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List of Publications by Year
in descending order

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89	2,141	279798	276875
papers	citations	23 h-index	41 g-index

89	89	89	1122
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Overview of first Wendelstein 7-X high-performance operation. Nuclear Fusion, 2019, 59, 112004.	3.5	165
2	Major results from the first plasma campaign of the Wendelstein 7-X stellarator. Nuclear Fusion, 2017, 57, 102020.	3.5	128
3	Extension of the operational regime of the LHD towards a deuterium experiment. Nuclear Fusion, 2017, 57, 102023.	3.5	116
4	Magnetic configuration effects on the Wendelstein 7-X stellarator. Nature Physics, 2018, 14, 855-860.	16.7	110
5	Performance and properties of the first plasmas of Wendelstein 7-X. Plasma Physics and Controlled Fusion, 2017, 59, 014018.	2.1	103
6	Confirmation of the topology of the Wendelstein 7-X magnetic field to better than 1:100,000. Nature Communications, 2016, 7, 13493.	12.8	85
7	Nonequilibrium Spin-Glass Dynamics from Picoseconds to a Tenth of a Second. Physical Review Letters, 2008, 101, 157201.	7.8	77
8	Confinement transitions in TJ-II under Li-coated wall conditions. Nuclear Fusion, 2009, 49, 104018.	3.5	75
9	Demonstration of reduced neoclassical energy transport in Wendelstein 7-X. Nature, 2021, 596, 221-226.	27.8	69
10	Simulating spin systems on IANUS, an FPGA-based computer. Computer Physics Communications, 2008, 178, 208-216.	7.5	57
11	Core radial electric field and transport in Wendelstein 7-X plasmas. Physics of Plasmas, 2018, 25, .	1.9	47
12	Inter-machine validation study of neoclassical transport modelling in medium- to high-density stellarator-heliotron plasmas. Nuclear Fusion, 2013, 53, 063022.	3.5	40
13	Electrostatic potential variation on the flux surface and its impact on impurity transport. Nuclear Fusion, 2017, 57, 056004.	3.5	39
14	The effect of tangential drifts on neoclassical transport in stellarators close to omnigeneity. Plasma Physics and Controlled Fusion, 2017, 59, 055014.	2.1	35
15	Vanishing Neoclassical Viscosity and Physics of the Shear Layer in Stellarators. Physical Review Letters, 2012, 109, 135003.	7.8	34
16	Incompressibility of impurity flows in low density TJ-II plasmas and comparison with neoclassical theory. Nuclear Fusion, 2013, 53, 023003.	3.5	33
17	Poloidal correlation reflectometry at W7-X: radial electric field and coherent fluctuations. Plasma Physics and Controlled Fusion, 2017, 59, 105002.	2.1	30
18	Calculation of the bootstrap current profile for the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2011, 53, 115014.	2.1	27

#	Article	IF	Citations
19	Stellarators close to quasisymmetry. Plasma Physics and Controlled Fusion, 2013, 55, 125014.	2.1	25
20	Ianus: an adaptive FPGA computer. Computing in Science and Engineering, 2006, 8, 41-49.	1.2	24
21	Overview of TJ-II experiments. Nuclear Fusion, 2011, 51, 094022.	3.5	24
22	Electrostatic potential variations along flux surfaces in stellarators. Nuclear Fusion, 2015, 55, 052001.	3.5	24
23	Stellarator impurity flux driven by electric fields tangent to magnetic surfaces. Nuclear Fusion, 2018, 58, 124005.	3.5	23
24	Ion kinetic transport in the presence of collisions and electric field in TJ-II ECRH plasmas. Plasma Physics and Controlled Fusion, 2007, 49, 753-776.	2.1	23
25	Moderation of neoclassical impurity accumulation in high temperature plasmas of helical devices. Nuclear Fusion, 2017, 57, 016016.	3.5	22
26	KNOSOS: A fast orbit-averaging neoclassical code for stellarator geometry. Journal of Computational Physics, 2020, 418, 109512.	3.8	21
27	Collisionless damping of flows in the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2013, 55, 014015.	2.1	20
28	Observation of Oscillatory Radial Electric Field Relaxation in a Helical Plasma. Physical Review Letters, 2017, 118, 185002.	7.8	20
29	Large tangential electric fields in plasmas close to temperature screening. Plasma Physics and Controlled Fusion, 2018, 60, 074004.	2.1	20
30	Study of the neoclassical radial electric field of the TJ-II flexible heliac. Plasma Physics and Controlled Fusion, 2012, 54, 015005.	2.1	19
31	Studying the impurity charge and main ion mass dependence of impurity confinement in ECR-heated TJ-II stellarator. Plasma Physics and Controlled Fusion, 2014, 56, 124007.	2.1	19
32	Investigation of turbulence rotation in limiter plasmas at W7-X with newly installed poloidal correlation reflectometer. Nuclear Fusion, 2017, 57, 066023.	3.5	19
33	Turbulence and perpendicular plasma flow asymmetries measured at TJ-II plasmas. Nuclear Fusion, 2019, 59, 076021.	3.5	19
34	Effect of ECH/ECCD on energetic-particle-driven MHD modes in helical plasmas. Nuclear Fusion, 2020, 60, 066018.	3.5	19
35	Plasma fuelling with cryogenic pellets in the stellarator TJ-II. Nuclear Fusion, 2017, 57, 056039.	3.5	18
36	Radial electric field and density fluctuations measured by Doppler reflectometry during the post-pellet enhanced confinement phase in W7-X. Nuclear Fusion, 2021, 61, 046008.	3.5	18

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37	Electrostatic potential variations on stellarator magnetic surfaces in low collisionality regimes. Journal of Plasma Physics, 2018, 84, .	2.1	17
38	3D effects on transport and plasma control in the TJ-II stellarator. Nuclear Fusion, 2017, 57, 102022.	3.5	16
39	Validation of global gyrokinetic simulations in stellarator configurations. Nuclear Fusion, 2019, 59, 076029.	3.5	16
40	Investigation of the neoclassical ambipolar electric field in ion-root plasmas on W7-X. Nuclear Fusion, 2020, 60, 036021.	3.5	16
41	Turbulent impurity transport simulations in Wendelstein 7-X plasmas. Journal of Plasma Physics, 2021, 87, .	2.1	16
42	Finite orbit width effect in ion collisional transport in TJ-II. Physics of Plasmas, 2009, 16, 052303.	1.9	15
43	Stability analysis of TJ-II stellarator NBI driven AlfvÃ©n eigenmodes in ECRH and ECCD experiments. Nuclear Fusion, 2021, 61, 066019.	3.5	15
44	Numerical study of the enlarged O(5) symmetry of the 3D antiferromagnetic RP2 spin model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 628, 281-290.	4.1	14
45	Spin glass phase in the four-state three-dimensional Potts model. Physical Review B, 2009, 79, .	3.2	14
46	Damping of radial electric field fluctuations in the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2013, 55, 124044.	2.1	14
47	Experimental studies and simulations of hydrogen pellet ablation in the stellarator TJ-II. Nuclear Fusion, 2018, 58, 026025.	3.5	14
48	Towards a new image processing system at Wendelstein 7-X: From spatial calibration to characterization of thermal events. Review of Scientific Instruments, 2018, 89, 123503.	1.3	14
49	On-surface potential and radial electric field variations in electron root stellarator plasmas. Plasma Physics and Controlled Fusion, 2018, 60, 104002.	2.1	14
50	Characterization of the radial electric field and edge velocity shear in Wendelstein 7-X. Nuclear Fusion, 2020, 60, 106019.	3.5	14
51	ISDEP: Integrator of stochastic differential equations for plasmas. Computer Physics Communications, 2012, 183, 1877-1883.	7.5	13
52	Compressible impurity flow in the TJ-II stellarator. Nuclear Fusion, 2014, 54, 013008.	3.5	13
53	Particle transport after pellet injection in the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2016, 58, 084004.	2.1	13
54	An experimental characterization of core turbulence regimes in Wendelstein 7-X. Nuclear Fusion, 0, , .	3.5	13

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55	Ion heating in transitions to CERC in the stellarator TJ-II. Nuclear Fusion, 2008, 48, 065008.	3.5	12
56	Critical properties of the four-state commutative random permutation glassy Potts model in three and four dimensions. Physical Review B, 2008, 77, .	3.2	12
57	Overview of recent TJ-II stellarator results. Nuclear Fusion, 2019, 59, 112019.	3.5	12
58	A model for the fast evaluation of prompt losses of energetic ions in stellarators. Nuclear Fusion, 2021, 61, 116059.	3.5	12
59	Magnetic well scan and confinement in the TJ-II stellarator. Nuclear Fusion, 2015, 55, 113014.	3.5	11
60	Physics design point of high-field stellarator reactors. Nuclear Fusion, 2022, 62, 036024.	3.5	11
61	Sequence determinants of protein folding rates: Positive correlation between contact energy and contact range indicates selection for fast folding. Proteins: Structure, Function and Bioinformatics, 2012, 80, 2287-2304.	2.6	10
62	Transport in threshold plasmas for a confinement transition in the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2013, 55, 015001.	2.1	10
63	Dynamics of zonal-flow-like structures in the edge of the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2013, 55, 014001.	2.1	10
64	Optimizing stellarators for large flows. Plasma Physics and Controlled Fusion, 2014, 56, 094003.	2.1	10
65	Parallel impurity dynamics in the TJ-II stellarator. Plasma Physics and Controlled Fusion, 2016, 58, 074009.	2.1	10
66	Transport, stability and plasma control studies in the TJ-II stellarator. Nuclear Fusion, 2015, 55, 104014.	3.5	9
67	Global calculation of neoclassical impurity transport including the variation of electrostatic potential. Journal of Plasma Physics, 2020, 86, .	2.1	9
68	Flux-expansion divertor studies in TJ-II. Nuclear Fusion, 2009, 49, 085019.	3.5	8
69	Oscillatory relaxation of zonal flows in a multi-species stellarator plasma. Plasma Physics and Controlled Fusion, 2018, 60, 094003.	2.1	8
70	Impact of magnetic islands on plasma flow and turbulence in W7-X. Nuclear Fusion, 2021, 61, 096011.	3.5	8
71	Fast simulations for large aspect ratio stellarators with the neoclassical code KNOSOS. Nuclear Fusion, 0, , .	3.5	8
72	Impact of 3D features on ion collisional transport in ITER. Nuclear Fusion, 2010, 50, 125007.	3.5	7

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73	Stellarator optimization under several criteria using metaheuristics. Plasma Physics and Controlled Fusion, 2013, 55, 014003.	2.1	6
74	Forward modeling of collective Thomson scattering for Wendelstein 7-X plasmas: Electrostatic approximation. Review of Scientific Instruments, 2019, 90, 023501.	1.3	6
75	Impact of main ion pressure anisotropy on stellarator impurity transport. Nuclear Fusion, 2020, 60, 016035.	3.5	6
76	Study on impurity hole plasmas by global neoclassical simulation. Nuclear Fusion, 2021, 61, 086025.	3.5	6
77	Dynamics of flows and confinement in the TJ-II stellarator. Nuclear Fusion, 2013, 53, 104016.	3.5	5
78	Flow damping in stellarators close to quasisymmetry. Plasma Physics and Controlled Fusion, 2015, 57, 014014.	2.1	5
79	Studies of the fast ion energy spectra in TJ-II. Physics of Plasmas, 2013, 20, 022507.	1.9	4
80	Transport analysis in an electron cyclotron heating power scan of TJ-II plasmas. Plasma Physics and Controlled Fusion, 2014, 56, 075024.	2.1	4
81	The Particle Flux Structure and the Search for a Flux-Expansion Divertor in TJ-II. Plasma and Fusion Research, 2008, 3, S1009-S1009.	0.7	4
82	Scaling laws of the energy confinement time in stellarators without renormalization factors. Nuclear Fusion, 2021, 61, 096036.	3.5	3
83	A new code for collisional drift kinetic equation solving. , 2008, , .		2
84	EUROfusion-theory and advanced simulation coordination (E-TASC): programme and the role of high performance computing. Plasma Physics and Controlled Fusion, 2022, 64, 034005.	2.1	2
85	Plasma flow measurements based on charge exchange recombination spectroscopy in the Wendelstein 7-X stellarator. Nuclear Fusion, 2022, 62, 106005.	3.5	2
86	On the role of density fluctuations in the core turbulent transport of Wendelstein 7-X. Plasma Physics and Controlled Fusion, 0, , .	2.1	1
87	The search for a flux-expansion divertor in TJ-II. , 2008, , .		0
88	Ion kinetic transport in TJ-II. , 2008, , .		0
89	Poster reception---IANUS. , 2006, , .		0