Didier Moreau

List of Publications by Year
in descending order

95	2,869	147801 31	175258 52
papers	citations	h-index	g-index

96	96	96	1295
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Robust control of q-profile and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msub><mml:mi>Î²</mml:mi><mml:mi>p</mml:mi></mml:msub></mml:math> using data-driven models on EAST. Fusion Engineering and Design, 2021, 162, 112071.	1.9	6
2	Lower hybrid wave absorption study to improve the calculation of energy confinement time in EAST. Physics of Plasmas, 2018, 25, .	1.9	16
3	Metis: a fast integrated tokamak modelling tool for scenario design. Nuclear Fusion, 2018, 58, 105001.	3.5	71
4	An efficient technique for magnetic equilibrium reconstruction with q profile constraints and its application on the EAST tokamak. Nuclear Fusion, 2017, 57, 084001.	3.5	2
5	Data-driven robust control of the plasma rotational transform profile and normalized beta dynamics for advanced tokamak scenarios in DIII-D. Fusion Engineering and Design, 2017, 117, 39-57.	1.9	4
6	Multi-experiment state-space identification of coupled magnetic and kinetic parameters in tokamak plasmas. Control Engineering Practice, 2017, 60, 28-38.	5.5	3
7	Estimation of Heat Source Term and Thermal Diffusion in Tokamak Plasmas Using a Kalman Filtering Method in the Early Lumping Approach. IEEE Transactions on Control Systems Technology, 2015, 23, 449-463.	5.2	17
8	Novel aspects of plasma control in ITER. Physics of Plasmas, 2015, 22, 021806.	1.9	45
9	Combined magnetic and kinetic control of advanced tokamak steady state scenarios based on semi-empirical modelling. Nuclear Fusion, 2015, 55, 063011.	3.5	14
10	Integrated magnetic and kinetic control of advanced tokamak plasmas on DIII-D based on data-driven models. Nuclear Fusion, 2013, 53, 063020.	3.5	34
11	Modelling of hybrid scenario: from present-day experiments towards ITER. Nuclear Fusion, 2013, 53, 073024.	3.5	4
12	Identification and control of magneto-kinetic response during advanced tokamak scenarios in DIII-D. , 2013, , .		1
13	A two-time-scale model-based combined magnetic and kinetic control system for advanced tokamak scenarios on DIII-D. , 2012, , .		6
14	Optimal feedback control of the poloidal magnetic flux profile in the DIII-D tokamak based on identified plasma response models. , 2012, , .		5
15	Soft x-ray tomography for real-time applications: present status at Tore Supra and possible future developments. Review of Scientific Instruments, 2012, 83, 063505.	1.3	35
16	Data-driven modeling and feedback tracking control of the toroidal rotation profile for advanced tokamak scenarios in DIII-D. , 2011, , .		5
17	Plasma models for real-time control of advanced tokamak scenarios. Nuclear Fusion, 2011, 51, 063009.	3.5	39
18	Contribution of Tore Supra in preparation of ITER. Nuclear Fusion, 2011, 51, 094014.	3.5	10

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19	Innovative signal processing and data analysis methods on JET for control in the perspective of next-step devices. Nuclear Fusion, 2010, 50, 055005.	3.5	6
20	Recent contribution of JET to the ITER physics. Fusion Engineering and Design, 2009, 84, 150-160.	1.9	9
21	Investigation of steady-state tokamak issues by long pulse experiments on Tore Supra. Nuclear Fusion, 2009, 49, 104010.	3.5	23
22	A two-time-scale dynamic-model approach for magnetic and kinetic profile control in advanced tokamak scenarios on JET. Nuclear Fusion, 2008, 48, 106001.	3.5	73
23	Real-Time Profile Control for Advanced Tokamak Operation. AIP Conference Proceedings, 2008, , .	0.4	3
24	Open and emerging control problems in tokamak plasma control. , 2008, , .		5
25	Integrated Plasma Shape and Boundary Flux Control on JET Tokamak. Fusion Science and Technology, 2008, 53, 789-805.	1.1	11
26	Development of steady-state scenarios compatible with ITER-like wall conditions. Plasma Physics and Controlled Fusion, 2007, 49, B529-B550.	2.1	33
27	Chapter 6: Steady state operation. Nuclear Fusion, 2007, 47, S285-S336.	3.5	323
28	Emerging applications in tokamak plasma control. IEEE Control Systems, 2006, 26, 35-63.	0.8	43
29	Development on JET of advanced tokamak operations for ITER. Nuclear Fusion, 2006, 46, 214-224.	3.5	16
30	Probing Internal Transport Barriers with Heat Pulses in JET. Physical Review Letters, 2006, 96, 095002.	7.8	30
31	A multiple-time-scale approach to the control of ITBs on JET. , 2006, , .		1
32	Real-time measurement and control at JET experiment control. Fusion Engineering and Design, 2005, 74, 561-566.	1.9	22
33	Predictive transport simulations of real-time profile control in JET advanced tokamak plasmas. Nuclear Fusion, 2005, 45, 1027-1038.	3.5	18
34	Progress in LHCD: a tool for advanced regimes on ITER. Plasma Physics and Controlled Fusion, 2005, 47, B363-B377.	2.1	29
35	Development of real-time diagnostics and feedback algorithms for JET in view of the next step. Plasma Physics and Controlled Fusion, 2005, 47, 395-407.	2.1	15
36	A model-based technique for integrated real-time profile control in the JET tokamak. Plasma Physics and Controlled Fusion, 2005, 47, 155-183.	2.1	69

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37	Studies on Pellet Fueling of ITER-Like Plasmas. Fusion Science and Technology, 2004, 45, 558-566.	1.1	4
38	Real time safety factor profile determination in JET. Fusion Engineering and Design, 2003, 66-68, 779-784.	1.9	4
39	Integrated scenario in JET using real-time profile control. Plasma Physics and Controlled Fusion, 2003, 45, A367-A383.	2.1	55
40	Real-time control of theq-profile in JET for steady state advanced tokamak operation. Nuclear Fusion, 2003, 43, 870-882.	3.5	80
41	Simulations of steady-state scenarios for Tore Supra using the CRONOS code. Nuclear Fusion, 2003, 43, 822-830.	3.5	120
42	Real-Time Control of the Current Profile in JET. AIP Conference Proceedings, 2003, , .	0.4	1
43	Progress towards steady-state operation and real-time control of internal transport barriers in JET. Nuclear Fusion, 2003, 43, 565-572.	3.5	61
44	Micro-stability and transport modelling of internal transport barriers on JET. Nuclear Fusion, 2003, 43, 975-981.	3.5	28
45	Active control of the current density profile in JET. Plasma Physics and Controlled Fusion, 2003, 45, L47-L54.	2.1	47
46	A dimensionless criterion for characterizing internal transport barriers in JET. Nuclear Fusion, 2002, 42, 520-526.	3.5	106
47	Towards fully non-inductive current drive operation in JET. Plasma Physics and Controlled Fusion, 2002, 44, 1057-1086.	2.1	79
48	Real-time control of internal transport barriers in JET*. Plasma Physics and Controlled Fusion, 2002, 44, 1087-1104.	2.1	49
49	JET Quasistationary Internal-Transport-Barrier Operation with Active Control of the Pressure Profile. Physical Review Letters, 2002, 88, 145004.	7.8	83
50	Helium Transport in Advanced Tokamak Scenarios with Internal Transport Barrier. Fusion Science and Technology, 2001, 39, 119-126.	0.6	1
51	Modelling of `advanced tokamak' scenarios with radiofrequency heating and current drive for Tore Supra. Nuclear Fusion, 2001, 41, 845-864.	3.5	6
52	Technical issues associated with the control of steady state tokamaks. Nuclear Fusion, 2000, 40, 1167-1181.	3.5	13
53	Estimation of heat loads on the wall structures in parasitic absorption of lower hybrid power. Nuclear Fusion, 2000, 40, 1477-1490.	3.5	21
54	Interaction of tokamak edge electrons with lower hybrid antenna electric field spectra. Plasma Physics and Controlled Fusion, 1999, 41, A495-A505.	2.1	6

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55	Particle-in-cell simulation of parasitic absorption of lower hybrid power in edge plasmas of tokamaks. Plasma Physics and Controlled Fusion, 1999, 41, 1125-1133.	2.1	10
56	Plasma control issues for an advanced steady state tokamak reactor. Nuclear Fusion, 1999, 39, 685-693.	3.5	34
57	Modeling of the shear effects on the thermal ion transport in advanced tokamak scenarios. Physics of Plasmas, 1999, 6, 4229-4238.	1.9	13
58	Interaction of lower hybrid waves with scrape-off-layer electrons. European Physical Journal D, 1998, 48, 307-312.	0.4	4
59	Full wave modelling of lower hybrid current drive in tokamaks. Nuclear Fusion, 1998, 38, 939-944.	3.5	22
60	Generation of hot spots by fast electrons in lower hybrid grills. Physics of Plasmas, 1998, 5, 2553-2559.	1.9	14
61	Thermal electron transport in regimes with low and negative magnetic shear in Tore Supra. Nuclear Fusion, 1997, 37, 1715-1733.	3.5	23
62	Report of the 3rd European Fusion Physics Workshop. Plasma Physics and Controlled Fusion, 1997, 39, 621-646.	2.1	0
63	Current profile optimisation during RF-assisted current ramp-up in Tore Supra. , 1997, , .		1
64	Full wave simulation of lower hybrid current drive in tokamaks. , 1997, , .		0
65	Modelling of fast electron Bremsstrahlung emission during LHCD with a 2-D relativistic Fokker-Planck code. , 1996, , .		0
66	Full steady state LH scenarios in Tore Supra. , 1996, , .		0
67	Magnetic ripple and the modeling of lowerâ€hybrid current drive in tokamaks. Physics of Plasmas, 1996, 3, 3668-3688.	1.9	32
68	A mechanism for the reconnectingm= 2N=1 instability inq>1 shearless equilibrium. Plasma Physics and Controlled Fusion, 1996, 38, 803-810.	2.1	2
69	Full steady-state operation in Tore Supra. Plasma Physics and Controlled Fusion, 1996, 38, 2113-2131.	2.1	24
70	Stationary magnetic shear reversal experiments in Tore Supra. Plasma Physics and Controlled Fusion, 1996, 38, 1603-1626.	2.1	134
71	Measurement of the Time Constants of Fast Electron Distributions in the Tore Supra Tokamak. Physical Review Letters, 1995, 74, 550-553.	7.8	24
72	Conceptual study of a reflector waveguide array for launching lower hybrid waves in reactor grade plasmas. Nuclear Fusion, 1995, 35, 1213-1223.	3.5	62

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73	Conceptual Study of a Reflector Array for Launching Lower Hybrid Waves in Reactor-Grade Plasmas. , 1995, , 565-568.		0
74	Improved confinement in high lilower hybrid driven steady state plasmas in TORE SUPRA. Nuclear Fusion, 1994, 34, 75-85.	3.5	108
75	Hamiltonian analysis of fast wave current drive in tokamak plasmas. Physics of Plasmas, 1994, 1, 2908-2925.	1.9	50
76	On selfâ€consistent rayâ€tracing and Fokkerâ€“Planck modeling of the hard xâ€ray emission during lowerâ€hybrid current drive in tokamaks. Physics of Fluids B, 1993, 5, 3276-3283.	1.7	29
77	Statistical theory of wave propagation and multipass absorption for current drive in tokamaks. Physics of Fluids B, 1993, 5, 4391-4407.	1.7	46
78	On ray stochasticity during lowerâ€hybrid current drive in tokamaks. Physics of Fluids B, 1993, 5, 1227-1238.	1.7	49
79	Lower hybrid wave coupling in TORE SUPRA through multijunction launchers. Nuclear Fusion, 1992, 32, 1883-1898.	3.5	55
80	Wave chaos and the dependence of LHCD efficiency on temperature. Nuclear Fusion, 1992, 32, 1845-1851.	3.5	31
81	Fast wave current drive in reactor scale tokamaks. Nuclear Fusion, 1992, 32, 701-712.	3.5	4
82	Lowerâ€hybrid current drive experiments in TORE SUPRA. Physics of Fluids B, 1992, 4, 2165-2175.	1.7	33
83	Stochastic Instability of Relativistic Runaway Electrons Due to Lower Hybrid Waves. Europhysics Letters, 1991, 15, 497-502.	2.0	17
84	Lower hybrid current drive in TORE SUPRA and JET. Plasma Physics and Controlled Fusion, 1991, 33, 1621-1638.	2.1	27
85	Variational description of lower hybrid wave propagation and absorption in fusion plasmas. Nuclear Fusion, 1990, 30, 97-110.	3.5	8
86	Electron absorption of fast magnetosonic waves by transit time magnetic pumping in JET. Nuclear Fusion, 1990, 30, 2170-2176.	3.5	13
87	Coupling of slow waves near the lower hybrid frequency in JET. Nuclear Fusion, 1990, 30, 471-484.	3.5	57
88	Comments on ICRH current drive in JET. Plasma Physics and Controlled Fusion, 1989, 31, 1785-1795.	2.1	0
89	Non-local current response in wave driven tokamaks. Nuclear Fusion, 1989, 29, 1751-1758.	3.5	50
90	Normal mode master equation for the distribution of lower hybrid electromagnetic energy in tokamaks. Plasma Physics and Controlled Fusion, 1989, 31, 1895-1920.	2.1	25

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91	Lower-hybrid plasma heating via a new launcher â€“ the multijunction grill. Nuclear Fusion, 1985, 25, 419-423.	3.5	49
92	Lower hybrid wave coupling in the Wega Tokamak. Plasma Physics and Controlled Fusion, 1984, 26, 553-564.	2.1	8
93	On the derivation of dispersion relations for parametric instabilities. Plasma Physics, 1981, 23, 15-21.	0.9	1
94	Towards real time control of the internal transport barriers on JET. , 0, , .		0
95	Robust real-time feedback algorithms for plasma kinetic control in advanced tokamak scenarios. Plasma Physics and Controlled Fusion, 0, , .	2.1	0