

Pierre Dumortier

List of Publications by Year in descending order

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143
all docs

143
docs citations

143
times ranked

1382
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics and applications of three-ion ICRF scenarios for fusion research. Physics of Plasmas, 2021, 28, .	1.9	42
2	JET ILA full array and polychromatic operation. Fusion Engineering and Design, 2021, 169, 112489.	1.9	2
3	Review of the JET ILA scattering-matrix arc detection system. Fusion Engineering and Design, 2020, 150, 110669.	1.9	1
4	ICRH options for JET-ILW DTE2 operation. AIP Conference Proceedings, 2020, , .	0.4	7
5	Further studies on the ITER ICRF antenna grounding. AIP Conference Proceedings, 2020, , .	0.4	1
6	Generation and observation of fast deuterium ions and fusion-born alpha particles in JET D^3He plasmas with the 3-ion radio-frequency heating scenario. Nuclear Fusion, 2020, 60, 124006.	3.5	34
7	Sawtooth control with modulated ICRH in JET-ILW H-mode plasmas. Nuclear Fusion, 2020, 60, 126037.	3.5	5
8	Modelling one-third field operation in the ITER pre-fusion power operation phase. Nuclear Fusion, 2019, 59, 126014.	3.5	19
9	RF sheath modeling of experimentally observed plasma surface interactions with the JET ITER-Like Antenna. Nuclear Materials and Energy, 2019, 19, 324-329.	1.3	5
10	Impact of ICRF on the scrape-off layer and on plasma wall interactions: From present experiments to fusion reactor. Nuclear Materials and Energy, 2019, 18, 131-140.	1.3	34
11	ICRH antenna S-matrix measurements and plasma coupling characterisation at JET. Nuclear Fusion, 2018, 58, 046012.	3.5	5
12	Progress in reducing ICRF-specific impurity release in ASDEX upgrade and JET. Nuclear Materials and Energy, 2017, 12, 1194-1198.	1.3	11
13	Commissioning and first results of the reinstated JET ICRF ILA. Fusion Engineering and Design, 2017, 123, 285-288.	1.9	7
14	ITER-like antenna for JET first results of the advanced matching control algorithms. Fusion Engineering and Design, 2017, 123, 253-258.	1.9	7
15	Sawtooth pacing with on-axis ICRH modulation in JET-ILW. Nuclear Fusion, 2017, 57, 036027.	3.5	23
16	ICRH system performance during ITER-Like Wall operations at JET and the outlook for DT campaign. EPJ Web of Conferences, 2017, 157, 03035.	0.3	2
17	ICRH physics and technology achievements in JET-ILW. EPJ Web of Conferences, 2017, 157, 02004.	0.3	5
18	Recent H majority inverted radio frequency heating scheme experiments in JET-ILW. EPJ Web of Conferences, 2017, 157, 03061.	0.3	4

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19	Reinstated JET ICRF ILA: Overview and Results. EPJ Web of Conferences, 2017, 157, 03010.	0.3	2
20	RF Sheath-Enhanced Plasma Surface Interaction Studies using Beryllium Optical Emission Spectroscopy in JET ITER-Like Wall. EPJ Web of Conferences, 2017, 157, 03024.	0.3	1
21	Electromagnetic simulations of JET ICRF ITER-like antenna with TOPICA and SSWICH asymptotic codes. EPJ Web of Conferences, 2017, 157, 03026.	0.3	1
22	Sawtooth pacing with on-axis ICRH modulation in JET-ILW. EPJ Web of Conferences, 2017, 157, 03029.	0.3	0
23	ITER-like antenna capacitors voltage probes: Circuit/electromagnetic calculations and calibrations. Review of Scientific Instruments, 2016, 87, 104705.	1.3	6
24	Contribution of LPP/ERM-KMS to the modern developments of ICRH antenna systems. Fusion Engineering and Design, 2016, 112, 21-35.	1.9	5
25	Ion cyclotron resonance heating systems upgrade toward high power and CW operations in WEST. AIP Conference Proceedings, 2015, , .	0.4	12
26	Calibrations and verifications performed in view of the ILA reinstatement at JET. AIP Conference Proceedings, 2015, , .	0.4	4
27	SIDON: A simulator of radio-frequency networks. Application to WEST ICRF launchers. AIP Conference Proceedings, 2015, , .	0.4	7
28	Confirmation of a new concept of ICRF antenna by modelling and experiments. Fusion Engineering and Design, 2015, 96-97, 532-537.	1.9	0
29	Circuit model of the ITER-like antenna for JET and simulation of its control algorithms. AIP Conference Proceedings, 2015, , .	0.4	7
30	Validation of the electrical design of the W7-X ICRF antenna on a reduced-scale mock-up. Fusion Engineering and Design, 2015, 96-97, 463-467.	1.9	2
31	Radio-frequency electrical design of the WEST long pulse and load-resilient ICRH launchers. Fusion Engineering and Design, 2015, 96-97, 473-476.	1.9	14
32	The dedicated ICRH system for the stellarator Wendelstein 7-X. , 2014, , .		2
33	Study of the effects of corrugated wall structures due to blanket modules around ICRH antennas. , 2014, , .		0
34	Coupling and matching study of the ICRF antenna for W7-X. , 2014, , .		5
35	Performance assessment of the ITER ICRF antenna. , 2014, , .		10
36	Study and design of the ion cyclotron resonance heating system for the stellarator Wendelstein 7-X. Physics of Plasmas, 2014, 21, .	1.9	35

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37	Design, performance, and grounding aspects of the International Thermonuclear Experimental Reactor ion cyclotron range of frequencies antenna. <i>Physics of Plasmas</i> , 2014, 21, 061512.	1.9	13
38	Development of the gas-puff imaging diagnostic in the TEXTOR tokamak. <i>Review of Scientific Instruments</i> , 2013, 84, 053501.	1.3	25
39	Status of the ITER Ion Cyclotron H&CD system. <i>Fusion Engineering and Design</i> , 2013, 88, 517-520.	1.9	33
40	ITER ICRH antenna grounding options. <i>Fusion Engineering and Design</i> , 2013, 88, 922-925.	1.9	9
41	Technical challenges in the construction of the steady-state stellarator Wendelstein 7-X. <i>Nuclear Fusion</i> , 2013, 53, 126001.	3.5	77
42	Design of a mechanically actuated RF grounding system for the ITER ICRH antenna. <i>Fusion Engineering and Design</i> , 2013, 88, 2100-2104.	1.9	4
43	Influence of the blanket shield modules geometry on the operation of the ITER ICRF antenna. <i>Fusion Engineering and Design</i> , 2013, 88, 926-929.	1.9	5
44	Experimental Evidence for the Intimate Interaction among Sheared Flows, Eddy Structures, Reynolds Stress, and Zonal Flows across a Transition to Improved Confinement. <i>Physical Review Letters</i> , 2013, 111, .	7.8	53
45	Physics and technology in the ion-cyclotron range of frequency on Tore Supra and TITAN test facility: implication for ITER. <i>Nuclear Fusion</i> , 2013, 53, 083012.	3.5	8
46	Technical optimization of the ITER ICRH decoupling and matching system. <i>Fusion Engineering and Design</i> , 2013, 88, 1030-1033.	1.9	4
47	RF optimisation of the port plug layout and performance assessment of the ITER ICRF antenna. <i>Fusion Engineering and Design</i> , 2013, 88, 940-944.	1.9	3
48	Influence of the plasma profile and the antenna geometry on the matching and current distribution control of the ITER ICRF antenna array. Optimization of the decoupling-matching system. <i>Fusion Engineering and Design</i> , 2013, 88, 501-506.	1.9	5
49	Role of symmetry-breaking induced by $E \times B$ shear flows on developing residual stresses and intrinsic rotation in the TEXTOR tokamak. <i>Nuclear Fusion</i> , 2013, 53, 072001.	3.5	15
50	Direct evidence of eddy breaking and tilting by edge sheared flows observed in the TEXTOR tokamak. <i>Nuclear Fusion</i> , 2012, 52, 042004.	3.5	29
51	ICRH Antenna Design and Matching. <i>Fusion Science and Technology</i> , 2012, 61, 320-327.	1.1	5
52	Summary and results of the study of the hybrid matching option implementation of the ITER ICRH system. <i>Fusion Engineering and Design</i> , 2012, 87, 167-178.	1.9	14
53	3D electromagnetic optimization of the front face of the ITER ICRF antenna. <i>Nuclear Fusion</i> , 2011, 51, 103002.	3.5	14
54	Simulation of ICRF antenna plasma loading by a dielectric dummy load. Application to the ITER case. <i>Fusion Engineering and Design</i> , 2011, 86, 855-859.	1.9	14

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55	Parametric study of one triplet of the ITER ICRH antenna by numerical modeling. Fusion Engineering and Design, 2011, 86, 901-904.	1.9	1
56	Implementation on a mock-up of the automatic feedback controlled matching options of the full ITER ICRH system. Fusion Engineering and Design, 2011, 86, 978-981.	1.9	3
57	Optical signature of RF arcs in the ICRH frequency range. Fusion Engineering and Design, 2011, 86, 831-834.	1.9	3
58	Proposal of an Arc Detection Technique Based on RF Measurements for the ITER ICRF Antenna. AIP Conference Proceedings, 2011, , .	0.4	2
59	Validation of the Electrical Properties of the ITER ICRF Antenna using Reduced-Scale Mock-Ups. , 2011, , .		2
60	Results of the implementation on a mock-up of the full 3dB hybrid matching option of the ITER ICRH system. AIP Conference Proceedings, 2011, , .	0.4	0
61	High Dielectric Dummy Loads for ITER ICRH Antenna Laboratory Testing: Numerical Simulation of One Triplet Loading by Ferroelectric Ceramics. , 2011, , .		1
62	Detailed Modeling of Grounding Solutions for the ITER ICRF Antenna. AIP Conference Proceedings, 2011, , .	0.4	1
63	Optimization of the Layout of the ITER ICRF Antenna Port Plug and its Performance Assessment. AIP Conference Proceedings, 2011, , .	0.4	3
64	Analysis of ICRH antenna loading data in TEXTOR obtained during gas injection experiments. AIP Conference Proceedings, 2011, , .	0.4	3
65	3D modeling and optimization of the ITER ICRH antenna. , 2011, , .		0
66	ICRH Antenna Design and Matching. Fusion Science and Technology, 2010, 57, 230-238.	1.1	4
67	Performance of the ITER ICRH system as expected from TOPICA and ANTITER II modelling. Nuclear Fusion, 2010, 50, 025026.	3.5	75
68	Preparing ITER ICRF: development and analysis of the load resilient matching systems based on antenna mock-up measurements. Nuclear Fusion, 2009, 49, 055004.	3.5	44
69	Performance of the ITER ICRF Antenna plug as expected from TOPICA matrices. , 2009, , .		0
70	Operational Experience with the Scattering Matrix Arc Detection System on the JET ITER-Like Antenna. , 2009, , .		4
71	Status of the ITER IC H&CD System. AIP Conference Proceedings, 2009, , .	0.4	16
72	Eigenmode analysis of the ITER ICRF antenna plug and electrical solution to the grounding of the antenna. , 2009, , .		0

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73	Overview on Experiments On ITER-like Antenna On JET And ICRF Antenna Design For ITER. , 2009, , .		11
74	RF Matching Feedback Control Systems on the JET ITER-Like Antenna. , 2009, , .		2
75	ITER ICRF Antenna Optimization and Broad-Banding Validation by use of a Reduced-Scale Mock-Up. , 2009, , .		2
76	ITER ICRF Antenna Reduced-Scale Mock-up EM Simulations and Comparisons with the Measurements. , 2009, , .		1
77	Tests on a mock-up of the feedback controlled matching options of the ITER ICRH system. , 2009, , .		2
78	Analysis of the ITER ICRH Decoupling and Matching System. , 2009, , .		1
79	Eigenmode analysis of the ITER ICRF antenna plug and electrical solution to the grounding of the antenna. Nuclear Fusion, 2009, 49, 065025.	3.5	11
80	Mechanical design features and challenges for the ITER ICRH antenna. Fusion Engineering and Design, 2009, 84, 493-496.	1.9	12
81	Scattering-matrix arc detection on the JET ITER-like ICRH antenna. Fusion Engineering and Design, 2009, 84, 1953-1960.	1.9	12
82	RF optimization of the ITER ICRF antenna plug including its broad banding by a service stub. Fusion Engineering and Design, 2009, 84, 707-711.	1.9	17
83	Commissioning of the ITER-like ICRF antenna for JET. Fusion Engineering and Design, 2009, 84, 279-283.	1.9	22
84	Status of the ITER ICRF system designâ€”Externally Matchedâ€” approach. AIP Conference Proceedings, 2007, , .	0.4	2
85	Study of the Load Resilient External Matching Circuit for the ITER ICRHâ€”FWCD System by means of its Mock-up.. AIP Conference Proceedings, 2007, , .	0.4	1
86	Report On The Commissioning Of The JET-EP ITER-Like ICRH Antenna. AIP Conference Proceedings, 2007, , .	0.4	1
87	RF Measurements and Modeling from the JET-ITER Like Antenna Testing. AIP Conference Proceedings, 2007, , .	0.4	3
88	Tests of load resilient matching procedure for the ITER ICRH system on a mock-up and layout proposal. Fusion Engineering and Design, 2007, 82, 758-764.	1.9	5
89	Recent ICRF developments at JET. Fusion Engineering and Design, 2007, 82, 873-880.	1.9	12
90	Recent developments in ICRF antenna modelling. Nuclear Fusion, 2006, 46, 432-443.	3.5	38

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91	Study of the ITER ICRH system with external matching by means of a mock-up loaded by a variable water load. Nuclear Fusion, 2006, 46, S514-S539.	3.5	19
92	Electron Cyclotron Resonance Heating on TEXTOR. Fusion Science and Technology, 2005, 47, 108-118.	1.1	18
93	Local effects of gas fuelling and their impact on transport processes in the plasma edge of the tokamak TEXTOR. Journal of Nuclear Materials, 2005, 337-339, 515-519.	2.7	11
94	Study of mutual coupling effects in the antenna array of the ICRH plug-in for ITER. Fusion Engineering and Design, 2005, 74, 359-365.	1.9	12
95	Realisation of a test facility for the ITER ICRH antenna plug-in by means of a mock-up with salted water load. Fusion Engineering and Design, 2005, 74, 367-375.	1.9	20
96	Tests and matching analysis of a load resilient ICRH antenna on TEXTOR. Fusion Engineering and Design, 2005, 74, 377-383.	1.9	3
97	Investigation of "Conjugate Load-Resilient ICRF Antenna Systems" Application to the JET ITER-Like and to a Possible ITER ICRF System. AIP Conference Proceedings, 2005, , .	0.4	4
98	Three-Dimensional Electromagnetic Modeling of the ITER ICRF Antenna (External Matching Design). AIP Conference Proceedings, 2005, , .	0.4	2
99	Study of the ITER ICRH system with external matching by means of a mock-up loaded by a variable water load. AIP Conference Proceedings, 2005, , .	0.4	1
100	Experimental proof of a load resilient external matching solution for the ITER ICRH system. AIP Conference Proceedings, 2005, , .	0.4	3
101	Impurity-seeded ELMy H-modes in JET, with high density and reduced heat load. Nuclear Fusion, 2005, 45, 1404-1410.	3.5	40
102	Overview of transport, fast particle and heating and current drive physics using tritium in JET plasmas. Nuclear Fusion, 2005, 45, S181-S194.	3.5	31
103	Ion Cyclotron Resonance Heating on TEXTOR. Fusion Science and Technology, 2005, 47, 97-107.	1.1	8
104	Predictive modelling of the impact of argon injection on H-mode plasmas in JET with the RITM code. Plasma Physics and Controlled Fusion, 2004, 46, A241-A247.	2.1	12
105	Reduction of divertor heat load in JET ELMy H-modes using impurity seeding techniques. Nuclear Fusion, 2004, 44, 312-319.	3.5	91
106	Towards the realization on JET of an integrated H-mode scenario for ITER. Nuclear Fusion, 2004, 44, 124-133.	3.5	45
107	Confinement and transport in EC heated RI-mode discharges in TEXTOR. Nuclear Fusion, 2004, 44, 533-541.	3.5	5
108	Tritium transport experiments on the JET tokamak. Plasma Physics and Controlled Fusion, 2004, 46, B255-B265.	2.1	64

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109	Design, tests and results of a second harmonic filter for the ICRH generator of JET. Fusion Engineering and Design, 2003, 66-68, 503-507.	1.9	0
110	Development of a load-insensitive ICRH antenna system on TEXTOR. Fusion Engineering and Design, 2003, 66-68, 509-513.	1.9	10
111	Integrated scenario in JET using real-time profile control. Plasma Physics and Controlled Fusion, 2003, 45, A367-A383.	2.1	55
112	Electron cyclotron resonance heating on TEXTOR. Nuclear Fusion, 2003, 43, 1371-1383.	3.5	35
113	Role of sawtooth in avoiding impurity accumulation and maintaining good confinement in JET radiative mantle discharges. Nuclear Fusion, 2003, 43, 1204-1213.	3.5	93
114	ELM Resilient External Matching System for the ICRF System of ITER: 2. Design of the Components and Implementation. AIP Conference Proceedings, 2003, , .	0.4	8
115	ELM Resilient External Matching System for the ICRF System of ITER: 1. Principle and Performances. AIP Conference Proceedings, 2003, , .	0.4	6
116	Impact of hydrogen fuelling on confinement properties in radiative improved mode. Plasma Physics and Controlled Fusion, 2003, 45, 1501-1510.	2.1	3
117	Impurity-seeded plasma experiments on JET. Nuclear Fusion, 2003, 43, 49-62.	3.5	48
118	Improved ELM scaling with impurity seeding in JET. Plasma Physics and Controlled Fusion, 2003, 45, 1657-1669.	2.1	14
119	High density, high performance high-confinement-mode plasmas in the Joint European Torus (JET). Physics of Plasmas, 2002, 9, 2103-2112.	1.9	12
120	Radiation pattern and impurity transport in argon seeded ELMy H-mode discharges in JET. Plasma Physics and Controlled Fusion, 2002, 44, 1863-1878.	2.1	46
121	Seeding of impurities in JET H-mode discharges to mitigate the impact of ELMs. Plasma Physics and Controlled Fusion, 2002, 44, 1879-1891.	2.1	19
122	Comparison of L-mode regimes with enhanced confinement by impurity seeding in JET and DIII-D. Plasma Physics and Controlled Fusion, 2002, 44, 1893-1902.	2.1	22
123	Confinement properties of high density impurity seeded ELMy H-mode discharges at low and high triangularity on JET. Plasma Physics and Controlled Fusion, 2002, 44, 1845-1861.	2.1	47
124	Modelling of confinement degradation in the radiative improved mode caused by a strong gas puff. Plasma Physics and Controlled Fusion, 2001, 43, 945-957.	2.1	18
125	Recent progress on JET towards the ITER reference mode of operation at high density. Plasma Physics and Controlled Fusion, 2001, 43, A11-A30.	2.1	51
126	Recent progress toward high performance above the Greenwald density limit in impurity seeded discharges in limiter and divertor tokamaks. Physics of Plasmas, 2001, 8, 2188-2198.	1.9	52

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127	JET radiative mantle experiments in ELMy H-Mode. Plasma Physics and Controlled Fusion, 2000, 42, A81-A88.	2.1	15
128	Quasistationary High Confinement Discharges with trans-Greenwald Density on TEXTOR-94. Physical Review Letters, 2000, 85, 2312-2315.	7.8	21
129	Overview of radiative improved mode results on TEXTOR-94. Nuclear Fusion, 1999, 39, 1637-1648.	3.5	69
130	Overview of experiments with radiation cooling at high confinement and high density in limited and diverted discharges. Plasma Physics and Controlled Fusion, 1999, 41, A379-A399.	2.1	51
131	The influence of plasma-edge properties on high confinement discharges with a radiating plasma mantle at the tokamak TEXTOR-94. Plasma Physics and Controlled Fusion, 1997, 39, B189-B206.	2.1	27
132	High confinement and high density with stationary plasma energy and strong edge radiation cooling in the upgraded Torus Experiment for Technology Oriented Research (TEXTOR-94). Physics of Plasmas, 1997, 4, 1690-1698.	1.9	54
133	ICRH in radiatively cooled TEXTOR-94 plasmas. , 1997, , .		3
134	High Confinement and High Density with Stationary Plasma Energy and Strong Edge Radiation in the TEXTOR-94 Tokamak. Physical Review Letters, 1996, 77, 2487-2490.	7.8	114
135	Transport and improved confinement in high power edge radiation cooling experiments on TEXTOR. Nuclear Fusion, 1996, 36, 39-53.	3.5	33
136	Confinement transitions with radiation cooling in TEXTOR-94. Plasma Physics and Controlled Fusion, 1996, 38, 279-288.	2.1	20
137	Recent results on ion cyclotron and combined heating of TEXTOR. Fusion Engineering and Design, 1995, 26, 103-120.	1.9	10
138	Results and modelling of high power edge radiation cooling in Textor. Physica Scripta, 1995, 52, 449-457.	2.5	23
139	Review of combined ICRH-NBI results in TEXTOR. AIP Conference Proceedings, 1994, , .	0.4	2
140	Improved confinement with edge radiative cooling at high densities and high heating power in TEXTOR. Nuclear Fusion, 1994, 34, 825-836.	3.5	66
141	Improved confinement in TEXTOR. Nuclear Fusion, 1993, 33, 283-300.	3.5	26
142	Review of recent advances in heating and current drive on TEXTOR. Plasma Physics and Controlled Fusion, 1993, 35, A15-A34.	2.1	13
143	Comparison of the performance of ICRF antennas with and without Faraday shield on TEXTOR. Nuclear Fusion, 1992, 32, 1913-1925.	3.5	25