

# Pablo Rodriguez-Fernandez

## List of Publications by Year in descending order

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687363

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642732

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31  
times ranked

503  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Nonlinear gyrokinetic predictions of SPARC burning plasma profiles enabled by surrogate modeling. Nuclear Fusion, 2022, 62, 076036.	3.5	13
3	Local transport dynamics of cold pulses in tokamak plasmas. Reviews of Modern Plasma Physics, 2022, 6, .	4.1	1
4	Edge turbulence measurements in L-mode and I-mode at ASDEX Upgrade. Physics of Plasmas, 2022, 29, 052504.	1.9	10
5	Dimensionless parameter scaling of intrinsic torque in C-Mod enhanced confinement plasmas. Nuclear Fusion, 2021, 61, 026013.	3.5	8
6	Gyrokinetic simulation of turbulence and transport in the SPARC tokamak. Physics of Plasmas, 2021, 28, .	1.9	12
7	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
8	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
9	Predictions of core plasma performance for the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	45
10	Overview of the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	181
11	Fast-ion physics in SPARC. Journal of Plasma Physics, 2020, 86, .	2.1	17
12	Projections of H-mode access and edge pedestal in the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	16
13	Evidence and modeling of turbulence bifurcation in L-mode confinement transitions on Alcator C-Mod. Physics of Plasmas, 2020, 27, 052303.	1.9	4
14	Design study of a combined interferometer and polarimeter for a high-field, compact tokamak. Physics of Plasmas, 2020, 27, .	1.9	4
15	Effect of plasma elongation on current dynamics during tokamak disruptions. Journal of Plasma Physics, 2020, 86, .	2.1	15
16	Inference of experimental radial impurity transport on Alcator C-Mod: Bayesian parameter estimation and model selection. Nuclear Fusion, 2020, 60, 126014.	3.5	20
17	Predict-first experiments and modeling of perturbative cold pulses in the DIII-D tokamak. Physics of Plasmas, 2019, 26, .	1.9	14
18	Hysteresis as a probe of turbulent bifurcation in intrinsic rotation reversals on Alcator C-Mod. Nuclear Fusion, 2019, 59, 104001.	3.5	7

#	ARTICLE	IF	CITATIONS
19	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
20	Criteria for the importance of multi-scale interactions in turbulent transport simulations. Plasma Physics and Controlled Fusion, 2019, 61, 085022.	2.1	14
21	Perturbative transport modeling of cold-pulse dynamics in Alcator C-Mod Ohmic plasmas. Nuclear Fusion, 2019, 59, 066017.	3.5	12
22	High-Fidelity Shape Optimization of Non-Conventional Turbomachinery by Surrogate Evolutionary Strategies. Journal of Turbomachinery, 2019, 141, .	1.7	23
23	Neutron diagnostics for the physics of a high-field, compact, $Q \sim 1$ tokamak. Fusion Engineering and Design, 2019, 143, 212-225.	1.9	5
24	Explaining Cold-Pulse Dynamics in Tokamak Plasmas Using Local Turbulent Transport Models. Physical Review Letters, 2018, 120, 075001.	7.8	34
25	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
26	X-ray observations of $\{m\}_K\text{-}\eta$ 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
27	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
28	On the correlation between non-local effects and intrinsic rotation reversals in Alcator C-Mod. Nuclear Fusion, 2017, 57, 074001.	3.5	7
29	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
30	Validation of nonlinear gyrokinetic simulations of L- and I-mode plasmas on Alcator C-Mod. Physics of Plasmas, 2017, 24, .	1.9	21
31	Advances in prediction of tokamak experiments with theory-based models. Nuclear Fusion, 0, , .	3.5	9