

# Ola Embreus

## List of Publications by Year in descending order

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38  
papers

724  
citations

471509

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h-index

552781

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38  
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38  
docs citations

38  
times ranked

610  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effective Critical Electric Field for Runaway-Electron Generation. <i>Physical Review Letters</i> , 2015, 114, 115002.	7.8	59
2	Kinetic modelling of runaway electrons in dynamic scenarios. <i>Nuclear Fusion</i> , 2016, 56, 112009.	3.5	45
3	Effect of Partially Screened Nuclei on Fast-Electron Dynamics. <i>Physical Review Letters</i> , 2017, 118, 255001.	7.8	45
4	Physics research on the TCV tokamak facility: from conventional to alternative scenarios and beyond. <i>Nuclear Fusion</i> , 2019, 59, 112023.	3.5	43
5	Influence of massive material injection on avalanche runaway generation during tokamak disruptions. <i>Nuclear Fusion</i> , 2019, 59, 084004.	3.5	42
6	Effect of partially ionized impurities and radiation on the effective critical electric field for runaway generation. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 074010.	2.1	40
7	Numerical characterization of bump formation in the runaway electron tail. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 025016.	2.1	36
8	Generalized collision operator for fast electrons interacting with partially ionized impurities. <i>Journal of Plasma Physics</i> , 2018, 84, .	2.1	31
9	Runaway dynamics in the DT phase of ITER operations in the presence of massive material injection. <i>Journal of Plasma Physics</i> , 2020, 86, .	2.1	30
10	SOFT: a synthetic synchrotron diagnostic for runaway electrons. <i>Nuclear Fusion</i> , 2018, 58, 026032.	3.5	28
11	Evaluation of the Dreicer runaway generation rate in the presence of high-impurities using a neural network. <i>Journal of Plasma Physics</i> , 2019, 85, .	2.1	26
12	Radiation reaction induced non-monotonic features in runaway electron distributions. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	22
13	DREAM: A fluid-kinetic framework for tokamak disruption runaway electron simulations. <i>Computer Physics Communications</i> , 2021, 268, 108098.	7.5	22
14	On the relativistic large-angle electron collision operator for runaway avalanches in plasmas. <i>Journal of Plasma Physics</i> , 2018, 84, .	2.1	21
15	Effect of bremsstrahlung radiation emission on fast electrons in plasmas. <i>New Journal of Physics</i> , 2016, 18, 093023.	2.9	20
16	Effects of magnetic perturbations and radiation on the runaway avalanche. <i>Journal of Plasma Physics</i> , 2021, 87, .	2.1	19
17	Spatiotemporal evolution of runaway electrons from synchrotron images in Alcator C-Mod. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 124001.	2.1	18
18	Spatiotemporal analysis of the runaway distribution function from synchrotron images in an ASDEX Upgrade disruption. <i>Journal of Plasma Physics</i> , 2021, 87, .	2.1	17

#	ARTICLE	IF	CITATIONS
19	Modeling the complete prevention of disruption-generated runaway electron beam formation with a passive 3D coil in SPARC. Nuclear Fusion, 2021, 61, 124003.	3.5	17
20	NORSE: A solver for the relativistic non-linear Fokker-Planck equation for electrons in a homogeneous plasma. Computer Physics Communications, 2017, 212, 269-279.	7.5	16
21	Effect of plasma elongation on current dynamics during tokamak disruptions. Journal of Plasma Physics, 2020, 86, .	2.1	15
22	Hot-Tail Runaway Seed Landscape during the Thermal Quench in Tokamaks. Physical Review Letters, 2021, 127, 035001.	7.8	15
23	Guiding-centre transformation of the radiation reaction force in a non-uniform magnetic field. Journal of Plasma Physics, 2015, 81, .	2.1	13
24	Recent DIII-D advances in runaway electron measurement and model validation. Nuclear Fusion, 2019, 59, 066025.	3.5	13
25	Interpretation of runaway electron synchrotron and bremsstrahlung images. Nuclear Fusion, 2018, 58, 082001.	3.5	12
26	Assessing energy dependence of the transport of relativistic electrons in perturbed magnetic fields with orbit-following simulations. Nuclear Fusion, 2020, 60, 126050.	3.5	8
27	Kinetic modelling of runaway electron generation in argon-induced disruptions in ASDEX Upgrade. Journal of Plasma Physics, 2020, 86, .	2.1	7
28	Runaway electron synchrotron radiation in a vertically translated plasma. Nuclear Fusion, 2020, 60, 094002.	3.5	7
29	Measurements of runaway electron synchrotron spectra at high magnetic fields in Alcator C-Mod. Nuclear Fusion, 2018, 58, 076019.	3.5	6
30	Numerical calculation of ion runaway distributions. Physics of Plasmas, 2015, 22, 052122.	1.9	5
31	The Gaussian radial basis function method for plasma kinetic theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2735-2739.	2.1	5
32	Runaway-electron formation and electron slide-away in an ITER post-disruption scenario. Journal of Physics: Conference Series, 2016, 775, 012013.	0.4	4
33	Modelling of runaway electron dynamics during argon-induced disruptions in ASDEX Upgrade and JET. Plasma Physics and Controlled Fusion, 2021, 63, 085021.	2.1	4
34	Dynamics of positrons during relativistic electron runaway. Journal of Plasma Physics, 2018, 84, .	2.1	3
35	Alpha particle driven Alfvénic instabilities in ITER post-disruption plasmas. Nuclear Fusion, 2021, 61, 086003.	3.5	3
36	Estimate of pre-thermal quench non-thermal electron density profile during Ar pellet shutdowns of low-density target plasmas in DIII-D. Physics of Plasmas, 2021, 28, 072501.	1.9	3

#	ARTICLE	IF	CITATIONS
37	Validity of models for Dreicer generation of runaway electrons in dynamic scenarios. Nuclear Fusion, 2021, 61, 066010.	3.5	2
38	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