

Diego Marcuzzi

List of Publications by Year in descending order

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98
papers

2,850
citations

218677

26
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52
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98
all docs

98
docs citations

98
times ranked

933
citing authors

#	ARTICLE	IF	CITATIONS
1	Status of the ITER heating neutral beam system. Nuclear Fusion, 2009, 49, 045006.	3.5	402
2	Overview of the design of the ITER heating neutral beam injectors. New Journal of Physics, 2017, 19, 025005.	2.9	201
3	Machine modification for active MHD control in RFX. Fusion Engineering and Design, 2003, 66-68, 161-168.	1.9	193
4	The ITER full size plasma source device design. Fusion Engineering and Design, 2009, 84, 269-274.	1.9	193
5	The PRIMA Test Facility: SPIDER and MITICA test-beds for ITER neutral beam injectors. New Journal of Physics, 2017, 19, 085004.	2.9	137
6	Progress in the realization of the PRIMA neutral beam test facility. Nuclear Fusion, 2015, 55, 083025.	3.5	98
7	Physics and engineering design of the accelerator and electron dump for SPIDER. Nuclear Fusion, 2011, 51, 063004.	3.5	85
8	Detailed design optimization of the MITICA negative ion accelerator in view of the ITER NBI. Nuclear Fusion, 2016, 56, 016015.	3.5	79
9	Detail design of the beam source for the SPIDER experiment. Fusion Engineering and Design, 2010, 85, 1792-1797.	1.9	71
10	Recent improvements to the ITER neutral beam system design. Fusion Engineering and Design, 2012, 87, 1805-1815.	1.9	66
11	Magnetic self organization, MHD active control and confinement in RFX-mod. Plasma Physics and Controlled Fusion, 2007, 49, B359-B369.	2.1	60
12	Detailed design of the RF source for the 1MV neutral beam test facility. Fusion Engineering and Design, 2009, 84, 1253-1258.	1.9	51
13	SPIDER in the roadmap of the ITER neutral beams. Fusion Engineering and Design, 2019, 146, 2539-2546.	1.9	46
14	First operations with caesium of the negative ion source SPIDER. Nuclear Fusion, 2022, 62, 086022.	3.5	46
15	Progress in the ITER neutral beam test facility. Nuclear Fusion, 2019, 59, 086058.	3.5	45
16	First operation in SPIDER and the path to complete MITICA. Review of Scientific Instruments, 2020, 91, 023510.	1.3	45
17	High current regimes in RFX-mod. Plasma Physics and Controlled Fusion, 2008, 50, 124031.	2.1	44
18	On the road to ITER NBIs: SPIDER improvement after first operation and MITICA construction progress. Fusion Engineering and Design, 2021, 168, 112622.	1.9	44

#	ARTICLE	IF	CITATIONS
19	Overview of RFX-mod results. Nuclear Fusion, 2009, 49, 104019.	3.5	43
20	The ITER Neutral Beam Test Facility towards SPIDER operation. Nuclear Fusion, 2017, 57, 086027.	3.5	43
21	Active MHD control at high currents in RFX-mod. Nuclear Fusion, 2007, 47, 783-791.	3.5	39
22	Progress in understanding halo current at JET. Nuclear Fusion, 2009, 49, 055012.	3.5	37
23	The European contribution to the development of the ITER NB injector. Fusion Engineering and Design, 2011, 86, 860-863.	1.9	37
24	Upgrades of the RFX-mod reversed field pinch and expected scenario improvements. Nuclear Fusion, 2019, 59, 076027.	3.5	34
25	Design of the RF ion source for the ITER NBI. Fusion Engineering and Design, 2007, 82, 798-805.	1.9	31
26	Overview of the RFX fusion science program. Nuclear Fusion, 2011, 51, 094023.	3.5	29
27	Overview of the RFX-mod fusion science activity. Nuclear Fusion, 2017, 57, 102012.	3.5	27
28	European programme towards the 1MeV ITER NB injector. Fusion Engineering and Design, 2009, 84, 1276-1280.	1.9	26
29	Analysis and modelling of the magnetic and plasma profiles during PPCD experiments in RFX. Nuclear Fusion, 2003, 43, 1057-1065.	3.5	25
30	Status of PRIMA, the test facility for ITER neutral beam injectors. AIP Conference Proceedings, 2013, , .	0.4	24
31	SPIDER plasma grid masking for reducing gas conductance and pressure in the vacuum vessel. Fusion Engineering and Design, 2020, 161, 112036.	1.9	24
32	Final design of the beam source for the MITICA injector. Review of Scientific Instruments, 2016, 87, 02B309.	1.3	23
33	Technological challenges for the design of the RFX-mod2 experiment. Fusion Engineering and Design, 2019, 146, 692-696.	1.9	23
34	Optimization of the electrostatic and magnetic field configuration in the MITICA accelerator. Fusion Engineering and Design, 2013, 88, 507-511.	1.9	20
35	RFX machine and power supply improvements for RFP advanced studies. Fusion Engineering and Design, 2001, 56-57, 819-824.	1.9	18
36	Design of a new toroidal shell and support structure for RFX. Fusion Engineering and Design, 2002, 63-64, 461-466.	1.9	18

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37	Progress in the MITICA beam source design. Review of Scientific Instruments, 2012, 83, 02B108.	1.3	18
38	Overview of the RFX-mod contribution to the international Fusion Science Program. Nuclear Fusion, 2015, 55, 104012.	3.5	18
39	FAST: A European ITER satellite experiment in the view of DEMO. Fusion Engineering and Design, 2011, 86, 497-503.	1.9	17
40	Overview of the RFX-mod fusion science programme. Nuclear Fusion, 2013, 53, 104018.	3.5	17
41	Characterization of the SPIDER Cs oven prototype in the CAesium Test Stand for the ITER HNB negative ion sources. Fusion Engineering and Design, 2019, 146, 676-679.	1.9	17
42	Design of a low voltage, high current extraction system for the ITER Ion Source. , 2009, , .		16
43	Comparative study of beam losses and heat loads reduction methods in MITICA beam source. Review of Scientific Instruments, 2014, 85, 02B308.	1.3	16
44	A substantial step forward in the realization of the ITER HNB system: The ITER NBI Test Facility. Fusion Engineering and Design, 2017, 123, 32-39.	1.9	16
45	New wide bandwidth in-vessel magnetic measurement system for RFX. Review of Scientific Instruments, 2003, 74, 1554-1557.	1.3	15
46	Improvement of the magnetic configuration in the reversed field pinch through successive bifurcations. Physics of Plasmas, 2009, 16, .	1.9	15
47	Design of the new magnetic sensors for Joint European Torus. Review of Scientific Instruments, 2004, 75, 4311-4313.	1.3	14
48	Potential failure mode and effects analysis for the ITER NB injector. Fusion Engineering and Design, 2009, 84, 466-469.	1.9	14
49	Improvements in the SPIDER RF system. Fusion Engineering and Design, 2021, 167, 112337.	1.9	14
50	Start of SPIDER operation towards ITER neutral beams. AIP Conference Proceedings, 2018, , .	0.4	13
51	Tests and analyses for the mechanical and thermal qualification of the new RFX first wall tiles. Fusion Engineering and Design, 2003, 66-68, 289-293.	1.9	12
52	Manufacturing and Testing of Grid Prototypes for the ITER Neutral Beam Injectors. IEEE Transactions on Plasma Science, 2014, 42, 628-632.	1.3	12
53	Two key improvements to enhance the thermo-mechanic performances of accelerator grids for neutral beam injectors. Fusion Engineering and Design, 2016, 109-111, 890-894.	1.9	11
54	Proposal of cooling plant, for SPIDER and MITICA experiments. Fusion Engineering and Design, 2011, 86, 843-846.	1.9	10

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55	Concepts for the magnetic design of the MITICA neutral beam test facility ion accelerator. Review of Scientific Instruments, 2012, 83, 02B107.	1.3	10
56	Manufacturing of the full size prototype of the ion source for the ITER neutral beam injector “The SPIDER beam source. Fusion Engineering and Design, 2015, 96-97, 319-324.	1.9	10
57	Status of the halo current sensor project for JET-EP. Fusion Engineering and Design, 2005, 74, 757-761.	1.9	9
58	Heating Neutral Beams for ITER: Present Status. IEEE Transactions on Plasma Science, 2016, 44, 1496-1505.	1.3	9
59	SPIDER Cs Ovens functional tests. Fusion Engineering and Design, 2021, 167, 112331.	1.9	8
60	The fabrication and assembly of the beam source for the SPIDER experiment. Fusion Engineering and Design, 2019, 146, 839-844.	1.9	7
61	The ITER neutral beam test facility: Designs of the general infrastructure, cryosystem and cooling plant. Fusion Engineering and Design, 2005, 74, 397-402.	1.9	6
62	Vessel design and interfaces development for the 1MV ITER Neutral Beam Injector and Test Facility. Fusion Engineering and Design, 2009, 84, 1606-1610.	1.9	6
63	Vacuum Tight Threaded Junctions (VTTJ): A new solution for reliable heterogeneous junctions in ITER. Fusion Engineering and Design, 2015, 96-97, 48-55.	1.9	6
64	Design of the new supporting structure for the passive stabilizing shell assembly of RFX-mod2. Fusion Engineering and Design, 2021, 169, 112466.	1.9	6
65	Radio Frequency Generators Based on Solid State Amplifiers for the NBTF and ITER Projects. IEEE Transactions on Plasma Science, 2022, 50, 3970-3976.	1.3	6
66	Thermo-mechanical design of the Plasma Driver Plate for the MITICA ion source. Fusion Engineering and Design, 2010, 85, 1073-1079.	1.9	5
67	Thermo Fluid Dynamics Tests on the Single Channel Prototypes for the SPIDER Grids. Fusion Science and Technology, 2012, 62, 164-170.	1.1	5
68	Electrical and structural R&D activities on high voltage dc solid insulator in vacuum. Fusion Engineering and Design, 2015, 96-97, 563-567.	1.9	5
69	The influence of grid positioning on the beam optics in the neutral beam injectors for ITER. Fusion Engineering and Design, 2016, 107, 64-69.	1.9	5
70	Maintenance schemes for the ITER neutral beam test facility. Fusion Engineering and Design, 2005, 74, 255-259.	1.9	4
71	Design, interface development and structural analyses of SPIDER vacuum vessel. Fusion Engineering and Design, 2010, 85, 2305-2311.	1.9	4
72	Structural analyses and integrated design of the MITICA Injector assembly. Fusion Engineering and Design, 2013, 88, 849-853.	1.9	4

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73	The Full-Size Source and Injector Prototypes for ITER Neutral Beams. Plasma and Fusion Research, 2016, 11, 2402119-2402119.	0.7	4
74	MITICA intermediate electrostatic shield: Concept design, development, and first experimental tests identification. AIP Conference Proceedings, 2018, , .	0.4	4
75	Spider beam source ready for operation. Fusion Engineering and Design, 2019, 146, 736-740.	1.9	4
76	Design integration of SINGAP accelerator and RF source in the ITER NB injector. , 2005, , .		3
77	Heating neutral beams for ITER: Present status. , 2015, , .		3
78	Steady state thermal-hydraulic analyses of the MITICA cooling circuits. Review of Scientific Instruments, 2016, 87, 02B323.	1.3	3
79	Studies on the voltage hold off of the SPIDER driver coil at high radio frequency power. AIP Conference Proceedings, 2018, , .	0.4	3
80	Thermo-mechanical design of the ITER Neutral Beam Injector grids for Radio Frequency Ion Source and SINGAP Accelerator. , 2007, , .		2
81	Physics and engineering studies on the MITICA accelerator: comparison among possible design solutions. , 2011, , .		2
82	Manufacturing, assembly and tests of SPIDER Vacuum Vessel to develop and test a prototype of ITER neutral beam ion source. Fusion Engineering and Design, 2015, 96-97, 383-387.	1.9	2
83	Electrostatic steering and beamlet aiming in large neutral beam injectors. AIP Conference Proceedings, 2015, , .	0.4	2
84	Plant integration of MITICA and SPIDER experiments with auxiliary plants and buildings on PRIMA site. Fusion Engineering and Design, 2015, 96-97, 257-260.	1.9	2
85	Off-normal and failure condition analysis of the MITICA negative-ion accelerator. Review of Scientific Instruments, 2016, 87, 02B311.	1.3	2
86	Design optimization of RF lines in vacuum environment for the MITICA experiment. Review of Scientific Instruments, 2016, 87, 02B314.	1.3	2
87	Requirements specification for the Neutral Beam Injector on FAST. Fusion Engineering and Design, 2011, 86, 974-977.	1.9	1
88	Detail Design of the Electron Dump for the SPIDER Beam Source. IEEE Transactions on Plasma Science, 2012, 40, 629-634.	1.3	1
89	Molybdenum armour layer on copper plates: Manufacturing technologies and tests of prototypes. , 2013, , .		1
90	Construction and testing of grid prototypes for the ITER neutral beam injectors. , 2013, , .		1

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91	Preparation of the vacuum insulation tests on the MITICA 1 MV electrostatic Accelerator. , 2021, , .		1
92	Detail design of the electron dump for the SPIDER beam source. , 2011, , .		0
93	Status of the 1 MeV Accelerator Design for ITER NBI. , 2011, , .		0
94	ITER neutral beam Vacuum Vessel design. , 2013, , .		0
95	Non-ideal operating conditions of the ion source prototype for the ITER neutral beam injector due to thermal deformation of the support structure. Review of Scientific Instruments, 2014, 85, 02B313.	1.3	0
96	Development and tests of molybdenum armored copper components for MITICA ion source. Review of Scientific Instruments, 2016, 87, 02B126.	1.3	0
97	Numerical investigation of the early operational phase of the negative ion test facility SPIDER: Beam features. AIP Conference Proceedings, 2018, , .	0.4	0
98	Optimization of Spider Grounded Grid Segment Design. IEEE Transactions on Plasma Science, 2022, , 1-7.	1.3	0