

# J R MartÃ-n-SolÃ-s

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7400060/publications.pdf>

Version: 2024-02-01

45  
papers

1,683  
citations

257450

24  
h-index

276875

41  
g-index

45  
all docs

45  
docs citations

45  
times ranked

1388  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Plasma detachment in JET Mark I divertor experiments. Nuclear Fusion, 1998, 38, 331-371.  | 3.5  | 282       |
| 2  | Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.   | 3.5  | 150       |
| 3  | Momentum space structure of relativistic runaway electrons. Physics of Plasmas, 1998, 5, 2370-2377.   | 1.9  | 95        |
| 4  | Dynamics of high energy runaway electrons in the Frascati Tokamak Upgrade. Physics of Plasmas, 2003, 10, 2350-2360.   | 1.9  | 90        |
| 5  | Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating. Nature Physics, 2017, 13, 973-978.  | 16.7 | 73        |
| 6  | An ITPA joint experiment to study runaway electron generation and suppression. Physics of Plasmas, 2014, 21, .  | 1.9  | 71        |
| 7  | Formation and termination of runaway beams in ITER disruptions. Nuclear Fusion, 2017, 57, 066025.   | 3.5  | 66        |
| 8  | Runaway electron measurements in the JET tokamak. Plasma Physics and Controlled Fusion, 1996, 38, 2035-2049.  | 2.1  | 56        |
| 9  | Magnetic energy flows during the current quench and termination of disruptions with runaway current plateau formation in JET and implications for ITER. Nuclear Fusion, 2011, 51, 073004.         | 3.5  | 52        |
| 10 | Overview of the JET results. Nuclear Fusion, 2015, 55, 104001.  | 3.5  | 50        |
| 11 | Energy limits on runaway electrons in tokamak plasmas. Physics of Plasmas, 1999, 6, 238-252.  | 1.9  | 46        |
| 12 | Disruption Avoidance in the Frascati Tokamak Upgrade by Means of Magnetohydrodynamic Mode Stabilization Using Electron-Cyclotron-Resonance Heating. Physical Review Letters, 2008, 100, 045006.   | 7.8  | 39        |
| 13 | Runaway electron generation and control. Plasma Physics and Controlled Fusion, 2017, 59, 014044.  | 2.1  | 39        |
| 14 | Effect of magnetic and electrostatic fluctuations on the runaway electron dynamics in tokamak plasmas. Physics of Plasmas, 1999, 6, 3925-3933.  | 1.9  | 38        |
| 15 | 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        |
| 16 | Disruption control on FTU and ASDEX upgrade with ECRH. Nuclear Fusion, 2009, 49, 065014.  | 3.5  | 35        |
| 17 | Experimental Observation of Increased Threshold Electric Field for Runaway Generation due to Synchrotron Radiation Losses in the FTU Tokamak. Physical Review Letters, 2010, 105, 185002.         | 7.8  | 33        |
| 18 | Runaway electron behaviour during electron cyclotron resonance heating in the Frascati Tokamak Upgrade. Nuclear Fusion, 2004, 44, 974-981.  | 3.5  | 29        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Predictions on runaway current and energy during disruptions in tokamak plasmas. Physics of Plasmas, 2000, 7, 3369-3377.  | 1.9 | 27        |
| 20 | Overview of the FTU results. Nuclear Fusion, 2007, 47, S608-S621.   | 3.5 | 27        |
| 21 | Inter-machine comparison of the termination phase and energy conversion in tokamak disruptions with runaway current plateau formation and implications for ITER. Nuclear Fusion, 2014, 54, 083027.            | 3.5 | 26        |
| 22 | Runaway electron beam control. Plasma Physics and Controlled Fusion, 2019, 61, 014036.  | 2.1 | 26        |
| 23 | Interaction of runaway electrons with lower hybrid waves via anomalous Doppler broadening. Physics of Plasmas, 2002, 9, 1667-1675.  | 1.9 | 25        |
| 24 | Overview of the FTU results. Nuclear Fusion, 2009, 49, 104013.  | 3.5 | 24        |
| 25 | A gamma-ray spectrometer system for fusion applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 522-526. | 1.6 | 23        |
| 26 | Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution <sup>a</sup>. Nuclear Fusion, 2017, 57, 102014.  | 3.5 | 23        |
| 27 | Runaway electron dynamics in tokamak plasmas with high impurity content. Physics of Plasmas, 2015, 22, .  | 1.9 | 22        |
| 28 | Analysis of deposited layers with deuterium and impurity elements on samples from the divertor of JET with ITER-like wall. Journal of Nuclear Materials, 2019, 516, 202-213.                                  | 2.7 | 18        |
| 29 | Comparison of runaway dynamics in LH and ECRH heated discharges in the Frascati Tokamak Upgrade. Nuclear Fusion, 2005, 45, 1524-1533.   | 3.5 | 17        |
| 30 | Overview of the FTU results. Nuclear Fusion, 2005, 45, S227-S238.   | 3.5 | 17        |
| 31 | On the avalanche generation of runaway electrons during tokamak disruptions. Physics of Plasmas, 2015, 22, .  | 1.9 | 17        |
| 32 | On the measurement of the threshold electric field for runaway electron generation in the Frascati Tokamak Upgrade. Physics of Plasmas, 2016, 23, 122501.   | 1.9 | 16        |
| 33 | Study of Z scaling of runaway electron plateau final loss energy deposition into wall of DIII-D. Physics of Plasmas, 2017, 24, .  | 1.9 | 16        |
| 34 | On the effect of synchrotron radiation and magnetic fluctuations on the avalanche runaway growth rate. Physics of Plasmas, 2000, 7, 3814-3817.  | 1.9 | 10        |
| 35 | Overview of the FTU results. Nuclear Fusion, 2015, 55, 104005.  | 3.5 | 10        |
| 36 | Determination of the parametric region in which runaway electron energy losses are dominated by bremsstrahlung radiation in tokamaks. Physics of Plasmas, 2007, 14, 072503.                                   | 1.9 | 9         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Pitch angle scattering and synchrotron radiation of relativistic runaway electrons in tokamak stochastic magnetic fields. <i>Physics of Plasmas</i> , 2008, 15, .             | 1.9 | 8         |
| 38 | Perpendicular dynamics of runaway electrons in tokamak plasmas. <i>Physics of Plasmas</i> , 2012, 19, 102504.   | 1.9 | 8         |
| 39 | A first approach to runaway electron control in FTU. <i>Fusion Engineering and Design</i> , 2013, 88, 1109-1112.  | 1.9 | 8         |
| 40 | Runaway electron imaging spectrometry (REIS) system. <i>Review of Scientific Instruments</i> , 2019, 90, 073501.  | 1.3 | 8         |
| 41 | Overview of the FTU results. <i>Nuclear Fusion</i> , 2017, 57, 102004.  | 3.5 | 7         |
| 42 | Estimation of synchrotron radiation and limiting energy of high-energy runaway electrons in tokamak stochastic magnetic fields. <i>Physics of Plasmas</i> , 2006, 13, 012508. | 1.9 | 5         |
| 43 | ECRH: A Tool To Control Disruptions In Tokamaks. , 2009, , .  |     | 2         |
| 44 | Radial runaway losses in tokamak disruptions. <i>Physics of Plasmas</i> , 2021, 28, 032505.   | 1.9 | 2         |
| 45 | Reply to comment on "Comparison of runaway dynamics in LH and ECRH heated discharges in the Frascati Tokamak Upgrade"™. <i>Nuclear Fusion</i> , 2008, 48, 068002.             | 3.5 | 0         |