Yasuhiko Sentoku

List of Publications by Year in Descending Order

221 papers	6,381 citations	45 h-index	74 g-index
248 ext. papers	6,832 ext. citations	3.2 avg, IF	5.22 L-index

#	Paper	IF	Citations
221	Dynamics of ultrafast heated radiative plasmas driven by petawatt laser light. *Plasma Physics and Controlled Fusion*, **2022**, 64, 035004	2	
220	Super-strong magnetic field-dominated ion beam dynamics in focusing plasma devices.. *Scientific Reports*, **2022**, 12, 6876	4.9	0
219	Demonstration of TNSA proton radiography on the National Ignition Facility Advanced Radiographic Capability (NIF-ARC) laser. *Plasma Physics and Controlled Fusion*, **2021**, 63, 124006	2	2
218	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
217	Lateral confinement of fast electrons and its impact on laser ion acceleration. *Physical Review Research*, **2021**, 3,	3.9	2
216	2D monochromatic x-ray imaging for beam monitoring of an x-ray free electron laser and a high-power femtosecond laser. *Review of Scientific Instruments*, **2021**, 92, 013510	1.7	3
215	Effects of mixed laser beam irradiation with different wavelengths on fast electron generation. *High Energy Density Physics*, **2021**, 38, 100918	1.2	
214	Progress of Fast Ignition Study with High Intensity Laser. *Journal of the Institute of Electrical Engineers of Japan*, **2021**, 141, 559-562	0	0
213	Pulse duration constraint of whistler waves in magnetized dense plasma. *Physical Review E*, **2021**, 104, 035205	2.4	
212	Two-color laser-plasma interactions for efficient production of non-thermal hot electrons. *High Energy Density Physics*, **2020**, 36, 100843	1.2	
211	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
210	Demonstration of repetitive energetic proton generation by ultra-intense laser interaction with a tape target. *High Energy Density Physics*, **2020**, 37, 100847	1.2	6
209	Effect of Small Focus on Electron Heating and Proton Acceleration in Ultrarelativistic Laser-Solid Interactions. *Physical Review Letters*, **2020**, 124, 084802	7.4	20
208	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
207	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. *Physical Review Letters*, **2020**, 124, 035001	7.4	13
206	Thermonuclear fusion triggered by collapsing standing whistler waves in magnetized overdense plasmas. *Physical Review E*, **2020**, 101, 013206	2.4	4
205	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

204	Dynamics of laser-driven heavy-ion acceleration clarified by ion charge states. *Physical Review Research*, **2020**, 2,	3.9	14
203	Plasma concept for generating circularly polarized electromagnetic waves with relativistic amplitude. *Physical Review E*, **2020**, 102, 053214	2.4	
202	Observation of MeV-energy ions from the interaction of over picosecond laser pulses with near-critical density foam targets. *High Energy Density Physics*, **2020**, 36, 100821	1.2	2
201	Plasma expansion accompanying superthermal electrons in over-picosecond relativistic laser-foil interactions. *Plasma Physics and Controlled Fusion*, **2020**, 62, 014011	2	1
200	Observation of ultra-high energy density state with x-ray free electron laser SACLA. *High Energy Density Physics*, **2020**, 36, 100813	1.2	1
199	Transition of dominant heating process from relativistic electron beam heating to thermal diffusion in an over picoseconds relativistic laser-solid interaction. *High Energy Density Physics*, **2020**, 37, 100829	1.2	1
198	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
197	Verification of fast heating of core plasmas produced by counter-illumination of implosion lasers. *High Energy Density Physics*, **2020**, 37, 100890	1.2	0
196	Study of fast ignition target design for ignition and burning experiments. *Nuclear Fusion*, **2019**, 59, 106055	3.3	5
195	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. *Communications Physics*, **2019**, 2,	5.4	8
194	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
193	A spherical shell pellet injection system for repetitive laser engagement. *Nuclear Fusion*, **2019**, 59, 096022	3.3	1
192	Electron acceleration in dense plasmas heated by a picosecond relativistic laser. *Nuclear Fusion*, **2019**, 59, 086035	3.3	6
191	Structure-preserving strategy for conservative simulation of the relativistic nonlinear Landau-Fokker-Planck equation. *Physical Review E*, **2019**, 99, 053309	2.4	5
190	Monochromatic 2D K□Emission Images Revealing Short-Pulse Laser Isochoric Heating Mechanism. *Physical Review Letters*, **2019**, 122, 155002	7.4	11
189	First demonstration of ARC-accelerated proton beams at the National Ignition Facility. *Physics of Plasmas*, **2019**, 26, 043110	2.1	21
188	Enhancing laser beam performance by interfering intense laser beamlets. *Nature Communications*, **2019**, 10, 2995	17.4	11
187	Efficient Fast Heating of Dense Core Plasma by Laser-Driven Strong Magnetic Field. *The Review of Laser Engineering*, **2019**, 47, 536	0	

186	Simple Analysis of the Laser-to-Core Energy Coupling Efficiency with Magnetized Fast Isochoric Laser Heating. *Plasma and Fusion Research*, **2019**, 14, 3404138-3404138	0.5	1
185	Ultrafast wave-particle energy transfer in the collapse of standing whistler waves. *Physical Review E* , **2019**, 100, 053205	2.4	5
184	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
183	Quadratic conservative scheme for relativistic VlasovMaxwell system. *Journal of Computational Physics*, **2019**, 379, 32-50	4.1	9
182	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
181	Plasma density limits for hole boring by intense laser pulses. *Nature Communications*, **2018**, 9, 623	17.4	27
180	Self-generated surface magnetic fields inhibit laser-driven sheath acceleration of high-energy protons. *Nature Communications*, **2018**, 9, 280	17.4	40
179	Characterization of fast electron divergence and energy spectrum from modeling of angularly resolved bremsstrahlung measurements. *Physics of Plasmas*, **2018**, 25, 123103	2.1	8
178	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. *Nature Communications*, **2018**, 9, 3937	17.4	53
177	Boosting laser-ion acceleration with multi-picosecond pulses. *Scientific Reports*, **2017**, 7, 42451	4.9	51
176	Validation of thermal conductivity in magnetized plasmas using particle-in-cell simulations. *Physics of Plasmas*, **2017**, 24, 042117	2.1	3
175	Ponderomotive scaling in the radiative damping regime. *Physics of Plasmas*, **2017**, 24, 103302	2.1	3
174	Kinetic modeling of x-ray laser-driven solid Al plasmas via particle-in-cell simulation. *Physical Review E*, **2017**, 95, 063203	2.4	15
173	Effect of soft-core potentials on inverse bremsstrahlung heating during laser matter interactions. *Physics of Plasmas*, **2017**, 24, 073303	2.1	9
172	Fast ion acceleration in a foil plasma heated by a multi-picosecond high intensity laser. *Physics of Plasmas*, **2017**, 24, 073111	2.1	22
171	Broadening of cyclotron resonance conditions in the relativistic interaction of an intense laser with overdense plasmas. *Physical Review E*, **2017**, 96, 043209	2.4	9
170	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
169	Integrated simulation of magnetic-field-assist fast ignition laser fusion. *Plasma Physics and Controlled Fusion*, **2017**, 59, 014045	2	15

168	Direct heating of a laser-imploded core using ultraintense laser LFEX. *Nuclear Fusion*, **2017**, 57, 076030	3.3	0
167	Comment on "In-depth Plasma-Wave Heating of Dense Plasma Irradiated by Short Laser Pulses". *Physical Review Letters*, **2016**, 116, 159501	7.4	2
166	Electron beam guiding by external magnetic fields in imploded fuel plasma. *Journal of Physics: Conference Series*, **2016**, 717, 012025	0.3	1
165	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
164	Progress Towards a Laser Produced Relativistic Electron-Positron Pair Plasma. *Journal of Physics: Conference Series*, **2016**, 688, 012010	0.3	3
163	Progress toward a unified kJ-machine CANDY. *Journal of Physics: Conference Series*, **2016**, 688, 012049	0.3	1
162	Study of fast electron generation using multi beam of LFEX-class laser. *Journal of Physics: Conference Series*, **2016**, 717, 012037	0.3	
161	Target Monitoring and Plasma Diagnosis using 2□robe beam for CANDY. *Journal of Physics: Conference Series*, **2016**, 688, 012036	0.3	1
160	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
159	Direct heating of compressed core by ultra-intense laser. *Journal of Physics: Conference Series*, **2016** , 717, 012055	0.3	1
158	Amorphous nanostructuralization in HOPG by 1014W cm-2laser. *Journal of Physics: Conference Series*, **2016**, 717, 012073	0.3	1
157	Fast Heating of Imploded Core with Counterbeam Configuration. *Physical Review Letters*, **2016**, 117, 055001	7.4	14
156	Control of an electron beam using strong magnetic field for efficient core heating in fast ignition. *Nuclear Fusion*, **2015**, 55, 053022	3.3	35
155	The scaling of electron and positron generation in intense laser-solid interactionsa). *Physics of Plasmas*, **2015**, 22, 056705	2.1	29
154	Direct heating of a laser-imploded core by ultraintense laser-driven ions. *Physical Review Letters*, **2015**, 114, 195002	7.4	19
153	A compact broadband ion beam focusing device based on laser-driven megagauss thermoelectric magnetic fields. *Review of Scientific Instruments*, **2015**, 86, 043502	1.7	5
152	Characterization of intense laser-produced fast electrons using hard x-rays via bremsstrahlung. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2015**, 48, 224008	1.3	17
151	Dynamics and structure of self-generated magnetics fields on solids following high contrast, high intensity laser irradiation. *Physics of Plasmas*, **2015**, 22, 123108	2.1	11

150	Multilayered polycrystallization in single-crystal YSZ by laser-shock compression. *Journal Physics D: Applied Physics*, **2015**, 48, 325305	3	4
149	Scaling the yield of laser-driven electron-positron jets to laboratory astrophysical applications. *Physical Review Letters*, **2015**, 114, 215001	7.4	79
148	Laser–plasma interactions for fast ignition. *Nuclear Fusion*, **2014**, 54, 054002	3.3	43
147	Scaling of resistive guiding of laser-driven fast-electron currents in solid targets. *Physical Review E*, **2014**, 89, 023109	2.4	25
146	Kinetic effects and nonlinear heating in intense x-ray-laser-produced carbon plasmas. *Physical Review E*, **2014**, 90, 051102	2.4	13
145	Repetitive 1 Hz Fast-Heating Fusion Driver HAMA Pumped by Diode Pumped Solid State Laser. *The Review of Laser Engineering*, **2014**, 42, 154	0	
144	Effect of target material on fast-electron transport and resistive collimation. *Physical Review Letters*, **2013**, 110, 025001	7.4	36
143	Collisional particle-in-cell modeling for energy transport accompanied by atomic processes in dense plasmas. *Physics of Plasmas*, **2013**, 20, 072704	2.1	25
142	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
141	Impact of extended preplasma on energy coupling in kilojoule energy relativistic laser interaction with cone wire targets relevant to fast ignition. *New Journal of Physics*, **2013**, 15, 015020	2.9	6
140	New insights into the laser produced electron–positron pairs. *New Journal of Physics*, **2013**, 15, 065010	2.9	22
139	First demonstration of laser engagement of 1-Hz-injected flying pellets and neutron generation. *Scientific Reports*, **2013**, 3, 2561	4.9	16
138	Dynamics of the spectral behaviour of an ultrashort laser pulse in an argon-gas-filled capillary discharge-preformed plasma channel. *EPJ Web of Conferences*, **2013**, 59, 17002	0.3	
137	Frequency upshift via flash ionization phenomena using semiconductor plasma. *EPJ Web of Conferences*, **2013**, 59, 19004	0.3	1
136	Longitudinal proton probing of ultrafast and high-contrast laser-solid interactions. *EPJ Web of Conferences*, **2013**, 59, 17014	0.3	3
135	THz radiation from an ultrashort-laser-induced fast spark dense plasma. *EPJ Web of Conferences*, **2013**, 59, 18007	0.3	2
134	Target Injection and Engagement for Neutron Generation at 1 Hz. *Plasma and Fusion Research*, **2013** , 8, 1205020-1205020	0.5	12
133	Hi-rep. Counter-Illumination Fast Ignition Scheme Fusion. *Plasma and Fusion Research*, **2013**, 8, 3404047-3404047	0.5	7

132	Material Dependence of Energy Spectra of Fast Electrons Generated by Use of High Contrast Laser. *The Review of Laser Engineering*, **2013**, 41, 49	0	
131	Focusing dynamics of high-energy density, laser-driven ion beams. *Physical Review Letters*, **2012**, 108, 055001	7.4	23
130	Propagation of a laser-driven relativistic electron beam inside a solid dielectric. *Physical Review E*, **2012**, 86, 036412	2.4	6
129	Measuring hot electron distributions in intense laser interaction with dense matter. *New Journal of Physics*, **2012**, 14, 063023	2.9	8
128	Higher order terms of radiative damping in extreme intense laser-matter interaction. *Physics of Plasmas*, **2012**, 19, 073304	2.1	28
127	Self-proton/ion radiography of laser-produced proton/ion beam from thin foil targets. *Physics of Plasmas*, **2012**, 19, 123101	2.1	3
126	Fusion using fast heating of a compactly imploded CD core. *Physical Review Letters*, **2012**, 108, 155001	7.4	17
125	Experimental observation of frequency up-conversion by flash ionization. *Applied Physics Letters*, **2012**, 101, 161118	3.4	19
124	Characteristics of argon plasma waveguide produced by alumina capillary discharge for short wavelength laser application. *Journal of Applied Physics*, **2012**, 111, 093302	2.5	3
123	Increased laser-accelerated proton energies via direct laser-light-pressure acceleration of electrons in microcone targetsa). *Physics of Plasmas*, **2011**, 18, 056710	2.1	137
122	X-ray spectroscopy to study energy transport of a low-Z, reduced mass target irradiated with a high-intensity laser pulse. *High Energy Density Physics*, **2011**, 7, 117-123	1.2	
121	Dynamic control over mega-ampere electron currents in metals using ionization-driven resistive magnetic fields. *Physical Review Letters*, **2011**, 107, 135005	7.4	51
120	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. *Applied Physics Letters*, **2011**, 99, 131501	3.4	9
119	Properties of a capillary discharge-produced argon plasma waveguide for shorter wavelength source application. *Review of Scientific Instruments*, **2011**, 82, 103509	1.7	3
118	Energy transport and isochoric heating of a low-Z, reduced-mass target irradiated with a high intensity laser pulse. *Physics of Plasmas*, **2011**, 18, 022702	2.1	19
117	Advanced Laser Particle Accelerator Development at LANL: From Fast Ignition to Radiation Oncology **2010**,		1
116	Enhanced propagation for relativistic laser pulses in inhomogeneous plasmas using hollow channels. *Physical Review Letters*, **2010**, 105, 225001	7.4	14
115	Efficient laser-ion acceleration from closely stacked ultrathin foils. *Physical Review E*, **2010**, 82, 016405	2.4	5

114	Isochoric heating of low-Z, reduced-mass targets with high intensity laser pulse. *Journal of Physics: Conference Series*, **2010**, 244, 022054	0.3	
113	Hot electron generation at a steep interface in super intense laser-matter interaction. *Journal of Physics: Conference Series*, **2010**, 244, 022048	0.3	
112	Transport of hot electron currents in solid targets irradiated by high intensity short laser pulses. *Journal of Physics: Conference Series*, **2010**, 244, 022016	0.3	1
111	Investigation of high intensity laser proton acceleration with underdense targets. *Journal of Physics: Conference Series*, **2010**, 244, 042023	0.3	11
110	Low-Divergent, Energetic Electron Beams from Ultra-Thin Foils **2010**,		2
109	Heat transport in solid target following relativistic laser matter interaction. *High Energy Density Physics*, **2010**, 6, 268-273	1.2	3
108	Enhanced hot-electron localization and heating in high-contrast ultraintense laser irradiation of microcone targets. *Physical Review E*, **2009**, 79, 036408	2.4	21
107	Superthermal and efficient-heating modes in the interaction of a cone target with ultraintense laser light. *Physical Review Letters*, **2009**, 102, 045009	7.4	16
106	Hot-electron energy coupling in ultraintense laser-matter interaction. *Physical Review E*, **2009**, 79, 066406	2.4	53
105	Guiding, focusing, and collimated transport of hot electrons in a canal in the extended tip of cone targets. *Physical Review Letters*, **2009**, 102, 205003	7.4	20
104	Autoinjection of electrons into a wake field using a capillary with attached cone. *Physics of Plasmas*, **2009**, 16, 123103	2.1	7
103	Numerical study of the advanced target design for FIREX-I. *Nuclear Fusion*, **2009**, 49, 075028	3.3	7
102	Laser acceleration of high-energy protons in variable density plasmas. *New Journal of Physics*, **2009**, 11, 023038	2.9	26
101	Core heating properties in FIREX-I influence of cone tip. *Plasma Physics and Controlled Fusion*, **2009**, 51, 014002	2	25
100	Importance of magnetic resistive fields in the heating of a micro-cone target irradiated by a high intensity laser. *European Physical Journal: Special Topics*, **2009**, 175, 89-95	2.3	2
99	Laser-driven proton acceleration and applications: Recent results. *European Physical Journal: Special Topics*, **2009**, 175, 105-110	2.3	7
98	Intense laser-plasma interactions: New frontiers in high energy density physics. *Physics of Plasmas*, **2009**, 16, 041002	2.1	40
97	Hot electron generation forming a steep interface in superintense laser-matter interaction. *Physics of Plasmas*, **2009**, 16, 112704	2.1	23

96	Study of ultraintense laser propagation in overdense plasmas for fast ignitiona). *Physics of Plasmas*, **2009**, 16, 056307	2.1	22
95	Energy Injection for Fast Ignition. *Plasma and Fusion Research*, **2009**, 4, 016-016	0.5	1
94	Hot-electron energy coupling in ultraintense laser-matter interaction. *Physical Review Letters*, **2008**, 101, 075004	7.4	56
93	Fast heating of cylindrically imploded plasmas by petawatt laser light. *Physical Review Letters*, **2008**, 100, 165001	7.4	14
92	Hot electron generation from intense laser irradiation of microtipped cone and wedge targets. *Physics of Plasmas*, **2008**, 15, 052701	2.1	9
91	Intensity scaling of hot electron energy coupling in cone-guided fast ignitiona). *Physics of Plasmas*, **2008**, 15, 056309	2.1	77
90	Generation of MeV-Range Protons From 30–100 nm Solid Targets by Ultra-High-Contrast Laser Pulses. *IEEE Transactions on Plasma Science*, **2008**, 36, 1817-1820	1.3	3
89	Laser-Driven Proton Beams: Acceleration Mechanism, Beam Optimization, and Radiographic Applications. *IEEE Transactions on Plasma Science*, **2008**, 36, 1833-1842	1.3	4
88	Focus optimization of relativistic self-focusing for anomalous laser penetration into overdense plasmas (super-penetration). *Plasma Physics and Controlled Fusion*, **2008**, 50, 105011	2	30
87	Increased efficiency of short-pulse laser-generated proton beams from novel flat-top cone targetsa). *Physics of Plasmas*, **2008**, 15, 056709	2.1	56
86	Hot and cold electron dynamics following high-intensity laser matter interaction. *Physical Review Letters*, **2008**, 101, 105004	7.4	44
85	Fast heating of wire target attached on entrant hollow cone with ultra-intense laser up to keV order. *Journal of Physics: Conference Series*, **2008**, 112, 022058	0.3	
84	Ultra-fast ionization modeling in laser-plasma interaction. *Journal of Physics: Conference Series*, **2008**, 112, 022108	0.3	
83	Laser-acceleration of high-energy protons in small-scale gradients. *Journal of Physics: Conference Series*, **2008**, 112, 022082	0.3	
82	Hot electron emission limited by self-excited fields from targets irradiated by ultra-intense laser pulses. *Journal of Physics: Conference Series*, **2008**, 112, 022093	0.3	1
81	Enhanced energy localization and heating in high contrast ultra-intense laser produced plasmas via novel conical micro-target design. *Journal of Physics: Conference Series*, **2008**, 112, 022050	0.3	2
80	Numerical methods for particle simulations at extreme densities and temperatures: Weighted particles, relativistic collisions and reduced currents. *Journal of Computational Physics*, **2008**, 227, 6846-6861	4.1	257
79	Laser-foil acceleration of high-energy protons in small-scale plasma gradients. *Physical Review Letters*, **2007**, 99, 015002	7.4	76

78	Laboratory simulation of magnetospheric plasma shocks. *Advances in Space Research*, **2007**, 39, 358-369	2.4	7
77	PRESENT STATUS OF TABLE-TOP SHORT-PULSE BEAT WAVE ELECTRON ACCELERATION LASER SYSTEM. *International Journal of Modern Physics B*, **2007**, 21, 572-578	1.1	12
76	Comparative spectra and efficiencies of ions laser-accelerated forward from the front and rear surfaces of thin solid foils. *Physics of Plasmas*, **2007**, 14, 053105	2.1	54
75	Energetic protons generated by ultrahigh contrast laser pulses interacting with ultrathin targets. *Physics of Plasmas*, **2007**, 14, 030701	2.1	87
74	Isochoric heating in heterogeneous solid targets with ultrashort laser pulses. *Physics of Plasmas*, **2007**, 14, 122701	2.1	24
73	Emittance growth mechanisms for laser-accelerated proton beams. *Physical Review E*, **2007**, 75, 056401	2.4	30
72	On the behavior of ultraintense laser produced hot electrons in self-excited fields. *Physics of Plasmas*, **2007**, 14, 040706	2.1	39
71	Influence of Electrostatic and Magnetic Fields on Hot Electron Emission in Ultra-Intense Laser Matter Interactions. *Plasma and Fusion Research*, **2007**, 2, 015-015	0.5	1
70	Proton Acceleration: New Developments in Energy Increase, Focusing and Energy Selection. *AIP Conference Proceedings*, **2006**,	0	2
69	Transient electrostatic fields and related energetic proton generation with a plasma fiber. *Physical Review Letters*, **2006**, 96, 084802	7.4	13
68	Collisional relaxation of superthermal electrons generated by relativistic laser pulses in dense plasma. *Physical Review Letters*, **2006**, 97, 235001	7.4	83
67	Fast Heating of High-Density Plasmas with a Reentrant Cone Concept. *Fusion Science and Technology*, **2006**, 49, 316-326	1.1	8
66	Laser Hole Boring and Hot Electron Generation in the Fast Ignition Scheme. *Fusion Science and Technology*, **2006**, 49, 278-296	1.1	44
65	WE-E-330D-01: The Production of Ultrafast Bright K-Alpha X-Rays From Laser Produced Plasmas for Medical Imaging. *Medical Physics*, **2006**, 33, 2251-2251	4.4	3
64	High Energy Ion Generation in Interaction of Ultra-Intense Laser Pulse with Dense Plasma Target. *The Review of Laser Engineering*, **2006**, 34, 142-147	0	
63	Core heating analysis of fast ignition targets by integrated simulations. *European Physical Journal Special Topics*, **2006**, 133, 385-389		12
62	Full scale explicit PIC simulation of fast ignition experiment. *European Physical Journal Special Topics*, **2006**, 133, 425-427		7
61	Isochoric heating of hot dense matter by magnetization of fast electrons produced by ultra-intense short pulse irradiation. *European Physical Journal Special Topics*, **2006**, 133, 521-523		9

60	Ultra-low emittance, high current proton beams produced with a laser-virtual cathode sheath accelerator. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2005**, 544, 277-284	1.2	10
59	Laboratory Simulation of Magnetospheric Plasma Shocks. *Astrophysics and Space Science*, **2005**, 298, 299-303	1.0	8
58	Broad-range neutron spectra identification in ultraintense laser interactions with carbon-deuterated plasma. *Physics of Plasmas*, **2005**, 12, 110703	2.1	26
57	Electron cyclotron heating by whistler waves generated during the interaction of a laser pulse with a magnetized plasma. *Physics of Plasmas*, **2005**, 12, 082107	2.1	5
56	Petawatt-laser direct heating of uniformly imploded deuterated-polystyrene shell target. *Physical Review E*, **2005**, 71, 016403	2.4	21
55	Comparison of laser ion acceleration from the front and rear surfaces of thin foils. *Physical Review Letters*, **2005**, 94, 045004	7.4	114
54	Petawatt Laser Direct Heating of Uniformly Imploded CD Shell Target. *Journal of Plasma and Fusion Research*, **2005**, 81, 384-390		1
53	Electron acceleration in an ultraintense-laser-illuminated capillary. *Physical Review Letters*, **2004**, 92, 205002	7.4	51
52	Anomalous inhibition of electron transport in laser□matter interaction at subrelativistic intensities. *Physics of Plasmas*, **2004**, 11, L69-L72	2.1	18
51	Plasma devices to guide and collimate a high density of MeV electrons. *Nature*, **2004**, 432, 1005-8	50.4	151
50	High-energy ion generation by short laser pulses. *Plasma Physics Reports*, **2004**, 30, 473-495	1.2	46
49	Present Status and Future Prospects of Laser Fusion Research at ILE Osaka University. *Plasma Science and Technology*, **2004**, 6, 2179-2184	1.5	2
48	Laser light and hot electron micro focusing using a conical target. *Physics of Plasmas*, **2004**, 11, 3083-3087	2.1	171
47	Fast ion acceleration in ultraintense laser interactions with an overdense plasma. *Physical Review E*, **2004**, 69, 036407	2.4	45
46	High energy proton acceleration in interaction of short laser pulse with dense plasma target. *Physics of Plasmas*, **2003**, 10, 2009-2015	2.1	236
45	Spatial uniformity of laser-accelerated ultrahigh-current MeV electron propagation in metals and insulators. *Physical Review Letters*, **2003**, 91, 255002	7.4	149
44	Proton spectra from ultraintense laser□plasma interaction with thin foils: Experiments, theory, and simulation. *Physics of Plasmas*, **2003**, 10, 3283-3289	2.1	100
43	Anomalous resistivity resulting from MeV-electron transport in overdense plasma. *Physical Review Letters*, **2003**, 90, 155001	7.4	167

42	Basic and integrated studies for fast ignition. *Physics of Plasmas*, **2003**, 10, 1925-1930	2.1	55
41	Momentum distribution of accelerated ions in ultra-intense laser–plasma interactions via neutron spectroscopy. *Physics of Plasmas*, **2003**, 10, 3712-3716	2.1	25
40	High-energy ion generation in interaction. of short laser pulse with high-density plasma. *Applied Physics B: Lasers and Optics*, **2002**, 74, 207-215	1.9	133
39	Observation of neutron spectrum produced by fast deuterons via ultraintense laser plasma interactions. *Physical Review E*, **2002**, 65, 036413	2.4	81
38	Weakly relativistic one-dimensional laser pulse envelope solitons in a warm plasma. *Physics of Plasmas*, **2002**, 9, 3802-3810	2.1	45
37	Harmonic emission with cyclotron satellite structure due to strong magnetic fields produced by ultra-intense laser–plasma interaction. *Physics of Plasmas*, **2002**, 9, 3193-3196	2.1	6
36	Generation of high-amplitude plasma waves for particle acceleration by cross-modulated laser wake fields. *Physics of Plasmas*, **2002**, 9, 3147-3153	2.1	36
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