

# Elena Gaio

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6801855/publications.pdf>

Version: 2024-02-01

137  
papers

2,619  
citations

185998

28  
h-index

233125

45  
g-index

138  
all docs

138  
docs citations

138  
times ranked

1479  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ITER full size plasma source device design. Fusion Engineering and Design, 2009, 84, 269-274.	1.0	193
2	Overview of the DEMO staged design approach in Europe. Nuclear Fusion, 2019, 59, 066013.	1.6	156
3	The PRIMA Test Facility: SPIDER and MITICA test-beds for ITER neutral beam injectors. New Journal of Physics, 2017, 19, 085004.	1.2	137
4	Progress in the realization of the PRIMA neutral beam test facility. Nuclear Fusion, 2015, 55, 083025.	1.6	98
5	In-vessel saddle coils for MHD control in ASDEX Upgrade. Fusion Engineering and Design, 2009, 84, 290-294.	1.0	72
6	Development and Testing of a 10-kA Hybrid Mechanicalâ€“Static DC Circuit Breaker. IEEE Transactions on Applied Superconductivity, 2011, 21, 3621-3627.	1.1	68
7	Progress in the design of the superconducting magnets for the EU DEMO. Fusion Engineering and Design, 2018, 136, 1597-1604.	1.0	67
8	Magnetic self organization, MHD active control and confinement in RFX-mod. Plasma Physics and Controlled Fusion, 2007, 49, B359-B369.	0.9	60
9	Improved current control technique of VSI PWM inverters with constant modulation frequency and extended voltage range. IEEE Transactions on Industry Applications, 1991, 27, 365-369.	3.3	50
10	Overview of Progress on the EU DEMO Reactor Magnet System Design. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	46
11	SPIDER in the roadmap of the ITER neutral beams. Fusion Engineering and Design, 2019, 146, 2539-2546.	1.0	46
12	Progress in the ITER neutral beam test facility. Nuclear Fusion, 2019, 59, 086058.	1.6	45
13	First operation in SPIDER and the path to complete MITICA. Review of Scientific Instruments, 2020, 91, 023510.	0.6	45
14	Facial nerve paralysis secondary to acute otitis media in infants and children. Journal of Paediatrics and Child Health, 2004, 40, 483-486.	0.4	44
15	High current regimes in RFX-mod. Plasma Physics and Controlled Fusion, 2008, 50, 124031.	0.9	44
16	On the road to ITER NBIs: SPIDER improvement after first operation and MITICA construction progress. Fusion Engineering and Design, 2021, 168, 112622.	1.0	44
17	Helical equilibria and magnetic structures in the reversed field pinch and analogies to the tokamak and stellarator. Plasma Physics and Controlled Fusion, 2009, 51, 124031.	0.9	43
18	Overview of RFX-mod results. Nuclear Fusion, 2009, 49, 104019.	1.6	43

#	ARTICLE	IF	CITATIONS
19	The ITER Neutral Beam Test Facility towards SPIDER operation. Nuclear Fusion, 2017, 57, 086027.	1.6	43
20	MASPIN subcellular localization and expression in oral cavity squamous cell carcinoma. European Archives of Oto-Rhino-Laryngology, 2008, 265, 97-104.	0.8	40
21	Active MHD control at high currents in RFX-mod. Nuclear Fusion, 2007, 47, 783-791.	1.6	39
22	The alternative design concept for the ion source power supply of the ITER neutral beam injector. Fusion Engineering and Design, 2008, 83, 21-29.	1.0	38
23	Advance in the conceptual design of the European DEMO magnet system. Superconductor Science and Technology, 2020, 33, 044013.	1.8	38
24	The JET PCU project: An international plasma control project. Fusion Engineering and Design, 2008, 83, 202-206.	1.0	35
25	A 3D approach to equilibrium, stability and transport studies in RFX-mod improved regimes. Plasma Physics and Controlled Fusion, 2010, 52, 124023.	0.9	35
26	Cervical Emphysema and Pneumomediastinum after Tonsillectomy: It Can Happen. Otolaryngology - Head and Neck Surgery, 2003, 128, 298-300.	1.1	33
27	Feasibility Study of a Hybrid Mechanical-Static DC Circuit Breaker for Superconducting Magnet Protection. IEEE Transactions on Applied Superconductivity, 2009, 19, 76-83.	1.1	32
28	Final Design of the Quench Protection Circuits for the JT-60SA Superconducting Magnets. IEEE Transactions on Plasma Science, 2012, 40, 557-563.	0.6	32
29	The power supply system of RFX. Fusion Engineering and Design, 1995, 25, 401-424.	1.0	30
30	Overview of the RFX fusion science program. Nuclear Fusion, 2011, 51, 094023.	1.6	29
31	JT-60SA power supply system. Fusion Engineering and Design, 2011, 86, 1373-1376.	1.0	27
32	Overview of the RFX-mod fusion science activity. Nuclear Fusion, 2017, 57, 102012.	1.6	27
33	Analysis and modelling of the magnetic and plasma profiles during PPCD experiments in RFX. Nuclear Fusion, 2003, 43, 1057-1065.	1.6	25
34	Feedback control of resistive wall modes by saddle coils in RFX-mod. Fusion Engineering and Design, 2007, 82, 1064-1072.	1.0	25
35	Status of JT-60SA tokamak under the EU-JA Broader Approach Agreement. Fusion Engineering and Design, 2008, 83, 795-803.	1.0	22
36	Conceptual design of the quench protection circuits for the JT-60SA superconducting magnets. Fusion Engineering and Design, 2009, 84, 804-809.	1.0	22

#	ARTICLE	IF	CITATIONS
37	Recent progress in reversed field pinch research in the RFX experiment. Nuclear Fusion, 1999, 39, 1697-1705.	1.6	21
38	Filter Design for Harmonic Reduction in High-Voltage Booster for Railway Applications. IEEE Transactions on Power Delivery, 2005, 20, 258-263.	2.9	21
39	Studies on the radio frequency power supply system for the ITER NB injector ion source. Fusion Engineering and Design, 2007, 82, 912-919.	1.0	21
40	Conceptual design of the enhanced radial field amplifier for plasma vertical stabilisation in JET. Fusion Engineering and Design, 2007, 82, 1599-1606.	1.0	19
41	Progress of the ITER NBI acceleration grid power supply reference design. Fusion Engineering and Design, 2013, 88, 956-959.	1.0	19
42	RFX machine and power supply improvements for RFP advanced studies. Fusion Engineering and Design, 2001, 56-57, 819-824.	1.0	18
43	Overview on the power supply systems for plasma instabilities control. Fusion Engineering and Design, 2011, 86, 565-571.	1.0	18
44	Full scale prototype of the JT-60SA Quench Protection Circuits. Fusion Engineering and Design, 2013, 88, 563-567.	1.0	18
45	Overview of the RFX-mod contribution to the international Fusion Science Program. Nuclear Fusion, 2015, 55, 104012.	1.6	18
46	Overview of the new Magnet Power Supply Systems of JT-60SA procured by EU. Fusion Engineering and Design, 2015, 98-99, 1122-1126.	1.0	18
47	Overview of the RFX-mod fusion science programme. Nuclear Fusion, 2013, 53, 104018.	1.6	17
48	New insights into MHD dynamics of magnetically confined plasmas from experiments in RFX. Nuclear Fusion, 2002, 42, 247-257.	1.6	16
49	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.	1.0	16
50	Evaluation of power transfer efficiency for a high power inductively coupled radio-frequency hydrogen ion source. Plasma Physics and Controlled Fusion, 2018, 60, 045007.	0.9	16
51	Improvement of the magnetic configuration in the reversed field pinch through successive bifurcations. Physics of Plasmas, 2009, 16, .	0.7	15
52	Experimental Qualification of the Hybrid Circuit Breaker Developed for JT-60SA Quench Protection Circuit. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	15
53	Improvements in the SPIDER RF system. Fusion Engineering and Design, 2021, 167, 112337.	1.0	14
54	Confinement studies on RFX. Plasma Physics and Controlled Fusion, 1993, 35, B333-B342.	0.9	13

#	ARTICLE	IF	CITATIONS
55	Start of SPIDER operation towards ITER neutral beams. AIP Conference Proceedings, 2018, , .	0.3	13
56	Status and challenges for the concept design development of the EU DEMO Plant Electrical System. Fusion Engineering and Design, 2022, 177, 113052.	1.0	13
57	Analogue feedback control system of RFX. Fusion Engineering and Design, 1996, 31, 221-238.	1.0	12
58	The power supply system for the active control of MHD modes in RFX. Fusion Engineering and Design, 2003, 66-68, 1143-1147.	1.0	12
59	Performance Analysis of a Hybrid IGBTs-Mechanical Dc Circuit Breaker for Quench Protection of Superconducting Magnets. , 2007, , .		12
60	Overcurrent analyses in JT-60SA poloidal circuits due to plasma disruption and quench protection intervention. Fusion Engineering and Design, 2011, 86, 33-40.	1.0	12
61	Studies on the requirements of the power supply system for the resistive-wall-mode control in JT-60SA. Fusion Engineering and Design, 2013, 88, 1509-1512.	1.0	12
62	Improvement of the dynamic response of the ITER Reactive Power Compensation system. Fusion Engineering and Design, 2015, 98-99, 1058-1062.	1.0	12
63	The new technological solution for the JT-60SA quench protection circuits. Nuclear Fusion, 2018, 58, 075001.	1.6	12
64	The reactive power demand in DEMO: Estimations and study of mitigation via a novel design approach for base converters. Fusion Engineering and Design, 2019, 146, 2687-2691.	1.0	12
65	Investigation on stable operational regions for SPIDER RF oscillators. Fusion Engineering and Design, 2019, 146, 2172-2175.	1.0	12
66	The control system of the ITER vertical stabilization converter. Fusion Engineering and Design, 2003, 66-68, 719-725.	1.0	11
67	MASPIN's prognostic role in patients with advanced head and neck carcinoma treated with primary chemotherapy (carboplatin plus vinorelbine) and radiotherapy: preliminary evidence. Acta Oto-Laryngologica, 2009, 129, 786-792.	0.3	11
68	Continuous model in dq frame of Thyristor Controlled Reactors for stability analysis of high power electrical systems. International Journal of Electrical Power and Energy Systems, 2014, 63, 836-845.	3.3	11
69	The DTT device: Power supplies and electrical distribution system. Fusion Engineering and Design, 2017, 122, 356-364.	1.0	11
70	A Conceptual Design Study for the Error Field Correction Coil Power Supply in JT-60SA. Plasma Science and Technology, 2013, 15, 257-260.	0.7	9
71	Final design of the acceleration grid power supply conversion system of the MITICA Neutral Beam Injector. Fusion Engineering and Design, 2017, 123, 376-380.	1.0	9
72	Improved Methodology to Estimate the Power Transfer Efficiency in an Inductively Coupled Radio Frequency Ion Source. IEEE Access, 2018, 6, 29665-29676.	2.6	8

#	ARTICLE	IF	CITATIONS
73	Inverted papilloma involving the temporal bone and its association with squamous cell carcinoma: critical analysis of the literature. Expert Review of Anticancer Therapy, 2005, 5, 391-397.	1.1	7
74	Enhancement of the power supply systems in RFX-mod towards 2MA plasma current. Fusion Engineering and Design, 2011, 86, 1393-1397.	1.0	7
75	Conceptual design of the power supply system for the in-vessel saddle coils for MHD control in ASDEX Upgrade. Fusion Engineering and Design, 2011, 86, 1488-1492.	1.0	7
76	Analyses of the impact of connectionsâ€™ layout on the coil transient voltage at the Quench Protection Circuit intervention in JT-60SA. Fusion Engineering and Design, 2015, 98-99, 1109-1112.	1.0	7
77	Studies on the requirements and design of the High Voltage Radio Frequency Test Facility. Fusion Engineering and Design, 2018, 131, 96-104.	1.0	7
78	Preliminary studies on DEMO toroidal field circuit topology and overvoltage estimation. Fusion Engineering and Design, 2019, 146, 539-542.	1.0	7
79	Development of supervisory control system for magnet power supplies in JT-60SA. Fusion Engineering and Design, 2019, 146, 1652-1656.	1.0	7
80	The power supply of the radial field control system at the RFX equatorial gap. Fusion Engineering and Design, 2001, 58-59, 29-33.	1.0	6
81	Transport mechanisms and enhanced confinement studies in RFX. Nuclear Fusion, 2001, 41, 431-436.	1.6	6
82	Studies on the ITER NBI Residual Ion Dump Power Supply System. IEEE Transactions on Plasma Science, 2012, 40, 659-664.	0.6	6
83	Detailed Analysis of the Transient Voltage in a JT-60SA PF Coil Circuit. Plasma Science and Technology, 2013, 15, 148-151.	0.7	6
84	Advancement on the procurement of Power Supply systems for JT-60SA. , 2015, , .		6
85	Analysis of Maximum Voltage Transient of JT-60SA Toroidal Field Coils in Case of Fast Discharge. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-7.	1.1	6
86	INSTALLATION, COMMISSIONING AND START UP OF RFX. , 1993, , 717-721.		6
87	Radio Frequency Generators Based on Solid State Amplifiers for the NBTF and ITER Projects. IEEE Transactions on Plasma Science, 2022, 50, 3970-3976.	0.6	6
88	Fault analysis and special tests of thyristor for RFX AC/DC converters. IEEE Transactions on Power Delivery, 1990, 5, 372-378.	2.9	5
89	Bypass operation of the ITER AC/DC converters for reactive power reduction. , 0, , .		5
90	Full-digital control boards for IGBT full-bridge switching converters. IEEE Industry Applications Magazine, 2002, 8, 76-82.	0.3	5

#	ARTICLE	IF	CITATIONS
91	The restoration of the rfx power supply. , 0, , .		5
92	Components and system tests on the RFX toroidal power supply. Fusion Engineering and Design, 2005, 75-79, 49-53.	1.0	5
93	Reference design of the power supply system for the resistive-wall-mode control in JT-60SA. Fusion Engineering and Design, 2015, 98-99, 1053-1057.	1.0	5
94	Power Amplifiers Based on SiC Technology for MHD Mode Control in Fusion Experiments. IEEE Transactions on Plasma Science, 2016, 44, 1654-1661.	0.6	5
95	Final design of the High Voltage Deck 1 and Bushing for MITICA: The ITER Heating Neutral Beam Injector prototype. Fusion Engineering and Design, 2017, 123, 395-399.	1.0	5
96	The EU DEMO Plant Electrical System: Issues and perspective. Fusion Engineering and Design, 2020, 156, 111728.	1.0	5
97	Conservative cricoid surgery for chondrosarcoma: a case report. Ear, Nose and Throat Journal, 2014, 93, E6-9.	0.4	5
98	Upgrade for full control of radial magnetic field errors in RFX poloidal gaps. , 0, , .		4
99	A full-digital control board for IGBT H-bridge switching converters. , 0, , .		4
100	Study of Active-Front-End design for the Acceleration Grid Power Supply of ITER Neutral Beam Injector. , 2011, , .		4
101	A 72 kVA very fast four-quadrant converter based on hybrid Si-SiC IGBTs. , 2015, , .		4
102	Continuous State-Space Model in dq Frame of the Thyristor AC/DC Converters for Stability Analysis of ITER Pulsed Power Electrical System. IEEE Transactions on Plasma Science, 2016, 44, 2923-2931.	0.6	4
103	Status and Perspectives of a Reversed Field Pinch as a Pilot Neutron Source. IEEE Transactions on Plasma Science, 2020, 48, 1708-1714.	0.6	4
104	Feasibility study of RFX-mod2 performance improvement by additional magnetic energy storage. Fusion Engineering and Design, 2021, 173, 112791.	1.0	4
105	INTEGRATION OF THE RFX ELECTROMAGNETIC CIRCUITS. , 1993, , 842-846.		4
106	Passive and active control of the field errors at the poloidal gaps of the RFX shell. , 0, , .		3
107	Analytical model for stability analysis in high power ac/dc converters applied to the ITER case. , 2012, , .		3
108	The design of the residual ion dump power supply for ITER neutral beam injector. Fusion Engineering and Design, 2017, 124, 69-72.	1.0	3

#	ARTICLE	IF	CITATIONS
109	Studies on the voltage hold off of the SPIDER driver coil at high radio frequency power. AIP Conference Proceedings, 2018, , .	0.3	3
110	MEST: A new Magnetic Energy Storage and Transfer system for improving the power handling in fusion experiments. Fusion Engineering and Design, 2019, 146, 2176-2179.	1.0	3
111	Continuous state space model of the ITER pulsed power electrical network for stability analysis. Fusion Engineering and Design, 2019, 139, 62-73.	1.0	3
112	The MEST, a new magnetic energy storage and transfer system: Application studies to the European DEMO. Fusion Engineering and Design, 2020, 157, 111666.	1.0	3
113	Key EU DEMO plant and building layout criteria. Fusion Engineering and Design, 2021, 171, 112567.	1.0	3
114	Analog Feedback Control of RFP Plasma: Implementation and First Results in the RFX Experiment. Fusion Science and Technology, 1994, 26, 572-576.	0.6	2
115	EMI on diagnostics and control circuits due to switching power supplies. Fusion Engineering and Design, 2005, 75-79, 61-66.	1.0	2
116	Comparative analysis of two electric schemes for the Ion Source Power Supplies of the ITER Neutral Beam Injector test bed. , 2005, , .		2
117	ITER NB Injector Test Facility: Analyses of the Impact on the High Voltage Network. Fusion Science and Technology, 2007, 52, 403-407.	0.6	2
118	Final design of the Quench Protection Circuits for the JT-60SA superconducting magnets. , 2011, , .		2
119	Electromagnetic analyses on radial field sector coils for JT-60SA. Fusion Engineering and Design, 2011, 86, 1527-1530.	1.0	2
120	Design, construction and operation of the 66 kA life test facility for the ITER magnet protection vacuum circuit breakers. , 0, , .		1
121	Digital fast control system for reduction of local magnetic field errors. , 0, , .		1
122	Upgrade of the RFX fast protection system in view of the new operating scenarios and machine modifications. Fusion Engineering and Design, 2003, 66-68, 1069-1073.	1.0	1
123	Filter design for harmonic reduction in high voltage booster for railway applications. , 0, , .		1
124	Thyristor Protection for Series Capacitors in an Arc Furnace Plant. IEEE Transactions on Power Delivery, 2004, 19, 1891-1897.	2.9	1
125	Review of the RFX-Mod AC/DC Conversion System and Possible Improvements for New Plasma Scenarios. IEEE Transactions on Plasma Science, 2014, 42, 645-650.	0.6	1
126	Continuous state space model of the ITER ac/dc converters for stability analysis of the Pulsed Power Electrical Network. , 2015, , .		1



#	ARTICLE	IF	CITATIONS
127	Si-SiC based switching power amplifiers for MHD modes control in fusion experiments. , 2015, , .		1
128	Design and Manufacturing of the SiC-Based Power Supply System for Resistive-Wall-Mode Control in JT-60SA. IEEE Transactions on Plasma Science, 2018, 46, 1670-1677.	0.6	1
129	Development and Validation of a Special Protection System for Internal Fault in a High-Power Three-Level NPC VSC. Energies, 2021, 14, 5937.	1.6	1
130	Esophageal Foreign Body in a Prison Inmate: Genuine Suicide Attempt or Pursuit of Illness for Secondary Gain?. The Journal of Otolaryngology, 2005, 34, 220.	0.6	1
131	A case of simultaneous retroauricular traumatic neuroma and arteriovenous aneurysm. Ear, Nose and Throat Journal, 2004, 83, 173-5.	0.4	1
132	Commissioning tests and simulation result comparison in RFX AC/DC converters. , 0, , .		0
133	Design and realization of the first X-point experiments on the RFX machine. , 0, , .		0
134	Thyristor protection for series capacitors in an arc furnace plant. , 0, , .		0
135	Studies on the ITER NBI Residual Ion Dump Power Supply System. , 2011, , .		0
136	Protection from internal faults in a special high power switching conversion system for thermonuclear fusion application. , 2017, , .		0
137	Double Poloidal Field System With Superconducting and Conventional Copper Coils for Induced High Loop Voltage: A New Concept and a Feasibility Study for an RFP FFHR. IEEE Transactions on Plasma Science, 2022, , 1-7.	0.6	0