Giuseppe A Rattá

List of Publications by Year
in descending order

70 papers	1,429 citations	279798 23 h-index	345221 36 g-index
73 all docs	73 docs citations	73 times ranked	1629 citing authors

#	Article	IF	Citations
1	Overview of the TJ-II stellarator research programme towards model validation in fusion plasmas. Nuclear Fusion, 2022, 62, 042025.	3.5	9
2	Disruption prediction with artificial intelligence techniques in tokamak plasmas. Nature Physics, 2022, 18, 741-750.	16.7	25
3	PHAD: a phase-oriented disruption prediction strategy for avoidance, prevention, and mitigation in JET. Nuclear Fusion, 2021, 61, 116055.	3.5	11
4	Automatic recognition of plasma relevant events: Implications for ITER. Fusion Engineering and Design, 2020, 156, 111638.	1.9	1
5	A linear equation based on signal increments to predict disruptive behaviours and the time to disruption on JET. Nuclear Fusion, 2020, 60, 026001.	3.5	11
6	Overview of physics studies on ASDEX Upgrade. Nuclear Fusion, 2019, 59, 112014.	3.5	38
7	Overview of recent TJ-II stellarator results. Nuclear Fusion, 2019, 59, 112019.	3.5	12
8	A locked mode indicator for disruption prediction on JET and ASDEX upgrade. Fusion Engineering and Design, 2019, 138, 254-266.	1.9	8
9	Dependence on plasma shape and plasma fueling for small edge-localized mode regimes in TCV and ASDEX Upgrade. Nuclear Fusion, 2019, 59, 086020.	3.5	34
10	Overview of the JET preparation for deuterium–tritium operation with the ITER like-wall. Nuclear Fusion, 2019, 59, 112021.	3.5	87
11	A multidimensional linear model for disruption prediction in JET. Fusion Engineering and Design, 2019, 146, 2393-2396.	1.9	5
12	Tritium distributions on W-coated divertor tiles used in the third JET ITER-like wall campaign. Nuclear Materials and Energy, 2019, 18, 258-261.	1.3	10
13	Population modelling of the He II energy levels in tokamak plasmas: I. Collisional excitation model. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 045001.	1.5	1
14	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
15	Analysis of the outer divertor hot spot activity in the protection video camera recordings at JET. Fusion Engineering and Design, 2019, 139, 115-123.	1.9	3
16	Improved neutron activation dosimetry for fusion. Fusion Engineering and Design, 2019, 139, 109-114.	1.9	7
17	Viability Assessment of a Cross-Tokamak AUG-JET Disruption Predictor. Fusion Science and Technology, 2018, 74, 13-22.	1.1	10
18	Prediction of exhaust emission in transient conditions of a diesel engine fueled with animal fat using Artificial Neural Network and Symbolic Regression. Energy, 2018, 149, 675-683.	8.8	50

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19	Real-time implementation with FPGA-based DAQ system of a probabilistic disruption predictor from scratch. Fusion Engineering and Design, 2018, 129, 179-182.	1.9	2
20	Neutron spectroscopy measurements of 14 MeV neutrons at unprecedented energy resolution and implications for deuterium–tritium fusion plasma diagnostics. Measurement Science and Technology, 2018, 29, 045502.	2.6	35
21	14 MeV calibration of JET neutron detectors—phase 1: calibration and characterization of the neutron source. Nuclear Fusion, 2018, 58, 026012.	3.5	22
22	Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating. Nature Physics, 2017, 13, 973-978.	16.7	73
23	Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution [a]. Nuclear Fusion, 2017, 57, 102014.	3.5	23
24	Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.	3.5	150
25	3D effects on transport and plasma control in the TJ-II stellarator. Nuclear Fusion, 2017, 57, 102022.	3.5	16
26	Automatic feature extraction in large fusion databases by using deep learning approach. Fusion Engineering and Design, 2016, 112, 979-983.	1.9	26
27	Review of disruption predictors in nuclear fusion: Classical, from scratch and anomaly detection approaches. , 2016, , .		3
28	Global optimization driven by genetic algorithms for disruption predictors based on APODIS architecture. Fusion Engineering and Design, 2016, 112, 1014-1018.	1.9	6
29	Disruption precursor detection: Combining the time and frequency domains. , 2015, , .		13
30	Overview of the JET results. Nuclear Fusion, 2015, 55, 104001.	3.5	50
31	Transport, stability and plasma control studies in the TJ-II stellarator. Nuclear Fusion, 2015, 55, 104014.	3.5	9
32	Recent ASDEX Upgrade research in support of ITER and DEMO. Nuclear Fusion, 2015, 55, 104010.	3.5	16
33	Feature selection for disruption prediction from scratch in JET by using genetic algorithms and probabilistic predictors. Fusion Engineering and Design, 2015, 96-97, 907-911.	1.9	3
34	Simulation and real-time replacement of missing plasma signals for disruption prediction: an implementation with APODIS. Plasma Physics and Controlled Fusion, 2014, 56, 114004.	2.1	10
35	Overview of the JET results with the ITER-like wall. Nuclear Fusion, 2013, 53, 104002.	3.5	70
36	Estimación de Daño de Miocardio Producido por el Mal de Chagas Mediante Técnicas no Invasivas. IFMBE Proceedings, 2013, , 870-873.	0.3	0

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37	Automatic Quantitative MRI Texture Analysis in Small-for-Gestational-Age Fetuses Discriminates Abnormal Neonatal Neurobehavior. PLoS ONE, 2013, 8, e69595.	2.5	25
38	An overview on power transformer management: Individual Assets and Fleets. , 2012, , .		10
39	Improved feature selection based on genetic algorithms for real time disruption prediction on JET. Fusion Engineering and Design, 2012, 87, 1670-1678.	1.9	29
40	Performance of an automatic quantitative ultrasound analysis of the fetal lung to predict fetal lung maturity. American Journal of Obstetrics and Gynecology, 2012, 207, 504.e1-504.e5.	1.3	26
41	25: Performance of an automatic quantitative ultrasound analysis (AQUA) texture extractor to predict fetal lung maturity assessed by TDx-FLM in amniotic fluid. American Journal of Obstetrics and Gynecology, 2012, 206, S16-S17.	1.3	0
42	Overview of TJ-II experiments. Nuclear Fusion, 2011, 51, 094022.	3.5	24
43	Real Time Plasma Disruptions Detection in JET Implemented With the ITMS Platform Using FPGA Based IDAQ. IEEE Transactions on Nuclear Science, 2011, 58, 1576-1581.	2.0	12
44	New signal processing methods and information technologies for the real time control of JET reactor relevant plasmas. Fusion Engineering and Design, 2011, 86, 544-547.	1.9	1
45	Overview of JET results. Nuclear Fusion, 2011, 51, 094008.	3.5	33
46	Design of an advanced intelligent instrument with waveform recognition based on the ITMS platform. International Journal of Nuclear Knowledge Management, 2010, 4, 10.	0.3	0
47	Progress on statistical learning systems as data mining tools for the creation of automatic databases in Fusion environments. Fusion Engineering and Design, 2010, 85, 399-402.	1.9	3
48	Test-bed of a real time detection system for L/H and H/L transitions implemented with the ITMS platform. Fusion Engineering and Design, 2010, 85, 360-366.	1.9	2
49	New information processing methods for control on JET. Fusion Engineering and Design, 2010, 85, 428-432.	1.9	2
50	Machine learning for the identification of scaling laws and dynamical systems directly from data in fusion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 850-854.	1.6	7
51	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
52	An advanced disruption predictor for JET tested in a simulated real-time environment. Nuclear Fusion, 2010, 50, 025005.	3.5	96
53	Real time plasma disruptions detection in JET implemented with the ITMS platform using FPGA based IDAQ. , 2010, , .		2
54	INSPECTION OF DISRUPTIVE BEHAVIOURS AT JET USING GENERATIVE TOPOGRAPHIC MAPPING. World Scientific Series on Nonlinear Science, Series B, 2010, , 315-320.	0.2	3

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55	Overview of JET results. Nuclear Fusion, 2009, 49, 104006.	3.5	46
56	Unbiased and non-supervised learning methods for disruption prediction at JET. Nuclear Fusion, 2009, 49, 055028.	3.5	35
57	Automated estimation of L/H transition times at JET by combining Bayesian statistics and support vector machines. Nuclear Fusion, 2009, 49, 085023.	3.5	23
58	Confinement transitions in TJ-II under Li-coated wall conditions. Nuclear Fusion, 2009, 49, 104018.	3.5	75
59	Overview of intelligent data retrieval methods for waveforms and images in massive fusion databases. Fusion Engineering and Design, 2009, 84, 1916-1919.	1.9	21
60	Recent developments in data mining and soft computing for JET with a view on ITER. Fusion Engineering and Design, 2009, 84, 1372-1375.	1.9	1
61	First applications of structural pattern recognition methods to the investigation of specific physical phenomena at JET. Fusion Engineering and Design, 2008, 83, 467-470.	1.9	7
62	Structural pattern recognition methods based on string comparison for fusion databases. Fusion Engineering and Design, 2008, 83, 421-424.	1.9	6
63	How to Extract Information and Knowledge from Fusion Massive Databases. AIP Conference Proceedings, 2008, , .	0.4	0
64	Structural Pattern Recognition Techniques for Data Retrieval in Massive Fusion Databases. AIP Conference Proceedings, 2008, , .	0.4	1
65	Feature extraction for improved disruption prediction analysis at JET. Review of Scientific Instruments, 2008, 79, 10F328.	1.3	21
66	DEVELOPMENT OF LEARNING SYSTEMS WITH DATA TOURS TECHNIQUES FOR FUSION DATABASES. , 2008, , .		0
67	DESIGN OF AN ADVANCED INTELLIGENT INSTRUMENT WITH WAVEFORM RECOGNITION BASED ON THE ITMS PLATFORM. , 2008, , .		0
68	New Techniques and Technologies for Information Retrieval and Knowledge Extraction from Nuclear Fusion Massive Databases. , 2007, , .		1
69	Recent results on structural pattern recognition for Fusion massive databases. , 2007, , .		4
70	Overview of JET results. Nuclear Fusion, 2003, 43, 1540-1554.	3.5	38