

Carsten Killer

List of Publications by Year in descending order

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citations

331670

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docs citations

70
times ranked

806
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental confirmation of efficient island divertor operation and successful neoclassical transport optimization in Wendelstein 7-X. Nuclear Fusion, 2022, 62, 042022.	3.5	24
2	Magnetic configuration scans during divertor operation of Wendelstein 7-X. Nuclear Fusion, 2022, 62, 026032.	3.5	4
3	Analysis of hydrogen fueling, recycling, and confinement at Wendelstein 7-X via a single-reservoir particle balance. Nuclear Fusion, 2022, 62, 036023.	3.5	5
4	Reciprocating probe measurements in the test divertor operation phase of Wendelstein 7-X. Journal of Instrumentation, 2022, 17, P03018.	1.2	6
5	Effect of magnetic geometry on the energy partition between ions and electrons in the scrape-off layer of magnetic fusion devices. Nuclear Fusion, 2022, 62, 094002.	3.5	2
6	Understanding detachment of the W7-X island divertor. Nuclear Fusion, 2021, 61, 086012.	3.5	29
7	Dynamics and dependencies of the configuration-dependent $1\text{--}2\text{ kHz}$ fluctuation in W7-X. Nuclear Materials and Energy, 2021, 27, 100967.	1.3	4
8	Ion temperature clamping in Wendelstein 7-X electron cyclotron heated plasmas. Nuclear Fusion, 2021, 61, 116072.	3.5	27
9	Impact of magnetic islands on plasma flow and turbulence in W7-X. Nuclear Fusion, 2021, 61, 096011.	3.5	8
10	Overview of the results from divertor experiments with attached and detached plasmas at Wendelstein 7-X and their implications for steady-state operation. Nuclear Fusion, 2021, 61, 106003.	3.5	24
11	Demonstration of reduced neoclassical energy transport in Wendelstein 7-X. Nature, 2021, 596, 221-226.	27.8	69
12	Characterization of injection and confinement improvement through impurity induced profile modifications on the Wendelstein 7-X stellarator. Physics of Plasmas, 2021, 28, .	1.9	18
13	Turbulent transport in the scrape-off layer of Wendelstein 7-X. Nuclear Fusion, 2021, 61, 096038.	3.5	7
14	Bolometer tomography on Wendelstein 7-X for study of radiation asymmetry. Nuclear Fusion, 2021, 61, 116043.	3.5	8
15	Effectiveness of local methane and hydrogen injection into the scrape-off layer of W7-X by means of the multi-purpose manipulator. Fusion Engineering and Design, 2021, 173, 112786.	1.9	1
16	Multi-diagnostic analysis of plasma filaments in the island divertor. Plasma Physics and Controlled Fusion, 2020, 62, 014017.	2.1	12
17	Coherence imaging spectroscopy at Wendelstein 7-X for impurity flow measurements. Review of Scientific Instruments, 2020, 91, 013501.	1.3	12
18	Design and characteristics of a low-frequency magnetic probe for magnetic profile measurements at Wendelstein 7-X. Review of Scientific Instruments, 2020, 91, 073506.	1.3	2

#	ARTICLE	IF	CITATIONS
19	Statistical characteristics of the SOL turbulence in the first divertor plasma operation of W7-X using a reciprocating probe. <i>Physics of Plasmas</i> , 2020, 27, 122504.	1.9	2
20	Retarding field analyzer for the wendelstein 7-X boundary plasma. <i>Fusion Engineering and Design</i> , 2020, 157, 111623.	1.9	7
21	Plasma filaments in the scrape-off layer of Wendelstein 7-X. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 085003.	2.1	16
22	Measurements of plasma parameters in the divertor island of Wendelstein 7-X through line-ratio spectroscopy on helium. <i>Nuclear Fusion</i> , 2020, 60, 106014.	3.5	9
23	First divertor physics studies in Wendelstein 7-X. <i>Nuclear Fusion</i> , 2019, 59, 096014.	3.5	34
24	Performance of Wendelstein 7-X stellarator plasmas during the first divertor operation phase. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	83
25	Overview of first Wendelstein 7-X high-performance operation. <i>Nuclear Fusion</i> , 2019, 59, 112004.	3.5	165
26	First Observation of a Stable Highly Dissipative Divertor Plasma Regime on the Wendelstein 7-X Stellarator. <i>Physical Review Letters</i> , 2019, 123, 025002.	7.8	33
27	Effects of toroidal plasma current on divertor power depositions on Wendelstein 7-X. <i>Nuclear Fusion</i> , 2019, 59, 106015.	3.5	26
28	Measurement of the edge ion temperature in W7-X with island divertor by a retarding field analyzer probe. <i>Nuclear Fusion</i> , 2019, 59, 126002.	3.5	11
29	Tuning of the rotational transform in Wendelstein 7-X. <i>Nuclear Fusion</i> , 2019, 59, 126004.	3.5	16
30	Drift effects on W7-X divertor heat and particle fluxes. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 125001.	2.1	35
31	Validating the ASCOT modelling of NBI fast ions in Wendelstein 7-X stellarator. <i>Journal of Instrumentation</i> , 2019, 14, C10012-C10012.	1.2	12
32	Characterization of the W7-X scrape-off layer using reciprocating probes. <i>Nuclear Fusion</i> , 2019, 59, 086013.	3.5	32
33	Operation of probe heads on the Multi-Purpose-Manipulator at W7-X in OP 1.2a. <i>Fusion Engineering and Design</i> , 2019, 146, 2353-2355.	1.9	4
34	Edge plasma measurements on the OP 1.2a divertor plasmas at W7-X using the combined probe. <i>Nuclear Materials and Energy</i> , 2019, 19, 179-183.	1.3	15
35	The effects of magnetic topology on the scrape-off layer turbulence transport in the first divertor plasma operation of Wendelstein 7-X using a new combined probe. <i>Nuclear Fusion</i> , 2019, 59, 066001.	3.5	9
36	A new multi-channel Mach probe measuring the radial ion flow velocity profile in the boundary plasma of the W7-X stellarator. <i>Review of Scientific Instruments</i> , 2019, 90, 033502.	1.3	4

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37	Observation of anomalous impurity transport during low-density experiments in W7-X with laser blow-off injections of iron. Nuclear Fusion, 2019, 59, 046009.	3.5	38
38	A horizontal powder injector for W7-X. Fusion Engineering and Design, 2019, 146, 1403-1407.	1.9	8
39	Investigation of turbulence rotation and radial electric field in the island divertor and plasma edge at W7-X. Plasma Physics and Controlled Fusion, 2019, 61, 054003.	2.1	25
40	Effect of toroidal plasma currents on the Wendelstein 7-X Scrape-Off Layer. Plasma Physics and Controlled Fusion, 2019, 61, 125014.	2.1	11
41	High Resolution Probe for filament transport and current density study at the edge region of W7-X. Journal of Instrumentation, 2019, 14, C09035-C09035.	1.2	2
42	Impurity transport studies at Wendelstein 7-X by means of x-ray imaging spectrometer measurements. Plasma Physics and Controlled Fusion, 2019, 61, 014030.	2.1	9
43	Magnetic configuration effects on the edge heat flux in the limiter plasma on W7-X measured using the infrared camera and the combined probe. Plasma Science and Technology, 2018, 20, 054003.	1.5	4
44	Observations of the effects of magnetic topology on the SOL characteristics of an electromagnetic coherent mode in the first experimental campaign of W7-X. Nuclear Fusion, 2018, 58, 046002.	3.5	6
45	Characterization of injected aluminum oxide nanoparticle clouds in an rf discharge. Plasma Sources Science and Technology, 2018, 27, 025004.	3.1	10
46	Fast camera imaging of plasmas in Alcator C-Mod and W7-X. Nuclear Materials and Energy, 2018, 17, 269-273.	1.3	8
47	Plasma impurities observed by a pulse height analysis diagnostic during the divertor campaign of the Wendelstein 7-X stellarator. Review of Scientific Instruments, 2018, 89, 10F111.	1.3	7
48	Characteristics of the SOL turbulence structure in the first experimental campaign on W7-X with limiter configuration. Physics of Plasmas, 2018, 25, .	1.9	5
49	Design, capabilities, and first results of the new laser blow-off system on Wendelstein 7-X. Review of Scientific Instruments, 2018, 89, 073505.	1.3	28
50	Prospects of X-ray imaging spectrometers for impurity transport: Recent results from the stellarator Wendelstein 7-X (invited). Review of Scientific Instruments, 2018, 89, 10G101.	1.3	27
51	Diagnostics and characterization of nanodust and nanodusty plasmas. European Physical Journal D, 2018, 72, 1.	1.3	32
52	Design of a High Resolution Probe Head for Electromagnetic Turbulence Investigations in W7-X. IEEE Transactions on Plasma Science, 2018, 46, 1306-1311.	1.3	6
53	Measurement of the plasma edge profiles using the combined probe on W7-X. Nuclear Fusion, 2017, 57, 126020.	3.5	22
54	Stereoscopic imaging of dusty plasmas. Journal of Plasma Physics, 2016, 82, .	2.1	18

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55	Long-term spatio-temporal evolution of the dust distribution in dusty argon rf plasmas. Plasma Sources Science and Technology, 2016, 25, 055004.	3.1	16
56	Phase Separation of Binary Charged Particle Systems with Small Size Disparities using a Dusty Plasma. Physical Review Letters, 2016, 116, 115002.	7.8	53
57	Influence of dust particles on the bulk electron density in radio frequency plasmas measured by microwave interferometry. Physics of Plasmas, 2015, 22, 123702.	1.9	7
58	Spatio-temporal evolution of the dust particle size distribution in dusty argon rf plasmas. Plasma Sources Science and Technology, 2015, 24, 025029.	3.1	35
59	Stereoscopy of dust density waves under microgravity: Velocity distributions and phase-resolved single-particle analysis. Physics of Plasmas, 2014, 21, 033703.	1.9	14
60	Computer tomography of large dust clouds in complex plasmas. Review of Scientific Instruments, 2014, 85, 103711.	1.3	18
61	Global coherence of dust density waves. Physics of Plasmas, 2014, 21, .	1.9	10
62	Wave Crest Reconstruction of a Dust Density Wave Using Single Particle Trajectories. IEEE Transactions on Plasma Science, 2014, 42, 2676-2677.	1.3	0
63	Oscillation Amplitudes in 3-D Dust Density Waves in Dusty Plasmas Under Microgravity Conditions. IEEE Transactions on Plasma Science, 2014, 42, 2680-2681.	1.3	5
64	Observation of $\hat{\omega}$ mode electron heating in dusty argon radio frequency discharges. Physics of Plasmas, 2013, 20, .	1.9	32
65	Three-dimensional single particle tracking in dense dust clouds by stereoscopy of fluorescent particles. Physics of Plasmas, 2012, 19, .	1.9	23
66	Vertically elongated three-dimensional Yukawa clusters in dusty plasmas. Physical Review B, 2011, 84, .	3.2	18
67	Estimating the error in filament propagation measurement using a synthetic probe. Plasma Physics and Controlled Fusion, 0, , .	2.1	0
68	Nonlinear decay of high-power microwaves into trapped modes in inhomogeneous plasma. Nuclear Fusion, 0, , .	3.5	15
69	Parametrisation of target heat flux distribution and study of transport parameters for boundary modelling in W7-X. Nuclear Fusion, 0, , .	3.5	1