with the GEKKO XII, green laser system. <i>Physics of Plasmas</i> , 1995 , 2, 2495-2503	2.1	15
163	Optical and scintillation properties of Pr-doped Li-glass for neutron detection in inertial confinement fusion process. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 910-914	3.9	14
162	Cool-down performance of the apparatus for the cryogenic target of the FIREX project. <i>Fusion Engineering and Design</i> , 2006 , 81, 1647-1652	1.7	14
161	Experimental technique for launching miniature flying plates using laser pulses. <i>International Journal of Impact Engineering</i> , 2003 , 29, 497-502	4	14
160	Resorcinol-Formalin Foam Balls Via Gelation of Emulsion Using Phase-Transfer Catalysts. <i>Macromolecular Chemistry and Physics</i> , 2005 , 206, 2171-2176	2.6	14
159	Recent progress in laser fusion research at Osaka University: Uniformity and stability issues*. <i>Physics of Plasmas</i> , 1994 , 1, 1653-1661	2.1	14
158	Production of relativistic electrons at subrelativistic laser intensities. <i>Physical Review E</i> , 2020 , 101, 031201	0.14	13
157	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. <i>Physical Review Letters</i> , 2020 , 124, 035001	7.4	13
156	High-Intensity Neutron Generation via Laser-Driven Photonuclear Reaction. <i>Plasma and Fusion Research</i> , 2015 , 10, 2404003-2404003	0.5	13

- 155 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
- 154 Temporal evolution of temperature and density profiles of a laser compressed core (invited). *Review of Scientific Instruments*, **2003**, 74, 1683-1687 1.7 13
- 153 Dynamic imaging of 13.5 nm extreme ultraviolet emission from laser-produced Sn plasmas. *Applied Physics Letters*, **2005**, 87, 241502 3.4 13
- 152 Rayleigh-Taylor instability growth on low-density foam targets. *Physics of Plasmas*, **2008**, 15, 092109 2.1 12
- 151 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
- 150 Moiré Interferometry of short wavelength Rayleigh-Taylor growth. *Review of Scientific Instruments*, **1999**, 70, 637-641 1.7 12
- 149 Enhancing laser beam performance by interfering intense laser beamlets. *Nature Communications*, **2019**, 10, 2995 17.4 11
- 148 The photonuclear neutron and gamma-ray backgrounds in the fast ignition experiment. *Review of Scientific Instruments*, **2012**, 83, 10D909 1.7 11
- 147 Imprint reduction in a plasma layer preformed with x-ray irradiation. *Physics of Plasmas*, **2002**, 9, 1381-1391 1.1 11
- 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 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
- 144 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
- 143 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
- 142 FIREX foam cryogenic target development: residual void reduction and estimation with solid hydrogen refractive index measurements. *Nuclear Fusion*, **2013**, 53, 083009 3.3 9
- 141 Recent results and future prospects of laser fusion research at ILE, Osaka. *European Physical Journal D*, **2007**, 44, 259-264 1.3 9
- 140 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
- 139 Dynamic Behavior of Rippled Shock Waves and Subsequently Induced Areal-Density-Perturbation Growth in Laser-Irradiated Foils. *Physical Review Letters*, **1995**, 75, 2908-2908 7.4 9
- 138 4.8-keV x-ray backlight framing method for observing images of soft-x-ray-driven fusion capsules. *Review of Scientific Instruments*, **1993**, 64, 706-710 1.7 9

137	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. <i>Communications Physics</i> , 2019 , 2,	5-4	8
136	Production of intense, pulsed, and point-like neutron source from deuterated plastic cavity by mono-directional kilo-joule laser irradiation. <i>Applied Physics Letters</i> , 2017 , 111, 233506	3-4	8
135	Stabilization of radiation reaction with vacuum polarization. <i>Progress of Theoretical and Experimental Physics</i> , 2014 , 2014, 43A01-0	5-4	8
134	Measurements of mass ablation rate of laser-irradiated target by the face-on x-ray backlighting technique. <i>Review of Scientific Instruments</i> , 1998 , 69, 3942-3944	1-7	8
133	Three-dimensional imaging of laser imploded targets. <i>Journal of Applied Physics</i> , 1990 , 68, 1483-1488	2-5	8
132	Suprathermal electron generation in cannonball targets. <i>Optics Communications</i> , 1986 , 56, 409-414	2	8
131	Development of Compton X-ray spectrometer for high energy resolution single-shot high-flux hard X-ray spectroscopy. <i>Review of Scientific Instruments</i> , 2016 , 87, 043502	1-7	8
130	Effect of equation of state on laser imprinting by comparing diamond and polystyrene foils. <i>Physics of Plasmas</i> , 2018 , 25, 032706	2-1	7
129	Characterizing a fast-response, low-afterglow liquid scintillator for neutron time-of-flight diagnostics in fast ignition experiments. <i>Review of Scientific Instruments</i> , 2014 , 85, 11E126	1-7	7
128	Down-scattered neutron imaging detector for areal density measurement of inertial confinement fusion. <i>Review of Scientific Instruments</i> , 2010 , 81, 10D303	1-7	7
127	Measurement of preheating due to radiation and nonlocal electron heat transport in laser-irradiated targets. <i>Physics of Plasmas</i> , 2010 , 17, 032702	2-1	7
126	Fast-response, Low-Afterglow 4,4'-Bis[(2-butyloctyl)oxy]-1,1'-bis[4-(4-methyl-1,3,5-trimethyl-5-quinolyl)-2-methylphenyl] Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 080202	1-4	7
125	Custom-designed scintillator for laser fusion diagnostics [Pr ³⁺ -doped fluoro-phosphate lithium glass scintillator. <i>Optical Materials</i> , 2010 , 32, 1393-1396	3-3	7
124	Implosion of D2 temperature-controlled cryogenic foam targets with plastic ablators. <i>Physical Review E</i> , 1994 , 49, 1520-1526	2-4	7
123	Time-resolved measurements of laser-induced shock waves in deuterated polystyrene porous targets by x-ray backlighting. <i>Physics of Fluids B</i> , 1991 , 3, 735-744		7
122	Stimulated Raman scattering in cannonball targets. <i>Physics of Fluids</i> , 1987 , 30, 3276		7
121	A comparison of ablative acceleration measurements. <i>Applied Physics Letters</i> , 1982 , 40, 776-778	3-4	7
120	Proof-of-principle experiment for laser-driven cold neutron source. <i>Scientific Reports</i> , 2020 , 10, 20157	4-9	7

119	Suppression of the Rayleigh-Taylor instability and its implication for the impact ignition. <i>Plasma Physics and Controlled Fusion</i> , 2004 , 46, B245-B254	2	6
118	Study on EUV emission properties of laser-produced plasma at ILE, Osaka 2004 ,		6
117	Annealing of polystyrene microcapsules for inertial confinement fusion experiments. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1991 , 9, 150-153	2.9	6
116	Formation of Initial Perturbation of Rayleigh-Taylor Instability in Supernovae and Laser-irradiated Targets: Is There Any Similarity?. <i>Astrophysical Journal, Supplement Series</i> , 2000 , 127, 219-225	8	6
115	Relativistic magnetic reconnection in laser laboratory for testing an emission mechanism of hard-state black hole system. <i>Physical Review E</i> , 2020 , 102, 033202	2.4	6
114	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> , 2014 , 85, 11D634	1.7	5
113	Photonuclear reaction based high-energy x-ray spectrometer to cover from 2 MeV to 20 MeV. <i>Review of Scientific Instruments</i> , 2014 , 85, 11D629	1.7	5
112	Quantitative measurement of hard X-ray spectra from laser-driven fast ignition plasma. <i>High Energy Density Physics</i> , 2013 , 9, 435-438	1.2	5
111	Electronic States of Trivalent Praseodymium Ion Doped in 20Al(PO ₃) ₃ 80LiF Glass. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 062402	1.4	5
110	Leakage Control of Tritium Through Heat Cycles of Conceptual-Design, Laser-Fusion Reactor KOYO-F. <i>Fusion Science and Technology</i> , 2011 , 60, 893-896	1.1	5
109	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> , 2012 , 59, 2256-2259	1.7	5
108	Polymorphic tin dioxide synthesis via sol-gel mineralization of ethylmagnanoethyl cellulose lyotropic liquid crystals. <i>Colloid and Polymer Science</i> , 2006 , 284, 429-434	2.4	5
107	Estimation of emission efficiency for laser-produced EUV plasmas 2004 ,		5
106	Properties of EUV emissions from laser-produced tin plasmas 2004 , 5374, 912		5
105	Rippled shock propagation and hydrodynamic perturbation growth in laser implosion. <i>Journal of Materials Processing Technology</i> , 1999 , 85, 34-38	5.3	5
104	Development of x-ray emission computed tomography for ICF research. <i>Review of Scientific Instruments</i> , 1990 , 61, 2783-2785	1.7	5
103	X-ray and particle diagnostics of a high-density plasma by laser implosion (invited). <i>Review of Scientific Instruments</i> , 1990 , 61, 3235-3240	1.7	5
102	Intensity dependence of classical and collective absorption processes in laser produced plasmas at 1.053 μm and 0.527 μm . <i>IEEE Transactions on Plasma Science</i> , 1982 , 10, 55-58	1.3	5

101	Direct evaluation of high neutron density environment using (n,2n) reaction induced by laser-driven neutron source. <i>Physical Review C</i> , 2021 , 104,	2.7	5
100	Energy distribution of fast electrons accelerated by high intensity laser pulse depending on laser pulse duration. <i>Journal of Physics: Conference Series</i> , 2016 , 717, 012102	0.3	5
99	Whispering Gallery Effect in Relativistic Optics. <i>JETP Letters</i> , 2018 , 107, 351-354	1.2	4
98	Development of Compton X-Ray Spectrometer for Fast Ignition Experiment . <i>Plasma and Fusion Research</i> , 2014 , 9, 4405109-4405109	0.5	4
97	Plasma mirror implementation on LFEX laser for ion and fast electron fast ignition. <i>Nuclear Fusion</i> , 2017 , 57, 126018	3.3	4
96	Optical properties and structure of Pr ³⁺ -doped Al(PO ₃) ₃ LiF glasses as scattered neutron scintillator for nuclear fusion diagnostics. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011 , 18, 112006	0.4	4
95	Recent Developments in Fabrication of New Conceptual Gold Cone and Machining of Polystyrene Shell for Fast Ignition Target. <i>Fusion Science and Technology</i> , 2011 , 59, 276-278	1.1	4
94	Smooth Membrane Formation on Resorcinol-Formaldehyde Aerogel Balls Gelated Using a Basic Phase-Transfer Catalyst. <i>Fusion Science and Technology</i> , 2009 , 55, 465-471	1.1	4
93	Industrial applications of laser neutron source. <i>Journal of Physics: Conference Series</i> , 2010 , 244, 042027	0.3	4
92	Study on possible fuel layering sequence for FIREX target. <i>Journal of Physics: Conference Series</i> , 2010 , 244, 032039	0.3	4
91	Preliminary Results of Fuel Layering on the Cryogenic Target for the FIREX Project. <i>Fusion Science and Technology</i> , 2007 , 51, 753-757	1.1	4
90	Polystyrene Based Foam Materials for Cryogenic Targets of Fast Ignition Realization Experiment (FIREX). <i>Fusion Science and Technology</i> , 2006 , 49, 695-700	1.1	4
89	Tin-Polymer Composite on a Rotating Drum as a High Repetition Rate Laser Target for Extreme Ultraviolet Generation. <i>Fusion Science and Technology</i> , 2006 , 49, 691-694	1.1	4
88	X-ray imaging diagnostics for laser-driven hydrodynamic instability experiments. <i>Review of Scientific Instruments</i> , 2003 , 74, 2194-2197	1.7	4
87	Manufacturing and Leak Check of Shell Targets for the FIREX-I Project. <i>Plasma and Fusion Research</i> , 2009 , 4, S1010-S1010	0.5	4
86	Single shot radiography by a bright source of laser-driven thermal neutrons and x-rays. <i>Applied Physics Express</i> , 2021 , 14, 106001	2.4	4
85	Improvement in the heating efficiency of fast ignition inertial confinement fusion through suppression of the preformed plasma. <i>Nuclear Fusion</i> , 2017 , 57, 066022	3.3	3
84	The conceptual design of 1-ps time resolution neutron detector for fusion reaction history measurement at OMEGA and the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2020 , 91, 063304	1.7	3

83	The avalanche image intensifier panel for fast neutron radiography by using laser-driven neutron sources. <i>High Energy Density Physics</i> , 2020 , 36, 100833	1.2	3
82	Development of Multichannel Time-of-Flight Neutron Spectrometer for the Fast Ignition Experiment. <i>Plasma and Fusion Research</i> , 2014 , 9, 4404110-4404110	0.5	3
81	Development of multichannel low-energy neutron spectrometer. <i>Review of Scientific Instruments</i> , 2014 , 85, 11E125	1.7	3
80	Study on a fuel layering sequence of the foam target for the FIREX project. <i>Journal of Physics: Conference Series</i> , 2008 , 112, 032067	0.3	3
79	Development of TOF neutron spectrometer for the measurement of degenerated plasma in fast ignition experiment. <i>Journal of Physics: Conference Series</i> , 2008 , 112, 032079	0.3	3
78	Developments of characterization of the foam shell target for fast ignition realization experiment-I (FIREX-I). <i>Journal of Physics: Conference Series</i> , 2008 , 112, 032066	0.3	3
77	Foam Structure of Xerogel Prepared Via Ring-Opening Reaction Between Epoxy Groups Attached on the Side Chain of Polystyrene. <i>Fusion Science and Technology</i> , 2007 , 51, 665-672	1.1	3
76	Perturbation transfer from the front to rear surface of laser-irradiated targets. <i>Physical Review E</i> , 2002 , 65, 045401	2.4	3
75	Indirect/direct hybrid drive implosion experiments with x-ray pre-irradiation 2000 , 3886, 465		3
74	Hydrodynamic model experiment of the collision of supernova 1987A with its circumstellar ring using high-power laser 2000 , 3886, 489		3
73	Shigemori et al. Reply:. <i>Physical Review Letters</i> , 1998 , 80, 3415-3415	7.4	3
72	Laser Fusion Research at Ite Osaka University. <i>Fusion Science and Technology</i> , 1996 , 30, 625-633		3
71	Development of XUV lasers at the RAL Central Laser Facility. <i>Optical and Quantum Electronics</i> , 1996 , 28, 201-208	2.4	3
70	Measurements of Intensity Scaling of Ablation Pressure at 10.6 μm and 1.05 μm Laser Wavelengths. <i>Japanese Journal of Applied Physics</i> , 1984 , 23, 1353-1356	1.4	3
69	Temperature-Dependent EUV Spectra of Xenon Plasmas Observed in the Compact Helical System. <i>Journal of Plasma and Fusion Research</i> , 2005 , 81, 480-481		3
68	Fast-response, Low-Afterglow 4,4'-Bis[(2-butylloctyl)oxy]-1,1'-bis[4-(4-quinolyl)phenyl] Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 080208	1.4	3
67	Dosimetric calibration of GafChromic HD-V2, MD-V3, and EBT3 films for dose ranges up to 100 kGy. <i>Review of Scientific Instruments</i> , 2021 , 92, 063301	1.7	3
66	Progress Towards a Laser Produced Relativistic Electron-Positron Pair Plasma. <i>Journal of Physics: Conference Series</i> , 2016 , 688, 012010	0.3	3

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