

Shinji Yoshimura

List of Publications by Year in descending order

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79
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79
docs citations

79
times ranked

923
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in the LHD experiment. Nuclear Fusion, 2003, 43, 1674-1683.	3.5	119
2	Extension of the operational regime of the LHD towards a deuterium experiment. Nuclear Fusion, 2017, 57, 102023.	3.5	116
3	Experimental observation of dominant propagation of the ion-acoustic slow mode in a negative ion plasma and its application. Physics of Plasmas, 2002, 9, 4481-4487.	1.9	113
4	Measurements of the negative ion density in SF ₆ /Ar plasma using a plane electrostatic probe. Review of Scientific Instruments, 2001, 72, 2288-2293.	1.3	69
5	Ion acoustic waves in one- and two-negative ion species plasmas. Physics of Plasmas, 2001, 8, 4275-4283.	1.9	66
6	Experimental observation of a tripolar vortex in a plasma. Physics of Plasmas, 2003, 10, 2211-2216.	1.9	58
7	MHD instabilities and their effects on plasma confinement in Large Helical Device plasmas. Nuclear Fusion, 2004, 44, 217-225.	3.5	57
8	Development of net-current free heliotron plasmas in the Large Helical Device. Nuclear Fusion, 2009, 49, 104015.	3.5	54
9	Control of 3D edge radiation structure with resonant magnetic perturbation fields applied to the stochastic layer and stabilization of radiative divertor plasma in LHD. Nuclear Fusion, 2013, 53, 093032.	3.5	48
10	Observation of an impurity hole in the Large Helical Device. Nuclear Fusion, 2009, 49, 062002.	3.5	46
11	Plasma Flow Measurement Using Directional Langmuir Probe Under Weakly Ion-Magnetized Conditions. Journal of the Physical Society of Japan, 2001, 70, 131-137.	1.6	43
12	Characterization and operational regime of high density plasmas with internal diffusion barrier observed in the Large Helical Device. Plasma Physics and Controlled Fusion, 2007, 49, B487-B496.	2.1	38
13	Spontaneous Formation of a Plasma Hole in a Rotating Magnetized Plasma: A Giant Burgers Vortex in a Compressible Fluid. Physical Review Letters, 2002, 89, 075001.	7.8	37
14	Extension of operation regimes and investigation of three-dimensional currentless plasmas in the Large Helical Device. Nuclear Fusion, 2013, 53, 104015.	3.5	35
15	Analytical Description of a Neutral-Induced Tripole Vortex in a Plasma. Physical Review Letters, 2002, 89, 265002.	7.8	34
16	Plasma performance and impurity behaviour in long pulse discharges on LHD. Nuclear Fusion, 2003, 43, 219-227.	3.5	34
17	Experimental studies on ion acceleration and stream line detachment in a diverging magnetic field. Physics of Plasmas, 2010, 17, 072106.	1.9	29
18	Recombination and enhanced metastable repopulation in the argon afterglow. Physical Review E, 2012, 85, 056401.	2.1	28

#	ARTICLE	IF	CITATIONS
19	Crystalline structure and magnetic properties of Fe ₂ CrSi Heusler alloy films: New ferromagnetic material for high-performance magnetic random access memory. <i>Journal of Applied Physics</i> , 2008, 103, 07D716.	2.5	27
20	High-density plasma with internal diffusion barrier in the Large Helical Device. <i>Nuclear Fusion</i> , 2009, 49, 085002.	3.5	27
21	High resolution laser induced fluorescence Doppler velocimetry utilizing saturated absorption spectroscopy. <i>Review of Scientific Instruments</i> , 2009, 80, 053505.	1.3	22
22	Development of impurity seeding and radiation enhancement in the helical divertor of LHD. <i>Nuclear Fusion</i> , 2015, 55, 083016.	3.5	21
23	Development of steady-state operation using ion cyclotron heating in the Large Helical Device. <i>Physics of Plasmas</i> , 2014, 21, 061505.	1.9	16
24	Electron cooling in decaying low-pressure plasmas. <i>Physical Review E</i> , 2012, 85, 046407.	2.1	15
25	Impurity shielding criteria for steady state hydrogen plasmas in the LHD, a heliotron-type device. <i>Plasma Physics and Controlled Fusion</i> , 2014, 56, 075014.	2.1	15
26	Bolometer Diagnostics on LHD. <i>Fusion Science and Technology</i> , 2010, 58, 412-417.	1.1	13
27	Effect of a magnetic island on the three-dimensional structure of edge radiation and its consequences on detachment in the Large Helical Device (EX-D). <i>Nuclear Fusion</i> , 2011, 51, 073005.	3.5	13
28	Divertor heat and particle control experiments on the large helical device. <i>Journal of Nuclear Materials</i> , 2013, 438, S133-S138.	2.7	13
29	Strong suppression of impurity accumulation in steady-state hydrogen discharges with high power NBI heating on LHD. <i>Nuclear Fusion</i> , 2017, 57, 056003.	3.5	13
30	Bolometric imaging of detached plasmas in LHD. <i>Journal of Nuclear Materials</i> , 2011, 415, S1147-S1150.	2.7	12
31	Insights into normothermic treatment with direct irradiation of atmospheric pressure plasma for biological applications. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 010502.	1.5	10
32	Energy confinement of hydrogen and deuterium electron-root plasmas in the Large Helical Device. <i>Nuclear Fusion</i> , 2018, 58, 106025.	3.5	9
33	Excitation Characteristics of Ion Waves in a Negative Ion Plasma. <i>Journal of the Physical Society of Japan</i> , 1997, 66, 3842-3846.	1.6	8
34	Propagation Characteristics of Ion Acoustic Waves in an Ar/SF ₆ Plasma. <i>Journal of the Physical Society of Japan</i> , 2000, 69, 1925-1926.	1.6	8
35	Estimate of the negative ion density in reactive gas plasmas. <i>Thin Solid Films</i> , 2001, 390, 222-227.	1.8	7
36	Flow structure formation in an ion-unmagnetized plasma: The HYPER-II experiments. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	7

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37	Exploration of spontaneous vortex formation and intermittent behavior in ECR plasmas: The HYPER-I experiments. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	7
38	Development of a dual beamlet monitor system for negative ion beam measurements. <i>Review of Scientific Instruments</i> , 2018, 89, 123303.	1.3	7
39	Response of beam focusing to plasma fluctuation in a filament-arc-type negative ion source. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SHHA01.	1.5	7
40	Self-Calibrated Measurement of Ion Flow Using a Fine Multihole Directional Langmuir Probe. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 036101.	1.5	6
41	Asymmetry of velocity distribution function and inhomogeneity-induced flow associated with neutral depletion structure in an ECR plasma. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	6
42	Controlling feeding gas temperature of plasma jet with Peltier device for experiments with fission yeast. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SEEG03.	1.5	6
43	Modification of laser-induced fluorescence spectrum by additional azimuthal Doppler effect in optical vortex beams. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SHHB04.	1.5	6
44	Tripolar vortex in a plasma. <i>IEEE Transactions on Plasma Science</i> , 2005, 33, 452-453.	1.3	5
45	Observation of high-temperature bubbles in an ECR plasma. <i>Physics of Plasmas</i> , 2018, 25, 052113.	1.9	5
46	Parallel Ion Flow Velocity Measurement Using Laser Induced Fluorescence Method in an Electron Cyclotron Resonance Plasma. <i>Plasma and Fusion Research</i> , 2010, 5, S2052-S2052.	0.7	5
47	Observation of Axial Neutral-Gas Flow Reversal in an ECR Plasma. <i>Plasma and Fusion Research</i> , 2019, 14, 1201066-1201066.	0.7	5
48	Plasma hole. <i>IEEE Transactions on Plasma Science</i> , 2005, 33, 454-455.	1.3	4
49	Spontaneous Toroidal Flow and Impurity Hole in the High Ion Temperature Plasma on LHD. <i>Fusion Science and Technology</i> , 2010, 58, 103-112.	1.1	4
50	Observation of Ion Stream Line Detachment and Onset of Azimuthal Rotation in a Diverging Magnetic Field. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2470-2471.	1.3	4
51	Intermittent Behavior of Local Electron Temperature in a Linear ECR Plasma. <i>Plasma and Fusion Research</i> , 2015, 10, 3401028-3401028.	0.7	4
52	A comprehensive study on impurity behavior in LHD long pulse discharges. <i>Nuclear Materials and Energy</i> , 2017, 12, 124-132.	1.3	4
53	Measurement of Azimuthal Flow Velocity Using Laser-Induced Fluorescence Spectroscopy in a HYPER-I Plasma. <i>Journal of Plasma and Fusion Research</i> , 2004, 80, 1003-1004.	0.4	4
54	The effects of inelastic collisions on waves in partially ionized plasma. <i>Plasma Sources Science and Technology</i> , 2006, 15, S1-S7.	3.1	3

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55	Quasi-Neutrality Breaking in a Rotating Plasma. IEEE Transactions on Plasma Science, 2008, 36, 1224-1225.	1.3	3
56	High-impedance wire grid method to study spatiotemporal behavior of hot electron clump generated in a plasma. Review of Scientific Instruments, 2014, 85, 113503.	1.3	3
57	Design of compact dispersion interferometer with a high efficiency nonlinear crystal and a low power CO ₂ laser. Journal of Instrumentation, 2017, 12, C12028-C12028.	1.2	3
58	Cold Atmospheric Plasma Modification of Amyloid β . International Journal of Molecular Sciences, 2021, 22, 3116.	4.1	3
59	Ignition-area extension of dielectric barrier discharge under high temperature. Results in Physics, 2021, 29, 104791.	4.1	3
60	Neutral Density Profile Determines the Vorticity of Ion Flow in a Charge Exchange-dominated Plasma.. Journal of Plasma and Fusion Research, 2002, 78, 1143-1144.	0.4	3
61	Measurement of Ion Species Utilizing Ion-Bursts in an Ar/SF ₆ Mixture Plasma. Japanese Journal of Applied Physics, 1998, 37, L248-L250.	1.5	2
62	Formation of Visco-dissipative Vortex and Quasi-neutrality Breaking in a Magnetoplasma. Physica Scripta, 2004, T107, 49.	2.5	2
63	Vortex Formation in a Plasma Interacting with Neutral Flow. , 2008, , .		2
64	Lamb-Dip Laser-Induced Fluorescence Spectroscopy for Measuring Magnetic Field in a Plasma. Japanese Journal of Applied Physics, 2011, 50, 036101.	1.5	2
65	Localized Intermittent Electron Flux in an ECR Plasma. IEEE Transactions on Plasma Science, 2014, 42, 2554-2555.	1.3	2
66	Probability Density Functions of Floating Potential Fluctuations Due to Local Electron Flux Intermittency in a Linear ECR Plasma. , 2014, , .		2
67	Consideration of Secondary Electron Emission Effect for Probe Measurement. Japanese Journal of Applied Physics, 2012, 51, 096101.	1.5	2
68	Variation of Doppler Broadening in High-Temperature Bubbles Created in an ECR Plasma. Plasma and Fusion Research, 2019, 14, 1201165-1201165.	0.7	2
69	Ion-burst method for positive and negative ion species measurements. Thin Solid Films, 2001, 390, 212-216.	1.8	1
70	Measurement of neutral flow velocity in an ECR plasma using tunable diode laser LIF spectroscopy combined with saturated absorption spectroscopy. Journal of Physics: Conference Series, 2010, 227, 012008.	0.4	1
71	Consideration of Secondary Electron Emission Effect for Probe Measurement. Japanese Journal of Applied Physics, 2012, 51, 096101.	1.5	1
72	Intermittent Magnetic Fluctuations Associated with High-Temperature Bubbles in an ECR Plasma. Plasma and Fusion Research, 2019, 14, 3401081-3401081.	0.7	1

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73	Plasma-neutral coupling allows electrostatic ion cyclotron waves to propagate below ion cyclotron frequency. <i>Physics of Plasmas</i> , 2022, 29, 022103.	1.9	1
74	Application of optical vortex to laser-induced fluorescence velocimetry of ions in a plasma. <i>Journal of Advanced Simulation in Science and Engineering</i> , 2022, 9, 150-159.	0.2	1
75	Properties of linear ion acoustic waves in negative ion plasmas. , 0, , .		0
76	Development of steady-state operation using ICH in the LHD. , 2014, , .		0
77	Ion Bursts in a Negative Ion Plasma. , 2000, , 381-384.		0
78	Neutral Particles at the Boundary of Microwave Discharge Plasma in HYPER-I. <i>Plasma and Fusion Research</i> , 2010, 5, S2075-S2075.	0.7	0
79	Lamb-Dip Laser-Induced Fluorescence Spectroscopy for Measuring Magnetic Field in a Plasma. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 036101.	1.5	0