Francesca Poli

List of Publications by Year
in descending order

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86 papers	2,343 citations	159585 30 h-index	233421 45 g-index
86 all docs	86 docs citations	86 times ranked	1828 citing authors

#	Article	IF	Citations
1	Development of a reduced model for energetic particle transport by sawteeth in tokamaks. Plasma Physics and Controlled Fusion, 2022, 64, 025002.	2.1	7
2	Fusion pilot plant performance and the role of a sustained high power density tokamak. Nuclear Fusion, 2022, 62, 036026.	3.5	13
3	Impact of lithium wall conditioning and wave-frequency on high density lower hybrid current drive experiment on EAST. Nuclear Materials and Energy, 2021, 26, 100955.	1.3	4
4	Pedestal collapse by resonant magnetic perturbations. Nuclear Fusion, 2021, 61, 044001.	3.5	7
5	Observation of synergy between lower hybrid waves at two frequencies in EAST. Physics of Plasmas, 2021, 28, 072506.	1.9	2
6	A model investigation of the impact of lower hybrid wave scattering angle on current drive profile in EAST and Alcator C-Mod. Nuclear Fusion, 2021, 61, 106034.	3.5	7
7	Fast ion transport by sawtooth instability in the presence of ICRFâ€“NBI synergy in JET plasmas. Nuclear Fusion, 2021, 61, 116056.	3.5	10
8	Predicting the rotation profile in ITER. Nuclear Fusion, 2020, 60, 036003.	3.5	16
9	Initial TRANSP simulations of lower hybrid heating and current drive in EAST. AIP Conference Proceedings, 2020, , .	0.4	2
10	Model predictive control of KSTAR equilibrium parameters enabled by TRANSP. Nuclear Fusion, 2020, 60, 096007.	3.5	5
11	Reduced energetic particle transport models enable comprehensive time-dependent tokamak simulations. Nuclear Fusion, 2019, 59, 106013.	3.5	12
12	Role of fast ion pressure in the isotope effect in JET L-mode plasmas. Nuclear Fusion, 2019, 59, 096030.	3.5	22
13	TRANSP-based optimization towards tokamak scenario development. Fusion Engineering and Design, 2019, 146, 547-550.	1.9	9
14	Multiphysics approach to plasma neutron source modelling at the JET tokamak. Nuclear Fusion, 2019, 59, 096020.	3.5	12
15	Overview of the JET preparation for deuteriumâ€“tritium operation with the ITER like-wall. Nuclear Fusion, 2019, 59, 112021.	3.5	87
16	Progress in disruption prevention for ITER. Nuclear Fusion, 2019, 59, 112012.	3.5	59
17	NSTX/NSTX-U theory, modeling and analysis results. Nuclear Fusion, 2019, 59, 112007.	3.5	20
18	Investigation of fast particle redistribution induced by sawtooth instability in NSTX-U. Nuclear Fusion, 2019, 59, 086007.	3.5	7

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19	On benchmarking of simulations of particle transport in ITER. Nuclear Fusion, 2019, 59, 076026.	3.5	9
20	Multi-machine analysis of termination scenarios with comparison to simulations of controlled shutdown of ITER discharges. Nuclear Fusion, 2018, 58, 026019.	3.5	20
21	Survey of heating and current drive for K-DEMO. Nuclear Fusion, 2018, 58, 036014.	3.5	16
22	TORBEAM 2.0, a paraxial beam tracing code for electron-cyclotron beams in fusion plasmas for extended physics applications. Computer Physics Communications, 2018, 225, 36-46.	7.5	51
23	Orbit modeling of fast particle redistribution induced by sawtooth instability. Nuclear Fusion, 2018, 58, 082029.	3.5	11
24	Integrated Tokamak modeling: When physics informs engineering and research planning. Physics of Plasmas, 2018, 25, .	1.9	26
25	Orchestrating TRANSP Simulations for Interpretative and Predictive Tokamak Modeling with OMFIT. Fusion Science and Technology, 2018, 74, 101-115.	1.1	44
26	Electron cyclotron power management for control of neoclassical tearing modes in the ITER baseline scenario. Nuclear Fusion, 2018, 58, 016007.	3.5	23
27	Regarding the optimization of O1-mode ECRH and the feasibility of EBW startup on NSTX-U. Plasma Physics and Controlled Fusion, 2018, 60, 065007.	2.1	6
28	Feedback control design for non-inductively sustained scenarios in NSTX-U using TRANSP. Nuclear Fusion, 2017, 57, 066017.	3.5	9
29	Overview of NSTX Upgrade initial results and modelling highlights. Nuclear Fusion, 2017, 57, 102006.	3.5	45
30	Self-consistent core-pedestal transport simulations with neural network accelerated models. Nuclear Fusion, 2017, 57, 086034.	3.5	78
31	Rotation and neoclassical ripple transport in ITER. Nuclear Fusion, 2017, 57, 116044.	3.5	11
32	Development of ITER non-activation phase operation scenarios. Nuclear Fusion, 2017, 57, 086021.	3.5	8
33	EC power management in ITER for NTM control: the path from the commissioning phase to demonstration discharges. EPJ Web of Conferences, 2017, 157, 03041.	0.3	0
34	Time-Dependent Simulations of Fast-Wave Heated High-Non-Inductive-Fraction H-Mode Plasmas in the National Spherical Torus Experiment Upgrade. EPJ Web of Conferences, 2017, 157, 03052.	0.3	0
35	LHCD during current ramp experiments on Alcator C-Mod. EPJ Web of Conferences, 2017, 157, 03063.	0.3	0
36	Experimental and modeling uncertainties in the validation of lower hybrid current drive. Plasma Physics and Controlled Fusion, 2016, 58, 095001.	2.1	13

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37	Exploration of the Super H-mode regime on DIII-D and potential advantages for burning plasma devices. Physics of Plasmas, 2016, 23, .	1.9	20
38	Development of fully non-inductive plasmas heated by medium and high-harmonic fast waves in the national spherical torus experiment upgrade. AIP Conference Proceedings, 2015, , .	0.4	0
39	A megawatt-level 28 GHz heating system for the National Spherical Torus Experiment Upgrade. EPJ Web of Conferences, 2015, 87, 02013.	0.3	5
40	Physics Basis for a Conservative Physics and Conservative Technology Tokamak Power Plant: ARIES-ACT2. Fusion Science and Technology, 2015, 67, 220-239.	1.1	14
41	The ARIES Advanced and Conservative Tokamak Power Plant Study. Fusion Science and Technology, 2015, 67, 1-21.	1.1	47
42	Physics Basis for an Advanced Physics and Advanced Technology Tokamak Power Plant Configuration: ARIES-ACT1. Fusion Science and Technology, 2015, 67, 75-106.	1.1	8
43	Simulations towards the achievement of non-inductive current ramp-up and sustainment in the National Spherical Torus Experiment Upgrade. Nuclear Fusion, 2015, 55, 123011.	3.5	11
44	ADX: a high field, high power density, advanced divertor and RF tokamak. Nuclear Fusion, 2015, 55, 053020.	3.5	82
45	Plasma turbulence, suprathermal ion dynamics and code validation on the basic plasma physics device TORPEX. Journal of Plasma Physics, 2015, 81, .	2.1	24
46	An overview of recent physics results from NSTX. Nuclear Fusion, 2015, 55, 104002.	3.5	21
47	External heating and current drive source requirements towards steady-state operation in ITER. Nuclear Fusion, 2014, 54, 073007.	3.5	17
48	Heating and current drive requirements towards steady state operation in ITER. , 2014, , .		0
49	Physics design of a 28 GHz electron heating system for the National Spherical Torus experiment upgrade. , 2014, , .		0
50	Overview of the JET results with the ITER-like wall. Nuclear Fusion, 2013, 53, 104002.	3.5	70
51	Formation and sustainment of internal transport barriers in the International Thermonuclear Experimental Reactor with the baseline heating mix. Physics of Plasmas, 2013, 20, .	1.9	7
52	Alcator C-Mod experiments in support of the ITER baseline 15 MA scenario. Nuclear Fusion, 2013, 53, 093021.	3.5	10
53	Ideal MHD stability and performance of ITER steady-state scenarios with ITBs. Nuclear Fusion, 2012, 52, 063027.	3.5	21
54	Spectra of magnetic perturbations triggered by pellets in JET plasmas. Nuclear Fusion, 2010, 50, 025004.	3.5	9

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55	A synthetic diagnostic for validation of electron gyroradius scale turbulence simulations against coherent scattering measurements. Physics of Plasmas, 2010, 17, .	1.9	8
56	Electrostatic instabilities, turbulence and fast ion interactions in the TORPEX device. Plasma Physics and Controlled Fusion, 2010, 52, 124020.	2.1	41
57	Quiet periods in edge turbulence preceding the L-H transition in the National Spherical Torus Experiment. Physics of Plasmas, 2010, 17, .	1.9	83
58	A robust method for measurement of fluctuation parallel wavenumber in laboratory plasmas. Review of Scientific Instruments, 2009, 80, 053501.	1.3	3
59	Langmuir probe-based observables for plasma-turbulence code validation and application to the TORPEX basic plasma physics experiment. Physics of Plasmas, 2009, 16, 055703.	1.9	40
60	Study of the spectral properties of ELM precursors by means of wavelets. Plasma Physics and Controlled Fusion, 2008, 50, 095009.	2.1	16
61	Mechanism for blob generation in the TORPEX toroidal plasma. Physics of Plasmas, 2008, 15, .	1.9	65
62	Transition from drift to interchange instabilities in an open magnetic field line configuration. Physics of Plasmas, 2008, 15, .	1.9	50
63	The role of the density gradient on intermittent cross-field transport events in a simple magnetized toroidal plasma. Physics of Plasmas, 2008, 15, .	1.9	32
64	Experimental Observation of the Blob-Generation Mechanism from Interchange Waves in a Plasma. Physical Review Letters, 2008, 100, 055004.	7.8	127
65	Cross-Field Transport by Instabilities and Blobs in a Magnetized Toroidal Plasma. Physical Review Letters, 2008, 101, 045001.	7.8	37
66	Development of electrostatic turbulence from drift-interchange instabilities in a toroidal plasma. Physics of Plasmas, 2007, 14, 052311.	1.9	14
67	Statistical properties of electrostatic turbulence in toroidal magnetized plasmas. Plasma Physics and Controlled Fusion, 2007, 49, B281-B290.	2.1	33
68	Characterization of the electron distribution function in an electron-cyclotron driven toroidal plasma. Plasma Physics and Controlled Fusion, 2007, 49, 175-182.	2.1	3
69	Universal Statistical Properties of Drift-Interchange Turbulence in TORPEX Plasmas. Physical Review Letters, 2007, 98, 255002.	7.8	91
70	Antenna excitation of drift wave in a toroidal plasma. Physics of Plasmas, 2007, 14, 102101.	1.9	1
71	Enhanced Production of Runaway Electrons during a Disruptive Termination of Discharges Heated with Lower Hybrid Power in the Frascati Tokamak Upgrade. Physical Review Letters, 2006, 97, 165002.	7.8	38
72	Experimental characterization and modelling of the particle source in an Electron-Cyclotron wave driven toroidal plasma. Plasma Physics and Controlled Fusion, 2006, 48, 1053-1062.	2.1	27

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73	Probabilistic analysis of turbulent structures from two-dimensional plasma imaging. Physics of Plasmas, 2006, 13, 100701.	1.9	33
74	Electrostatic turbulence and transport in a simple magnetized plasma. Physics of Plasmas, 2006, 13, 055902.	1.9	103
75	Fast ion source and detector for investigating the interaction of turbulence with suprathermal ions in a low temperature toroidal plasma. Review of Scientific Instruments, 2006, 77, 10F503.	1.3	16
76	Experimental characterization of drift-interchange instabilities in a simple toroidal plasma. Physics of Plasmas, 2006, 13, 102104.	1.9	43
77	Basic turbulence studies on TORPEX and challenges in the theory-experiment comparison. Physics of Plasmas, 2005, 12, 090906.	1.9	46
78	Plasma production by low-field side injection of electron cyclotron waves in a simple magnetized torus. Plasma Physics and Controlled Fusion, 2005, 47, 1989-2002.	2.1	51
79	Effects of a Vertical Magnetic Field on Particle Confinement in a Magnetized Plasma Torus. Physical Review Letters, 2004, 93, 165003.	7.8	48
80	Compact NE213 neutron spectrometer with high energy resolution for fusion applications. Review of Scientific Instruments, 2004, 75, 3553-3555.	1.3	56
81	Dynamics of high energy runaway electrons in the Frascati Tokamak Upgrade. Physics of Plasmas, 2003, 10, 2350-2360.	1.9	90
82	Overview of JET results. Nuclear Fusion, 2003, 43, 1540-1554.	3.5	38
83	Overview of the FTU results. Nuclear Fusion, 2003, 43, 1632-1640.	3.5	6
84	Steady improved confinement in FTU high field plasmas sustained by deep pellet injection. Nuclear Fusion, 2001, 41, 1613-1618.	3.5	24
85	Predicted colours for simple stellar populations. Astronomy and Astrophysics, 2000, 146, 91-101.	2.1	42
86	Implications of parasitic absorption of Electron Cyclotron waves on ITER operation around half-field. Nuclear Fusion, 0, , .	3.5	1