

Hiroshi Sawada

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6210922/hiroshi-sawada-publications-by-citations.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

53
papers

827
citations

16
h-index

26
g-index

58
ext. papers

947
ext. citations

3.4
avg, IF

2.82
L-index

#	Paper	IF	Citations
53	Hot surface ionic line emission and cold K-inner shell emission from petawatt-laser-irradiated Cu foil targets. <i>Physics of Plasmas</i> , 2006 , 13, 043102	2.1	91
52	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. <i>Nature Communications</i> , 2018 , 9, 3937	17.4	53
51	Hot electron temperature and coupling efficiency scaling with prepulse for cone-guided fast ignition. <i>Physical Review Letters</i> , 2012 , 108, 115004	7.4	52
50	Measurement of carbon ionization balance in high-temperature plasma mixtures by temporally resolved X-ray scattering. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2006 , 99, 225-237	2.1	49
49	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
48	Time-resolved compression of a capsule with a cone to high density for fast-ignition laser fusion. <i>Nature Communications</i> , 2014 , 5, 5785	17.4	41
47	Visualizing fast electron energy transport into laser-compressed high-density fast-ignition targets. <i>Nature Physics</i> , 2016 , 12, 499-504	16.2	40
46	Effect of target material on fast-electron transport and resistive collimation. <i>Physical Review Letters</i> , 2013 , 110, 025001	7.4	36
45	Dynamics of relativistic laser-plasma interaction on solid targets. <i>Physical Review Letters</i> , 2012 , 109, 145006	7.4	35
44	Diagnosing direct-drive, shock-heated, and compressed plastic planar foils with noncollective spectrally resolved x-ray scattering. <i>Physics of Plasmas</i> , 2007 , 14, 122703	2.1	35
43	Microbial Production of Ursodeoxycholic Acid from Lithocholic Acid by <i>Fusarium equiseti</i> M41. <i>Applied and Environmental Microbiology</i> , 1982 , 44, 1249-52	4.8	27
42	Flash K α radiography of laser-driven solid sphere compression for fast ignition. <i>Applied Physics Letters</i> , 2016 , 108, 254101	3.4	22
41	Enhanced relativistic-electron-beam energy loss in warm dense aluminum. <i>Physical Review Letters</i> , 2015 , 114, 095004	7.4	21
40	Laser absorption, mass ablation rate, and shock heating in direct-drive inertial confinement fusion). <i>Physics of Plasmas</i> , 2007 , 14, 056305	2.1	20
39	Characterization of intense laser-produced fast electrons using hard x-rays via bremsstrahlung. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015 , 48, 224008	1.3	17
38	Al 1s-2p absorption spectroscopy of shock-wave heating and compression in laser-driven planar foil. <i>Physics of Plasmas</i> , 2009 , 16, 052702	2.1	17
37	Calibration and characterization of a highly efficient spectrometer in von Hamos geometry for 7-10 keV x-rays. <i>Review of Scientific Instruments</i> , 2017 , 88, 043110	1.7	13

36	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. <i>Physical Review Letters</i> , 2020 , 124, 035001	7.4	13
35	Characterizing the energy distribution of laser-generated relativistic electrons in cone-wire targets. <i>Physics of Plasmas</i> , 2012 , 19, 103108	2.1	13
34	Measurement of pulsed-power-driven magnetic fields via proton deflectometry. <i>Applied Physics Letters</i> , 2014 , 105, 224103	3.4	12
33	Monochromatic 2D K α Emission Images Revealing Short-Pulse Laser Isochoric Heating Mechanism. <i>Physical Review Letters</i> , 2019 , 122, 155002	7.4	11
32	Single-shot divergence measurements of a laser-generated relativistic electron beam. <i>Physics of Plasmas</i> , 2010 , 17, 113106	2.1	11
31	An evaluation of high energy bremsstrahlung background in point-projection x-ray radiography experiments. <i>Review of Scientific Instruments</i> , 2012 , 83, 10E528	1.7	11
30	Spectral tomographic analysis of Bremsstrahlung X-rays generated in a laser-produced plasma. <i>Laser and Particle Beams</i> , 2016 , 34, 645-654	0.9	10
29	Study of laser produced plasma in a longitudinal magnetic field. <i>Physics of Plasmas</i> , 2019 , 26, 062707	2.1	9
28	Collimated Propagation of Fast Electron Beams Accelerated by High-Contrast Laser Pulses in Highly Resistive Shocked Carbon. <i>Physical Review Letters</i> , 2017 , 118, 205001	7.4	9
27	Analysis of gene expression profiles of induced by direct contact with through recognition of yeast mannan. <i>Bioscience of Microbiota, Food and Health</i> , 2017 , 36, 17-25	3.2	9
26	The response function of Fujifilm BAS-TR imaging plates to laser-accelerated titanium ions. <i>Review of Scientific Instruments</i> , 2019 , 90, 083302	1.7	8
25	Supra-thermal electron beam stopping power and guiding in dense plasmas. <i>Journal of Plasma Physics</i> , 2013 , 79, 429-435	2.7	8
24	Applied plasma spectroscopy: Laser-fusion experiments. <i>High Energy Density Physics</i> , 2009 , 5, 234-243	1.2	8
23	Characterization of fast electron divergence and energy spectrum from modeling of angularly resolved bremsstrahlung measurements. <i>Physics of Plasmas</i> , 2018 , 25, 123103	2.1	8
22	Cu-oleate microspheres fabricated by emulsion method as novel targets for fast ignition laser fusion experiments. <i>Fusion Engineering and Design</i> , 2017 , 125, 89-92	1.7	6
21	Diagnosing laser-driven, shock-heated foam target with Al absorption spectroscopy on OMEGA EP. <i>High Energy Density Physics</i> , 2012 , 8, 180-183	1.2	6
20	Impact of extended preplasma on energy coupling in kilojoule energy relativistic laser interaction with cone wire targets relevant to fast ignition. <i>New Journal of Physics</i> , 2013 , 15, 015020	2.9	6
19	Transport and spatial energy deposition of relativistic electrons in copper-doped fast ignition plasmas. <i>Physics of Plasmas</i> , 2017 , 24, 102710	2.1	5

18	Investigation of fast-electron-induced K α rays in laser-produced blow-off plasma. <i>Physical Review E</i> , 2014 , 89, 033105	2.4	5
17	Compton scattering measurements from dense plasmas*. <i>Journal of Physics: Conference Series</i> , 2008 , 112, 032071	0.3	5
16	Two-color monochromatic x-ray imaging with a single short-pulse laser. <i>Review of Scientific Instruments</i> , 2017 , 88, 063502	1.7	4
15	Development of a predictive capability of short-pulse laser-driven broadband x-ray radiography. <i>Plasma Physics and Controlled Fusion</i> , 2020 , 62, 065001	2	4
14	Characterization of Brillouin-enhanced four-wave mixing for an application to space debris removal 1999 ,		4
13	Development of 4.5 keV monochromatic X-ray radiography using the high-energy, picosecond LFEX laser. <i>Journal of Physics: Conference Series</i> , 2016 , 717, 012112	0.3	4
12	Development of broadband x-ray radiography for diagnosing magnetically driven cylindrically compressed matter. <i>Physics of Plasmas</i> , 2019 , 26, 083104	2.1	3
11	High-contrast laser acceleration of relativistic electrons in solid cone-wire targets. <i>Physical Review E</i> , 2015 , 92, 063112	2.4	3
10	Spectroscopic observations of Fermi-degenerate aluminum compressed and heated to four times solid density and 20keV. <i>High Energy Density Physics</i> , 2011 , 7, 259-262	1.2	3
9	Proton Radiography of Intense-Laser-Irradiated Wire-Attached Cone Targets. <i>IEEE Transactions on Plasma Science</i> , 2011 , 39, 2822-2823	1.3	3
8	Emission of energetic protons from relativistic intensity laser interaction with a cone-wire target. <i>Physical Review E</i> , 2012 , 86, 056405	2.4	3
7	Hot electron generation and transport using K α emission. <i>Journal of Physics: Conference Series</i> , 2010 , 244, 022026	0.3	3
6	2D monochromatic x-ray imaging for beam monitoring of an x-ray free electron laser and a high-power femtosecond laser. <i>Review of Scientific Instruments</i> , 2021 , 92, 013510	1.7	3
5	Monochromatic Imaging of 8.0-keV Cu K α Emission Induced by Energetic Electrons Generated at OMEGA EP. <i>IEEE Transactions on Plasma Science</i> , 2011 , 39, 2816-2817	1.3	2
4	Direct-Drive Inertial Confinement Fusion Implosions on Omega. <i>Astrophysics and Space Science</i> , 2005 , 298, 227-233	1.6	2
3	Temporally resolved characterization of shock-heated foam target with Al absorption spectroscopy for fast electron transport study. <i>Physics of Plasmas</i> , 2012 , 19, 092705	2.1	0
2	Numerical study of core formation of asymmetrically driven cone-guided targets. <i>Physics of Plasmas</i> , 2017 , 24, 100703	2.1	
1	Divergence of laser-generated hot electrons generated in a cone geometry. <i>Journal of Physics: Conference Series</i> , 2010 , 244, 022064	0.3	

