# Diego Marcuzzi

## List of Publications by Year in descending order

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|---|---|---|---|
| 98 papers | 2,850 citations | 218677 26 h-index | 175258 52 g-index |
| 98 all docs | 98 docs citations | 98 times ranked | 933 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Optimization of Spider Grounded Grid Segment Design. IEEE Transactions on Plasma Science, 2022, , 1-7. | 1.3 | 0 |
| 2 | First operations with caesium of the negative ion source SPIDER. Nuclear Fusion, 2022, 62, 086022. | 3.5 | 46 |
| 3 | 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 |
| 4 | SPIDER Cs Ovens functional tests. Fusion Engineering and Design, 2021, 167, 112331. | 1.9 | 8 |
| 5 | Improvements in the SPIDER RF system. Fusion Engineering and Design, 2021, 167, 112337. | 1.9 | 14 |
| 6 | 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 |
| 7 | 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 |
| 8 | Preparation of the vacuum insulation tests on the MITICA 1 MV electrostatic Accelerator. , 2021, , . | | 1 |
| 9 | SPIDER plasma grid masking for reducing gas conductance and pressure in the vacuum vessel. Fusion Engineering and Design, 2020, 161, 112036. | 1.9 | 24 |
| 10 | First operation in SPIDER and the path to complete MITICA. Review of Scientific Instruments, 2020, 91, 023510. | 1.3 | 45 |
| 11 | Spider beam source ready for operation. Fusion Engineering and Design, 2019, 146, 736-740. | 1.9 | 4 |
| 12 | The fabrication and assembly of the beam source for the SPIDER experiment. Fusion Engineering and Design, 2019, 146, 839-844. | 1.9 | 7 |
| 13 | 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 |
| 14 | Upgrades of the RFX-mod reversed field pinch and expected scenario improvements. Nuclear Fusion, 2019, 59, 076027. | 3.5 | 34 |
| 15 | Progress in the ITER neutral beam test facility. Nuclear Fusion, 2019, 59, 086058. | 3.5 | 45 |
| 16 | SPIDER in the roadmap of the ITER neutral beams. Fusion Engineering and Design, 2019, 146, 2539-2546. | 1.9 | 46 |
| 17 | Technological challenges for the design of the RFX-mod2 experiment. Fusion Engineering and Design, 2019, 146, 692-696. | 1.9 | 23 |
| 18 | Numerical investigation of the early operational phase of the negative ion test facility SPIDER: Beam features. AIP Conference Proceedings, 2018, , . | 0.4 | 0 |

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|---|---|---|---|
| 19 | Start of SPIDER operation towards ITER neutral beams. AIP Conference Proceedings, 2018, , . | 0.4 | 13 |
| 20 | Studies on the voltage hold off of the SPIDER driver coil at high radio frequency power. AIP Conference Proceedings, 2018, , . | 0.4 | 3 |
| 21 | MITICA intermediate electrostatic shield: Concept design, development, and first experimental tests identification. AIP Conference Proceedings, 2018, , . | 0.4 | 4 |
| 22 | 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 |
| 23 | Overview of the design of the ITER heating neutral beam injectors. New Journal of Physics, 2017, 19, 025005. | 2.9 | 201 |
| 24 | The ITER Neutral Beam Test Facility towards SPIDER operation. Nuclear Fusion, 2017, 57, 086027. | 3.5 | 43 |
| 25 | The PRIMA Test Facility: SPIDER and MITICA test-beds for ITER neutral beam injectors. New Journal of Physics, 2017, 19, 085004. | 2.9 | 137 |
| 26 | Overview of the RFX-mod fusion science activity. Nuclear Fusion, 2017, 57, 102012. | 3.5 | 27 |
| 27 | Steady state thermal-hydraulic analyses of the MITICA cooling circuits. Review of Scientific Instruments, 2016, 87, 02B323. | 1.3 | 3 |
| 28 | Off-normal and failure condition analysis of the MITICA negative-ion accelerator. Review of Scientific Instruments, 2016, 87, 02B311. | 1.3 | 2 |
| 29 | Detailed design optimization of the MITICA negative ion accelerator in view of the ITER NBI. Nuclear Fusion, 2016, 56, 016015. | 3.5 | 79 |
| 30 | Design optimization of RF lines in vacuum environment for the MITICA experiment. Review of Scientific Instruments, 2016, 87, 02B314. | 1.3 | 2 |
| 31 | Final design of the beam source for the MITICA injector. Review of Scientific Instruments, 2016, 87, 02B309. | 1.3 | 23 |
| 32 | 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 |
| 33 | Heating Neutral Beams for ITER: Present Status. IEEE Transactions on Plasma Science, 2016, 44, 1496-1505. | 1.3 | 9 |
| 34 | The Full-Size Source and Injector Prototypes for ITER Neutral Beams. Plasma and Fusion Research, 2016, 11, 2402119-2402119. | 0.7 | 4 |
| 35 | Development and tests of molybdenum armored copper components for MITICA ion source. Review of Scientific Instruments, 2016, 87, 02B126. | 1.3 | 0 |
| 36 | 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 |

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| 37 | Heating neutral beams for ITER: Present status. , 2015, , . | | 3 |
| 38 | 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 |
| 39 | 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 |
| 40 | 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 |
| 41 | Electrostatic steering and beamlet aiming in large neutral beam injectors. AIP Conference Proceedings, 2015, , . | 0.4 | 2 |
| 42 | Progress in the realization of the PRIMA neutral beam test facility. Nuclear Fusion, 2015, 55, 083025. | 3.5 | 98 |
| 43 | Overview of the RFX-mod contribution to the international Fusion Science Program. Nuclear Fusion, 2015, 55, 104012. | 3.5 | 18 |
| 44 | Manufacturing of the full size prototype of the ion source for the ITER neutral beam injector â€“ The SPIDER beam source. Fusion Engineering and Design, 2015, 96-97, 319-324. | 1.9 | 10 |
| 45 | 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 |
| 46 | 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 |
| 47 | Comparative study of beam losses and heat loads reduction methods in MITICA beam source. Review of Scientific Instruments, 2014, 85, 02B308. | 1.3 | 16 |
| 48 | Manufacturing and Testing of Grid Prototypes for the ITER Neutral Beam Injectors. IEEE Transactions on Plasma Science, 2014, 42, 628-632. | 1.3 | 12 |
| 49 | Optimization of the electrostatic and magnetic field configuration in the MITICA accelerator. Fusion Engineering and Design, 2013, 88, 507-511. | 1.9 | 20 |
| 50 | ITER neutral beam Vacuum Vessel design. , 2013, , . | | 0 |
| 51 | Molybdenum armour layer on copper plates: Manufacturing technologies and tests of prototypes. , 2013, , . | | 1 |
| 52 | Structural analyses and integrated design of the MITICA Injector assembly. Fusion Engineering and Design, 2013, 88, 849-853. | 1.9 | 4 |
| 53 | Overview of the RFX-mod fusion science programme. Nuclear Fusion, 2013, 53, 104018. | 3.5 | 17 |
| 54 | Construction and testing of grid prototypes for the ITER neutral beam injectors. , 2013, , . | | 1 |

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| 55 | Status of PRIMA, the test facility for ITER neutral beam injectors. AIP Conference Proceedings, 2013, , . | 0.4 | 24 |
| 56 | Progress in the MITICA beam source design. Review of Scientific Instruments, 2012, 83, 02B108. | 1.3 | 18 |
| 57 | Concepts for the magnetic design of the MITICA neutral beam test facility ion accelerator. Review of Scientific Instruments, 2012, 83, 02B107. | 1.3 | 10 |
| 58 | Thermo Fluid Dynamics Tests on the Single Channel Prototypes for the SPIDER Grids. Fusion Science and Technology, 2012, 62, 164-170. | 1.1 | 5 |
| 59 | Recent improvements to the ITER neutral beam system design. Fusion Engineering and Design, 2012, 87, 1805-1815. | 1.9 | 66 |
| 60 | Detail Design of the Electron Dump for the SPIDER Beam Source. IEEE Transactions on Plasma Science, 2012, 40, 629-634. | 1.3 | 1 |
| 61 | FAST: A European ITER satellite experiment in the view of DEMO. Fusion Engineering and Design, 2011, 86, 497-503. | 1.9 | 17 |
| 62 | Requirements specification for the Neutral Beam Injector on FAST. Fusion Engineering and Design, 2011, 86, 974-977. | 1.9 | 1 |
| 63 | The European contribution to the development of the ITER NB injector. Fusion Engineering and Design, 2011, 86, 860-863. | 1.9 | 37 |
| 64 | Proposal of cooling plant, for SPIDER and MITICA experiments. Fusion Engineering and Design, 2011, 86, 843-846. | 1.9 | 10 |
| 65 | Detail design of the electron dump for the SPIDER beam source. , 2011, , . | | 0 |
| 66 | Overview of the RFX fusion science program. Nuclear Fusion, 2011, 51, 094023. | 3.5 | 29 |
| 67 | Physics and engineering design of the accelerator and electron dump for SPIDER. Nuclear Fusion, 2011, 51, 063004. | 3.5 | 85 |
| 68 | Status of the 1 MeV Accelerator Design for ITER NBI. , 2011, , . | | 0 |
| 69 | Physics and engineering studies on the MITICA accelerator: comparison among possible design solutions. , 2011, , . | | 2 |
| 70 | Thermo-mechanical design of the Plasma Driver Plate for the MITICA ion source. Fusion Engineering and Design, 2010, 85, 1073-1079. | 1.9 | 5 |
| 71 | Detail design of the beam source for the SPIDER experiment. Fusion Engineering and Design, 2010, 85, 1792-1797. | 1.9 | 71 |
| 72 | Design, interface development and structural analyses of SPIDER vacuum vessel. Fusion Engineering and Design, 2010, 85, 2305-2311. | 1.9 | 4 |

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| 73 | Improvement of the magnetic configuration in the reversed field pinch through successive bifurcations. Physics of Plasmas, 2009, 16, . | 1.9 | 15 |
| 74 | Progress in understanding halo current at JET. Nuclear Fusion, 2009, 49, 055012. | 3.5 | 37 |
| 75 | Status of the ITER heating neutral beam system. Nuclear Fusion, 2009, 49, 045006. | 3.5 | 402 |
| 76 | The ITER full size plasma source device design. Fusion Engineering and Design, 2009, 84, 269-274. | 1.9 | 193 |
| 77 | Detailed design of the RF source for the 1MV neutral beam test facility. Fusion Engineering and Design, 2009, 84, 1253-1258. | 1.9 | 51 |
| 78 | European programme towards the 1MeV ITER NB injector. Fusion Engineering and Design, 2009, 84, 1276-1280. | 1.9 | 26 |
| 79 | 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 |
| 80 | Potential failure mode and effects analysis for the ITER NB injector. Fusion Engineering and Design, 2009, 84, 466-469. | 1.9 | 14 |
| 81 | Overview of RFX-mod results. Nuclear Fusion, 2009, 49, 104019. | 3.5 | 43 |
| 82 | Design of a low voltage, high current extraction system for the ITER Ion Source. , 2009, , . | | 16 |
| 83 | High current regimes in RFX-mod. Plasma Physics and Controlled Fusion, 2008, 50, 124031. | 2.1 | 44 |
| 84 | Active MHD control at high currents in RFX-mod. Nuclear Fusion, 2007, 47, 783-791. | 3.5 | 39 |
| 85 | Magnetic self organization, MHD active control and confinement in RFX-mod. Plasma Physics and Controlled Fusion, 2007, 49, B359-B369. | 2.1 | 60 |
| 86 | Thermo-mechanical design of the ITER Neutral Beam Injector grids for Radio Frequency Ion Source and SINGAP Accelerator. , 2007, , . | | 2 |
| 87 | Design of the RF ion source for the ITER NBI. Fusion Engineering and Design, 2007, 82, 798-805. | 1.9 | 31 |
| 88 | 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 |
| 89 | Status of the halo current sensor project for JET-EP. Fusion Engineering and Design, 2005, 74, 757-761. | 1.9 | 9 |
| 90 | Maintenance schemes for the ITER neutral beam test facility. Fusion Engineering and Design, 2005, 74, 255-259. | 1.9 | 4 |

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| 91 | Design integration of SINGAP accelerator and RF source in the ITER NB injector. , 2005, , . | | 3 |
| 92 | Design of the new magnetic sensors for Joint European Torus. Review of Scientific Instruments, 2004, 75, 4311-4313. | 1.3 | 14 |
| 93 | 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 |
| 94 | Machine modification for active MHD control in RFX. Fusion Engineering and Design, 2003, 66-68, 161-168. | 1.9 | 193 |
| 95 | New wide bandwidth in-vessel magnetic measurement system for RFX. Review of Scientific Instruments, 2003, 74, 1554-1557. | 1.3 | 15 |
| 96 | Analysis and modelling of the magnetic and plasma profiles during PPCD experiments in RFX. Nuclear Fusion, 2003, 43, 1057-1065. | 3.5 | 25 |
| 97 | Design of a new toroidal shell and support structure for RFX. Fusion Engineering and Design, 2002, 63-64, 461-466. | 1.9 | 18 |
| 98 | RFX machine and power supply improvements for RFP advanced studies. Fusion Engineering and Design, 2001, 56-57, 819-824. | 1.9 | 18 |