

# Ilon Joseph

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5048021/publications.pdf>

Version: 2024-02-01

48  
papers

2,273  
citations

331670

21  
h-index

243625

44  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1416  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlinear kinetic simulation study of the ionâ€“ion streaming instability in single- and multi-ion species plasmas. <i>Physics of Plasmas</i> , 2021, 28, 022105.	1.9	0
2	Impact of ion temperature anisotropy on 2D edge-plasma transport. <i>Nuclear Materials and Energy</i> , 2021, 26, 100881.	1.3	7
3	Guiding center and gyrokinetic orbit theory for large electric field gradients and strong shear flows. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	3
4	Simulating non-native cubic interactions on noisy quantum machines. <i>Physical Review A</i> , 2021, 103, .	2.5	8
5	Koopman wavefunctions and Clebsch variables in Vlasovâ€“Maxwell kinetic theory. <i>Journal of Plasma Physics</i> , 2021, 87, .	2.1	9
6	Quantum phase estimation for a class of generalized eigenvalue problems. <i>Physical Review A</i> , 2020, 102, .	2.5	21
7	Koopmanâ€“von Neumann approach to quantum simulation of nonlinear classical dynamics. <i>Physical Review Research</i> , 2020, 2, .	3.6	40
8	Simulation of edge localized mode heat pulse using drift-kinetic ions and Boltzmann electrons. <i>Nuclear Materials and Energy</i> , 2019, 19, 330-334.	1.3	1
9	Linearized Coulomb Collision Operator for Simulation of Interpenetrating Plasma Streams. <i>IEEE Transactions on Plasma Science</i> , 2019, 47, 2074-2080.	1.3	3
10	Stellarator Research Opportunities: A Report of the National Stellarator Coordinating Committee. <i>Journal of Fusion Energy</i> , 2018, 37, 51-94.	1.2	15
11	Electron parallel closures for the 3 + 1 fluid model. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	4
12	Comparison of 2D simulations of detached divertor plasmas with divertor Thomson measurements in the DIII-D tokamak. <i>Nuclear Materials and Energy</i> , 2017, 12, 44-50.	1.3	26
13	On coupling fluid plasma and kinetic neutral physics models. <i>Nuclear Materials and Energy</i> , 2017, 12, 813-818.	1.3	3
14	Connecting Collisionless Landau Fluid Closures to Collisional Plasma Physics Models. <i>Contributions To Plasma Physics</i> , 2016, 56, 504-510.	1.1	9
15	BOUT++: Recent and current developments. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	49
16	Modeling of tokamak divertor plasma for weakly collisional parallel electron transport. <i>Journal of Nuclear Materials</i> , 2015, 463, 506-509.	2.7	19
17	Quantitative study of the trapped particle bunching instability in Langmuir waves. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	17
18	A fast non-Fourier method for Landau-fluid operators. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	33

#	ARTICLE	IF	CITATIONS
19	Three dimensional nonlinear simulations of edge localized modes on the EAST tokamak using BOUT++ code. Physics of Plasmas, 2014, 21, 090705.	1.9	11
20	Fast pedestal, SOL and divertor measurements from DIII-D to validate BOUT++ nonlinear ELM simulations. Journal of Nuclear Materials, 2013, 438, S346-S350.	2.7	4
21	Gyro-fluid and two-fluid theory and simulations of edge-localized-modes. Physics of Plasmas, 2013, 20, .	1.9	42
22	Nonlinear instability in simulations of Large Plasma Device turbulence. Physics of Plasmas, 2013, 20, .	1.9	9
23	On the applicability of the standard approaches for evaluating a neoclassical radial electric field in a tokamak edge region. Physics of Plasmas, 2013, 20, .	1.9	5
24	Improved understanding of physics processes in pedestal structure, leading to improved predictive capability for ITER. Nuclear Fusion, 2013, 53, 093024.	3.5	59
25	Generation of non-axisymmetric scrape-off layer perturbations for controlling tokamak edge plasma profiles and stability. Physics of Plasmas, 2012, 19, 056124.	1.9	3
26	Role of singular layers in the plasma response to resonant magnetic perturbations. Nuclear Fusion, 2012, 52, 074004.	3.5	69
27	Edge-Localized Mode Control and Transport Generated by Externally Applied Magnetic Perturbations. Contributions To Plasma Physics, 2012, 52, 326-347.	1.1	19
28	Assessment of thermo-electric techniques for scrape-off layer current drive in flux-tube geometry. Journal of Nuclear Materials, 2011, 415, S932-S935.	2.7	2
29	Magnetic Perturbation Spectrum Produced by Non-Axisymmetric Scrape-Off Layer Current and the X-Point Shadow. Contributions To Plasma Physics, 2010, 50, 331-337.	1.1	1
30	Plasma transport in stochastic magnetic field caused by vacuum resonant magnetic perturbations at diverted tokamak edge. Physics of Plasmas, 2010, 17, .	1.9	76
31	Overview of the results on divertor heat loads in RMP controlled H-mode plasmas on DIII-D. Nuclear Fusion, 2009, 49, 095013.	3.5	136
32	Particle, heat, and sheath power transmission factor profiles during ELM suppression experiments on DIII-D. Journal of Nuclear Materials, 2009, 390-391, 839-842.	2.7	25
33	Extended MHD simulation of resonant magnetic perturbations. Nuclear Fusion, 2009, 49, 055025.	3.5	43
34	Driving toroidally asymmetric current through the tokamak scrape-off layer. I. Potential for edge localized mode suppression. Physics of Plasmas, 2009, 16, 052510.	1.9	21
35	Driving toroidally asymmetric current through the tokamak scrape-off layer. II. Magnetic field structure and spectrum. Physics of Plasmas, 2009, 16, 052511.	1.9	13
36	RMP ELM suppression in DIII-D plasmas with ITER similar shapes and collisionalities. Nuclear Fusion, 2008, 48, 024002.	3.5	348

#	ARTICLE	IF	CITATIONS
37	Calculation of stochastic thermal transport due to resonant magnetic perturbations in DIII-D*. Nuclear Fusion, 2008, 48, 045009.	3.5	60
38	Aspects of three dimensional transport for ELM control experiments in ITER-similar shape plasmas at low collisionality in DIII-D. Plasma Physics and Controlled Fusion, 2008, 50, 124029.	2.1	89
39	RMP enhanced transport and rotational screening in simulations of DIII-D plasmas. Nuclear Fusion, 2008, 48, 115004.	3.5	46
40	Kinetic estimate of the shielding of resonant magnetic field perturbations by the plasma in DIII-D. Nuclear Fusion, 2008, 48, 024005.	3.5	81
41	Effect of island overlap on edge localized mode suppression by resonant magnetic perturbations in DIII-D. Physics of Plasmas, 2008, 15, .	1.9	139
42	Stochastic transport modeling of resonant magnetic perturbations in DIII-D. Journal of Nuclear Materials, 2007, 363-365, 591-595.	2.7	17
43	Pedestal, SOL and divertor plasma properties in DIII-D RMP ELM-suppressed discharges at ITER relevant edge collisionality. Journal of Nuclear Materials, 2007, 363-365, 476-483.	2.7	23
44	Experimental and numerical studies of separatrix splitting and magnetic footprints in DIII-D. Journal of Nuclear Materials, 2007, 363-365, 570-574.	2.7	41
45	Edge stability and transport control with resonant magnetic perturbations in collisionless tokamak plasmas. Nature Physics, 2006, 2, 419-423.	16.7	538
46	The physics of edge resonant magnetic perturbations in hot tokamak plasmas. Physics of Plasmas, 2006, 13, 056121.	1.9	86
47	Ion temperature anisotropy in the tokamak scrape-off layer. Plasma Physics and Controlled Fusion, 0, , .	2.1	0
48	Ion temperature anisotropy model with cross-field drifts in the scrape-off layer. Contributions To Plasma Physics, 0, , .	1.1	0