

# Stéphane Devaux

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

1,581  
citations

304743

22  
h-index

302126

39  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1465  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fuel retention studies with the ITER-Like Wall in JET. Nuclear Fusion, 2013, 53, 083023.	3.5	193
2	Impact of nitrogen seeding on confinement and power load control of a high-triangularity JET ELMy H-mode plasma with a metal wall. Nuclear Fusion, 2013, 53, 113025.	3.5	118
3	Type-I ELM power deposition profile width and temporal shape in JET. Journal of Nuclear Materials, 2011, 415, S856-S859.	2.7	90
4	ELM-induced transient tungsten melting in the JET divertor. Nuclear Fusion, 2015, 55, 023010.	3.5	83
5	Runaway electron beam generation and mitigation during disruptions at JET-ILW. Nuclear Fusion, 2015, 55, 093013.	3.5	58
6	Study of physical and chemical assisted physical sputtering of beryllium in the JET ITER-like wall. Nuclear Fusion, 2014, 54, 103001.	3.5	55
7	ELM induced tungsten melting and its impact on tokamak operation. Journal of Nuclear Materials, 2015, 463, 78-84.	2.7	53
8	Upgrade of the infrared camera diagnostics for the JET ITER-like wall divertor. Review of Scientific Instruments, 2012, 83, 10D530.	1.3	52
9	Scrape-off layer properties of ITER-like limiter start-up plasmas in JET. Nuclear Fusion, 2013, 53, 073016.	3.5	51
10	Power load studies in JET and ASDEX-Upgrade with full-W divertors. Plasma Physics and Controlled Fusion, 2013, 55, 124039.	2.1	51
11	Strike-point splitting induced by external magnetic perturbations: Observations on JET and MAST and associated modelling. Journal of Nuclear Materials, 2011, 415, S914-S917.	2.7	48
12	A protection system for the JET ITER-like wall based on imaging diagnostics. Review of Scientific Instruments, 2012, 83, 10D727.	1.3	47
13	Ion target impact energy during Type I edge localized modes in JET ITER-like Wall. Plasma Physics and Controlled Fusion, 2015, 57, 085006.	2.1	44
14	Vlasov simulations of plasma-wall interactions in a magnetized and weakly collisional plasma. Physics of Plasmas, 2006, 13, 083504.	1.9	41
15	Contrasting H-mode behaviour with deuterium fuelling and nitrogen seeding in the all-carbon and metallic versions of JET. Nuclear Fusion, 2014, 54, 073016.	3.5	37
16	Strike point splitting in the heat and particle flux profiles compared with the edge magnetic topology in a $n=2$ resonant magnetic perturbation field at JET. Nuclear Fusion, 2012, 52, 054009.	3.5	36
17	Experimental estimation of tungsten impurity sputtering due to Type I ELMs in JET-ITER-like wall using pedestal electron cyclotron emission and target Langmuir probe measurements. Physica Scripta, 2016, T167, 014005.	2.5	31
18	Power load characterization for type-I ELMy H-modes in JET. Nuclear Fusion, 2011, 51, 123001.	3.5	26

#	ARTICLE	IF	CITATIONS
19	Nonlinear MHD simulations of edge-localized-modes in JET. Plasma Physics and Controlled Fusion, 2011, 53, 054014.	2.1	26
20	Numerical evaluation of heat flux and surface temperature on a misaligned JET divertor W lamella during ELMs. Nuclear Fusion, 2014, 54, 123011.	3.5	26
21	Comparison of H-mode plasmas in JET-ILW and JET-C with and without nitrogen seeding. Nuclear Fusion, 2016, 56, 046012.	3.5	25
22	Heat load measurements on the JET first wall during disruptions. Journal of Nuclear Materials, 2011, 415, S817-S820.	2.7	22
23	Disruption heat loads and their mitigation in JET with the ITER-like wall. Journal of Nuclear Materials, 2013, 438, S102-S107.	2.7	22
24	Power handling of the JET ITER-like wall. Physica Scripta, 2014, T159, 014009.	2.5	22
25	Magnetized plasma "wall transition" consequences for wall sputtering and erosion. Plasma Physics and Controlled Fusion, 2008, 50, 025009.	2.1	21
26	Vlasov modelling of parallel transport in a tokamak scrape-off layer. Plasma Physics and Controlled Fusion, 2011, 53, 015012.	2.1	20
27	Non-linear MHD simulations of ELMs in JET and quantitative comparisons to experiments. Plasma Physics and Controlled Fusion, 2016, 58, 014026.	2.1	20
28	Plasma sheath properties in a magnetic field parallel to the wall. Physics of Plasmas, 2016, 23, .	1.9	19
29	Energy balance in JET. Nuclear Materials and Energy, 2017, 12, 227-233.	1.3	18
30	Characterisation of local ICRF heat loads on the JET ILW. Journal of Nuclear Materials, 2013, 438, S379-S383.	2.7	17
31	Power and particle fluxes to plasma-facing components in mitigated-ELM H-mode discharges on JET. Journal of Nuclear Materials, 2011, 415, S894-S900.	2.7	16
32	Type-I ELM filamentary substructure on the JET divertor target. Journal of Nuclear Materials, 2011, 415, S865-S868.	2.7	16
33	Ion cyclotron resonance frequency heating in JET during initial operations with the ITER-like wall. Physics of Plasmas, 2014, 21, 061510.	1.9	16
34	The JET real-time plasma-wall load monitoring system. Fusion Engineering and Design, 2014, 89, 243-258.	1.9	16
35	Intra-ELM phase modelling of a JET ITER-like wall H-mode discharge with EDGE2D-EIRENE. Journal of Nuclear Materials, 2015, 463, 493-497.	2.7	16
36	Moderation of target loads using fuelling and impurity seeding on JET. Journal of Nuclear Materials, 2011, 415, S313-S317.	2.7	15

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37	Characterization of scrape-off layer transport in JET limiter plasmas. Nuclear Fusion, 2014, 54, 083022.	3.5	14
38	Thermal analysis of an exposed tungsten edge in the JET divertor. Journal of Nuclear Materials, 2015, 463, 415-419.	2.7	14
39	Vessel thermal map real-time system for the JET tokamak. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	13
40	Movement of liquid beryllium during melt events in JET with ITER-like wall. Physica Scripta, 2014, T159, 014041.	2.5	13
41	Runaway beam studies during disruptions at JET-ILW. Journal of Nuclear Materials, 2015, 463, 143-149.	2.7	12
42	Comparison of scrape-off layer transport in inner and outer wall limited JET plasmas. Journal of Nuclear Materials, 2013, 438, S189-S193.	2.7	11
43	Thermoelectric currents and their role during ELM formation in JET. Nuclear Fusion, 2012, 52, 074012.	3.5	9
44	The plasma-wall transition layers in the presence of collisions with a magnetic field parallel to the wall. Physics of Plasmas, 2018, 25, 013534.	1.9	8
45	ALINE: A device dedicated to understanding radio-frequency sheaths. Nuclear Materials and Energy, 2017, 12, 908-912.	1.3	7
46	The plasma-wall transition with collisions and an oblique magnetic field: Reversal of potential drops at grazing incidences. Physics of Plasmas, 2019, 26, .	1.9	5
47	Inverse heat conduction problem using thermocouple deconvolution: application to the heat flux estimation in a tokamak. Inverse Problems in Science and Engineering, 2013, 21, 854-864.	1.2	3
48	Plasma-wall transition in weakly collisional plasmas. , 2008, , .		2
49	Calorimetry of the JET ITER-Like Wall components. Journal of Nuclear Materials, 2013, 438, S1208-S1211.	2.7	2
50	Magnetized plasma-wall transition and its effect on wall sputtering and erosion. , 2008, , .		1
51	An arc control and protection system for the JET lower hybrid antenna based on an imaging system. Review of Scientific Instruments, 2014, 85, 11E806.	1.3	0