

# Simppa A.,kAöslompolo

## List of Publications by Year in descending order

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59  
papers

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all docs

59  
docs citations

59  
times ranked

1272  
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of first Wendelstein 7-X high-performance operation. Nuclear Fusion, 2019, 59, 112004.	3.5	165
2	ASCOT: Solving the kinetic equation of minority particle species in tokamak plasmas. Computer Physics Communications, 2014, 185, 1310-1321.	7.5	143
3	Major results from the first plasma campaign of the Wendelstein 7-X stellarator. Nuclear Fusion, 2017, 57, 102020.	3.5	128
4	Measurements and modeling of Alfvén eigenmode induced fast ion transport and loss in DIII-D and ASDEX Upgrade. Physics of Plasmas, 2011, 18, .	1.9	90
5	Performance of Wendelstein 7-X stellarator plasmas during the first divertor operation phase. Physics of Plasmas, 2019, 26, .	1.9	83
6	Demonstration of reduced neoclassical energy transport in Wendelstein 7-X. Nature, 2021, 596, 221-226.	27.8	69
7	Fast-ion losses induced by ELMs and externally applied magnetic perturbations in the ASDEX Upgrade tokamak. Plasma Physics and Controlled Fusion, 2013, 55, 124014.	2.1	65
8	Convective and Diffusive Energetic Particle Losses Induced by Shear Alfvén Waves in the ASDEX Upgrade Tokamak. Physical Review Letters, 2010, 104, 185002.	7.8	61
9	Fast-ion transport induced by Alfvén eigenmodes in the ASDEX Upgrade tokamak. Nuclear Fusion, 2011, 51, 103013.	3.5	52
10	Fast-ion redistribution and loss due to edge perturbations in the ASDEX Upgrade, DIII-D and KSTAR tokamaks. Nuclear Fusion, 2013, 53, 123008.	3.5	47
11	Overview of ASDEX Upgrade results. Nuclear Fusion, 2013, 53, 104003.	3.5	36
12	Effect of plasma response on the fast ion losses due to ELM control coils in ITER. Nuclear Fusion, 2016, 56, 046014.	3.5	31
13	Overview of ASDEX Upgrade results. Nuclear Fusion, 2011, 51, 094012.	3.5	27
14	Simulations of fast ion wall loads in ASDEX Upgrade in the presence of magnetic perturbations due to ELM-mitigation coils. Nuclear Fusion, 2012, 52, 094014.	3.5	25
15	Modelling of NBI ion wall loads in the W7-X stellarator. Nuclear Fusion, 2018, 58, 082010.	3.5	24
16	Experimental confirmation of efficient island divertor operation and successful neoclassical transport optimization in Wendelstein 7-X. Nuclear Fusion, 2022, 62, 042022.	3.5	24
17	Gamma-ray spectroscopy measurements of confined fast ions on ASDEX Upgrade. Nuclear Fusion, 2012, 52, 094021.	3.5	19
18	Fast-ion losses induced by ACs and TAEs in the ASDEX Upgrade tokamak. Nuclear Fusion, 2010, 50, 084004.	3.5	18

#	ARTICLE	IF	CITATIONS
19	Protecting ITER walls: fast ion power loads in 3D magnetic field. Plasma Physics and Controlled Fusion, 2017, 59, 014013.	2.1	17
20	Versatile fusion source integrator AFSI for fast ion and neutron studies in fusion devices. Nuclear Fusion, 2018, 58, 016023.	3.5	17
21	Recent ASDEX Upgrade research in support of ITER and DEMO. Nuclear Fusion, 2015, 55, 104010.	3.5	16
22	The effect of non-axisymmetric wall geometry on 13C transport in ASDEX Upgrade. Nuclear Fusion, 2012, 52, 032001.	3.5	15
23	Validation of the BEAMS3D neutral beam deposition model on Wendelstein 7-X. Nuclear Fusion, 2020, 60, 076020.	3.5	15
24	Modeling and measurement of energetic particle slowing down in Wendelstein 7-X. Nuclear Fusion, 2021, 61, 096005.	3.5	15
25	ITER edge-localized modes control coils: the effect on fast ion losses and edge confinement properties. Plasma Physics and Controlled Fusion, 2012, 54, 105008.	2.1	13
26	Energy-and-pitch-angle-resolved escaping beam ion measurements by Faraday-cup-based fast-ion loss detector in Wendelstein 7-X. Journal of Instrumentation, 2019, 14, C09021-C09021.	1.2	13
27	First neutral beam experiments on Wendelstein 7-X. Nuclear Fusion, 2021, 61, 096008.	3.5	13
28	Validating the ASCOT modelling of NBI fast ions in Wendelstein 7-X stellarator. Journal of Instrumentation, 2019, 14, C10012-C10012.	1.2	12
29	Armoring of the Wendelstein 7-X divertor-observation immersion-tubes based on NBI fast-ion simulations. Fusion Engineering and Design, 2019, 146, 862-865.	1.9	12
30	ITER fast ion confinement in the presence of the European test blanket module. Nuclear Fusion, 2015, 55, 093010.	3.5	11
31	Inspection of W 7-X plasma-facing components after the operation phase OP1.2b: observations and first assessments. Physica Scripta, 2020, T171, 014033.	2.5	11
32	Performance of the first neutral beam injector at the Wendelstein 7-X stellarator. Fusion Engineering and Design, 2021, 163, 112115.	1.9	11
33	Effect of the European design of TBMs on ITER wall loads due to fast ions in the baseline (15 MA), hybrid (12.5 MA), steady-state (9 MA) and half-field (7.5 MA) scenarios. Nuclear Fusion, 2016, 56, 112024.	3.5	10
34	Predictive ASCOT modelling of 10Be transport in JET with the ITER-like wall. Journal of Nuclear Materials, 2013, 438, S612-S615.	2.7	9
35	Synthetic Diagnostics in the European Union Integrated Tokamak Modelling Simulation Platform. Fusion Science and Technology, 2013, 63, 1-8.	1.1	9
36	Calculating the 3D magnetic field of ITER for European TBM studies. Fusion Engineering and Design, 2015, 98-99, 1039-1043.	1.9	9

#	ARTICLE	IF	CITATIONS
37	Monte Carlo method and High Performance Computing for solving Fokker-Planck equation of minority plasma particles. Journal of Plasma Physics, 2015, 81, .	2.1	9
38	Validating fast-ion wall-load IR analysis-methods against W7-X NBI empty-torus experiment. Journal of Instrumentation, 2019, 14, P07018-P07018.	1.2	8
39	Investigation of mode activity in NBI-heated experiments of Wendelstein 7-X. Nuclear Fusion, 2020, 60, 112004.	3.5	8
40	ASCOT simulations of 14 MeV neutron rates in W7-X: effect of magnetic configuration. Plasma Physics and Controlled Fusion, 2021, 63, 035022.	2.1	7
41	Commissioning and initial operation of the W7-X neutral beam injection heating system. Fusion Engineering and Design, 2020, 161, 111997.	1.9	6
42	Collective Thomson Scattering Diagnostic for Wendelstein 7-X at 175 GHz. Journal of Instrumentation, 2020, 15, C05035-C05035.	1.2	6
43	Modelling of 3D fields due to ferritic inserts and test blanket modules in toroidal geometry at ITER. Nuclear Fusion, 2016, 56, 066001.	3.5	5
44	Serpent neutronics model of Wendelstein 7-X for 14.1-MeV neutrons. Fusion Engineering and Design, 2021, 167, 112347.	1.9	5
45	Adjoint Monte Carlo simulation of fusion product activation probe experiment in ASDEX Upgrade tokamak. Journal of Instrumentation, 2015, 10, P10012-P10012.	1.2	4
46	Synthetic NPA diagnostic for energetic particles in JET plasmas. Journal of Instrumentation, 2017, 12, C11025-C11025.	1.2	4
47	Operation of W7-X With an Inertially Cooled Divertor-”On the Way to Steady State Operation. IEEE Transactions on Plasma Science, 2020, 48, 1369-1375.	1.3	4
48	Estimation of 14 MeV neutron rate from triton burn-up in future W7-X deuterium plasma campaigns. Contributions To Plasma Physics, 2020, 60, e201900186.	1.1	4
49	Calibration of neutron detectors at ASDEX Upgrade, measurement and model. Fusion Engineering and Design, 2021, 170, 112702.	1.9	4
50	Synthetic Fast Ion Diagnostics in Tokamaks: Comparing the Monte Carlo Test Particle Code ASCOT against Experiments. Fusion Science and Technology, 2016, 69, 620-627.	1.1	3
51	Heat pulse propagation and anomalous electron heat transport measurements on the optimized stellarator W7-X. Nuclear Fusion, 2021, 61, 056001.	3.5	3
52	Parametric study of fast-ion-driven modes in Wendelstein 7-X. Journal of Physics: Conference Series, 2018, 1125, 012019.	0.4	2
53	Clearing the road for high-fidelity fast ion simulations in full three dimensions. Journal of Plasma Physics, 2018, 84, .	2.1	2
54	Feasibility of neutral particle analysis for fast-ion measurements at W7-X. Journal of Instrumentation, 2022, 17, P01034.	1.2	2

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55	Plasma flow measurements based on charge exchange recombination spectroscopy in the Wendelstein 7-X stellarator. Nuclear Fusion, 2022, 62, 106005.	3.5	2
56	Influence of toroidal field ripple and resonant magnetic perturbations on global 13C transport in ASDEX Upgrade. Journal of Nuclear Materials, 2015, 463, 459-462.	2.7	1
57	Combining research with safety: Performance of the Wendelstein 7-X video diagnostic system. Fusion Engineering and Design, 2019, 146, 874-877.	1.9	1
58	Design of endoscopes for monitoring water-cooled divertor in W7-X. Fusion Engineering and Design, 2020, 158, 111841.	1.9	1
59	Effect of Resonant Magnetic Perturbation Field on Energetic Ion Behavior in the Large Helical Device. Plasma and Fusion Research, 2019, 14, 1202159-1202159.	0.7	1