

Pablo Rodriguez-Fernandez

List of Publications by Year in descending order

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papers

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citations

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31
all docs

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docs citations

31
times ranked

503
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	181
2	Predictions of core plasma performance for the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	45
3	Overview of the SPARC physics basis towards the exploration of burning-plasma regimes in high-field, compact tokamaks. Nuclear Fusion, 2022, 62, 042003.	3.5	37
4	Explaining Cold-Pulse Dynamics in Tokamak Plasmas Using Local Turbulent Transport Models. Physical Review Letters, 2018, 120, 075001.	7.8	34
5	High-Fidelity Shape Optimization of Non-Conventional Turbomachinery by Surrogate Evolutionary Strategies. Journal of Turbomachinery, 2019, 141, .	1.7	23
6	Validation of nonlinear gyrokinetic simulations of L- and I-mode plasmas on Alcator C-Mod. Physics of Plasmas, 2017, 24, .	1.9	21
7	Inference of experimental radial impurity transport on Alcator C-Mod: Bayesian parameter estimation and model selection. Nuclear Fusion, 2020, 60, 126014.	3.5	20
8	Fast-ion physics in SPARC. Journal of Plasma Physics, 2020, 86, .	2.1	17
9	The local nature of the plasma response to cold pulses with electron and ion heating at ASDEX Upgrade. Nuclear Fusion, 2019, 59, 106007.	3.5	16
10	Projections of H-mode access and edge pedestal in the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	16
11	Effect of plasma elongation on current dynamics during tokamak disruptions. Journal of Plasma Physics, 2020, 86, .	2.1	15
12	Predict-first experiments and modeling of perturbative cold pulses in the DIII-D tokamak. Physics of Plasmas, 2019, 26, .	1.9	14
13	Criteria for the importance of multi-scale interactions in turbulent transport simulations. Plasma Physics and Controlled Fusion, 2019, 61, 085022.	2.1	14
14	VITALS: A Surrogate-Based Optimization Framework for the Accelerated Validation of Plasma Transport Codes. Fusion Science and Technology, 2018, 74, 65-76.	1.1	13
15	Nonlinear gyrokinetic predictions of SPARC burning plasma profiles enabled by surrogate modeling. Nuclear Fusion, 2022, 62, 076036.	3.5	13
16	Impurity screening behavior of the high-field side scrape-off layer in near-double-null configurations: prospect for mitigating plasma-material interactions on RF actuators and first-wall components. Nuclear Fusion, 2017, 57, 076021.	3.5	12
17	Multi-scale gyrokinetic simulations of an Alcator C-Mod, ELM-y H-mode plasma. Plasma Physics and Controlled Fusion, 2018, 60, 014034.	2.1	12
18	Perturbative transport modeling of cold-pulse dynamics in Alcator C-Mod Ohmic plasmas. Nuclear Fusion, 2019, 59, 066017.	3.5	12

#	ARTICLE	IF	CITATIONS
19	Cyrokinetic simulation of turbulence and transport in the SPARC tokamak. Physics of Plasmas, 2021, 28, .	1.9	12
20	Edge turbulence measurements in L-mode and I-mode at ASDEX Upgrade. Physics of Plasmas, 2022, 29, 052504.	1.9	10
21	Advances in prediction of tokamak experiments with theory-based models. Nuclear Fusion, 0, , .	3.5	9
22	Dimensionless parameter scaling of intrinsic torque in C-Mod enhanced confinement plasmas. Nuclear Fusion, 2021, 61, 026013.	3.5	8
23	Experimental inference of neutral and impurity transport in Alcator C-Mod using high-resolution x-ray and ultra-violet spectra. Nuclear Fusion, 2021, 61, 126060.	3.5	8
24	On the correlation between $\tilde{\omega}$ -non-local $\tilde{\omega}$ ™ effects and intrinsic rotation reversals in Alcator C-Mod. Nuclear Fusion, 2017, 57, 074001.	3.5	7
25	Hysteresis as a probe of turbulent bifurcation in intrinsic rotation reversals on Alcator C-Mod. Nuclear Fusion, 2019, 59, 104001.	3.5	7
26	Neutron diagnostics for the physics of a high-field, compact, $Q \approx 1$ tokamak. Fusion Engineering and Design, 2019, 143, 212-225.	1.9	5
27	The role of ion and electron-scale turbulence in setting heat and particle transport in the DIII-D ITER baseline scenario. Nuclear Fusion, 2021, 61, 106002.	3.5	5
28	X-ray observations of $\{m\}_K\}_{\eta}$ emission from medium Z He-like ions in C-Mod tokamak plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 035702.	1.5	4
29	Evidence and modeling of turbulence bifurcation in L-mode confinement transitions on Alcator C-Mod. Physics of Plasmas, 2020, 27, 052303.	1.9	4
30	Design study of a combined interferometer and polarimeter for a high-field, compact tokamak. Physics of Plasmas, 2020, 27, .	1.9	4
31	Local transport dynamics of cold pulses in tokamak plasmas. Reviews of Modern Plasma Physics, 2022, 6, .	4.1	1