

# Julien Dominski

## List of Publications by Year in descending order

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33  
papers

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citations

759233

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h-index

713466

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all docs

33  
docs citations

33  
times ranked

701  
citing authors

#	ARTICLE	IF	CITATIONS
1	Orb5: A global electromagnetic gyrokinetic code using the PIC approach in toroidal geometry. Computer Physics Communications, 2020, 251, 107072.	7.5	66
2	Complete multi-field characterization of the geodesic acoustic mode in the TCV tokamak. Plasma Physics and Controlled Fusion, 2014, 56, 072001.	2.1	65
3	How non-adiabatic passing electron layers of linear microinstabilities affect turbulent transport. Physics of Plasmas, 2015, 22, .	1.9	31
4	Pedestal and edge electrostatic turbulence characteristics from an XGC1 gyrokinetic simulation. Plasma Physics and Controlled Fusion, 2017, 59, 105014.	2.1	28
5	Direct Observation of Nonlinear Coupling between Pedestal Modes Leading to the Onset of Edge Localized Modes. Physical Review Letters, 2018, 121, 235001.	7.8	28
6	Cross-verification of the global gyrokinetic codes GENE and XGC. Physics of Plasmas, 2018, 25, 062308.	1.9	26
7	An arbitrary wavelength solver for global gyrokinetic simulations. Application to the study of fine radial structures on microturbulence due to non-adiabatic passing electron dynamics. Physics of Plasmas, 2017, 24, .	1.9	23
8	Coupling Exascale Multiphysics Applications: Methods and Lessons Learned. , 2018, , .		20
9	A tight-coupling scheme sharing minimum information across a spatial interface between gyrokinetic turbulence codes. Physics of Plasmas, 2018, 25, 072308.	1.9	17
10	Identifying microturbulence regimes in a TCV discharge making use of physical constraints on particle and heat fluxes. Physics of Plasmas, 2018, 25, .	1.9	15
11	Verification of the global gyrokinetic stellarator code XGC-S for linear ion temperature gradient driven modes. Physics of Plasmas, 2019, 26, .	1.9	15
12	Investigating the radial structure of axisymmetric fluctuations in the TCV tokamak with local and global gyrokinetic GENE simulations. Plasma Physics and Controlled Fusion, 2018, 60, 034003.	2.1	14
13	How eigenmode self-interaction affects zonal flows and convergence of tokamak core turbulence with toroidal system size. Journal of Plasma Physics, 2020, 86, .	2.1	13
14	Nonlinear global gyrokinetic $\delta f$ turbulence simulations in a quasi-axisymmetric stellarator. Physics of Plasmas, 2020, 27, .	1.9	12
15	Spatial coupling of gyrokinetic simulations, a generalized scheme based on first-principles. Physics of Plasmas, 2021, 28, .	1.9	12
16	The Exascale Framework for High Fidelity coupled Simulations (EFFIS): Enabling whole device modeling in fusion science. International Journal of High Performance Computing Applications, 2022, 36, 106-128.	3.7	11
17	Identifying the role of non-adiabatic passing electrons in ITC/TEM microturbulence by comparing fully kinetic and hybrid electron simulations. Journal of Physics: Conference Series, 2012, 401, 012006.	0.4	10
18	Study of up-down poloidal density asymmetry of high-impurities with the new impurity version of XGCa. Journal of Plasma Physics, 2019, 85, .	2.1	10

#	ARTICLE	IF	CITATIONS
19	Spatial core-edge coupling of the particle-in-cell gyrokinetic codes GEM and XGC. Physics of Plasmas, 2020, 27, 122510.	1.9	10
20	Potential of a plasma bound between two biased walls. Physics of Plasmas, 2012, 19, .	1.9	9
21	Pad� approximation of the adiabatic electron contribution to the gyrokinetic quasi-neutrality equation in the ORB5 code. Journal of Physics: Conference Series, 2016, 775, 012006.	0.4	9
22	First coupled GENE�XGC microturbulence simulations. Physics of Plasmas, 2021, 28, 012303.	1.9	9
23	Gyroaveraging operations using adaptive matrix operators. Physics of Plasmas, 2018, 25, .	1.9	7
24	Cross-verification of neoclassical transport solutions from XGCa against NEO. Physics of Plasmas, 2019, 26, .	1.9	7
25	Identification of a network of nonlinear interactions as a mechanism triggering the onset of edge localized modes. Plasma Physics and Controlled Fusion, 2020, 62, 095011.	2.1	6
26	Turbulence and zonal flow structures in the core and L-mode pedestal of tokamak plasmas. Journal of Physics: Conference Series, 2014, 561, 012022.	0.4	5
27	Transition of a network of nonlinear interactions into a regime of strong nonlinear fluctuations: A paradigm for the edge localized mode onset. Physics of Plasmas, 2021, 28, .	1.9	4
28	In Situ Analysis and Visualization of Fusion Simulations: Lessons Learned. Lecture Notes in Computer Science, 2018, , 230-242.	1.3	2
29	A Co-Design Study Of Fusion Whole Device Modeling Using Code Coupling. , 2019, , .		2
30	Tokamak parameter regimes with low toroidal momentum diffusivity. Journal of Plasma Physics, 2019, 85, .	2.1	1
31	Toward the core-edge coupling of delta-f and total-f gyrokinetic models. Physics of Plasmas, 2022, 29, 032301.	1.9	1
32	Scalable Performance Awareness for In Situ Scientific Applications. , 2019, , .		0
33	ContourNet: Salient Local Contour Identification for Blob Detection in Plasma Fusion Simulation Data. Lecture Notes in Computer Science, 2019, , 289-301.	1.3	0