Ivan C Cunha Nascimento

List of Publications by Year
in descending order

114	1,069	471509 17	552781 26
papers	citations	h-index	g-index

114	114	114	491
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plasma confinement using biased electrode in the TCABR tokamak. Nuclear Fusion, 2005, 45, 796-803.	3.5	71
2	Nuclear excitation by electrons and positrons. Nuclear Physics A, 1975, 246, 210-220.	1.5	59
3	Suppression and excitation of MHD activity with an electrically polarized electrode at the TCABR tokamak plasma edge. Nuclear Fusion, 2007, 47, 1570-1576.	3.5	36
4	Electric quadrupole giant resonance in the photofission ofU238. Physical Review C, 1978, 18, 863-869.	2.9	35
5	Reduction of chaotic particle transport driven by drift waves in sheared flows. Physics of Plasmas, 2008, 15, .	1.9	34
6	Plasma residual rotation in the TCABR tokamak. Nuclear Fusion, 2003, 43, 1047-1056.	3.5	33
7	Electrofission of 234U, 236U and 238U: Angular distributions and E2 strength functions. Nuclear Physics A, 1982, 389, 378-402.	1.5	30
8	New regime of runaway discharges in tokamaks. Plasma Physics and Controlled Fusion, 2001, 43, 1181-1190.	2.1	28
9	Disruptive instabilities in the discharges of the TBR-1 small Tokamak. Plasma Physics and Controlled Fusion, 1989, 31, 147-156.	2.1	27
10	Electrofission and photofission ofU238in the energy range 6-60 MeV. Physical Review C, 1976, 14, 1499-1505.	2.9	25
11	Status report on fusion research. Nuclear Fusion, 2005, 45, A1-A28.	3.5	22
12	Recurrence quantification analysis of electrostatic fluctuations in fusion plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1088-1095.	2.1	22
13	Present Status of Photofission of Actinides Near Threshold. Nuclear Science and Engineering, 1976, 60, 19-26.	1.1	20
14	Shearless transport barriers in magnetically confined plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 124035.	2.1	19
15	E2giant resonances and anM1component in the photofission ofU236. Physical Review C, 1980, 22, 1996-2007.	2.9	18
16	Plasma boundary determination in ITER by the optimized current filament method. Nuclear Fusion, 1998, 38, 1829-1838.	3.5	18
17	Runaway discharges in TCABR. Nuclear Fusion, 2004, 44, 631-644.	3.5	17
18	Temperature fluctuations and plasma edge turbulence in the Brazilian tokamak TBR. Physics of Plasmas, 1996, 3, 971-977.	1.9	16

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19	Magnetic islands and plasma rotation in the Tokamak Chauffage AlfvÃ©n BrÃ©silien tokamak. Physics of Plasmas, 2004, 11, 846-848.	1.9	16
20	Multifractality in plasma edge electrostatic turbulence. Physics of Plasmas, 2008, 15, 082311.	1.9	16
21	Ion Larmour Radius Effect on rf Ponderomotive Forces and Induced Poloidal Flow in Tokamak Plasmas. Physical Review Letters, 2000, 84, 1200-1203.	7.8	15
22	AlfvÃ©n wave heating and runaway discharges maintained by the avalanche effect in TCABR. Plasma Physics and Controlled Fusion, 2001, 43, A299-A312.	2.1	15
23	Recurrence quantification analysis of turbulent fluctuations in the plasma edge of Tokamak Chauffage AlfvÃ©n BrÃ©silien tokamak. Physics of Plasmas, 2010, 17, 012303.	1.9	15
24	Gamma-rays from139Pr and143Sm. Il Nuovo Cimento B, 1967, 47, 306-309.	0.1	14
25	Advanced antenna system for AlfvÃ©n wave plasma heating and current drive in TCABR tokamak. Fusion Engineering and Design, 1998, 43, 15-28.	1.9	14
26	Bicoherence in electrostatic turbulence driven by high magnetohydrodynamic activity in Tokamak Chauffage AlfvÃ©n BrÃ©silien. Physics of Plasmas, 2009, 16, 042508.	1.9	14
27	Electrodisintegration of Nuclei by Positrons and Electrons. Physical Review, 1965, 139, B562-B566.	2.7	13
28	Determination of the giantE2 isoscalar resonance for236U. Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica, 1979, 26, 487-491.	0.4	13
29	Influence of resonant helical windings on the mirnov oscillations in a small tokamak. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1988, 10, 1193-1198.	0.4	13
30	Ion Transport in Tokamak Plasmas with Ion Banana Orbits Squeezed by AlfvÃ©n Waves. Physical Review Letters, 1998, 81, 3403-3406.	7.8	13
31	Mirnov Oscillations in a Small Tokamak. IEEE Transactions on Plasma Science, 1986, 14, 279-281.	1.3	12
32	Electrostatic ion probe for tokamakâ€plasmaâ€edge diagnostic. Review of Scientific Instruments, 1986, 57, 2205-2209.	1.3	12
33	Plasma rotation measurement in small tokamaks using an optical spectrometer and a single photomultiplier as detector. Review of Scientific Instruments, 2007, 78, 043509.	1.3	12
34	Electrostatic turbulence driven by high magnetohydrodynamic activity in Tokamak Chauffage AlfvÃ©n BrÃ©silien. Physics of Plasmas, 2008, 15, 062501.	1.9	12
35	Long-distance correlations in TCABR biasing experiments. Nuclear Fusion, 2012, 52, 063004.	3.5	12
36	Correlation between Plasma Edge Electrostatic and Magnetic Oscillations in the Brazilian Tokamak TBR. Journal of the Physical Society of Japan, 1997, 66, 3453-3460.	1.6	11

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37	AlfvÃ©n wave driving forces and plasma flow in tokamak plasmas. Plasma Physics and Controlled Fusion, 1998, 40, 451-463.	2.1	11
38	Calculations of wave excitation and dissipation in Tokamak Chauffage AlfvÃ©n wave heating experiment in Brazil. Physics of Plasmas, 1999, 6, 2437-2442.	1.9	11
39	Joint research using small tokamaks. Nuclear Fusion, 2005, 45, S245-S254.	3.5	11
40	Elastic electron scattering from the M7 magnetization density of 51V. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1974, 53, 168-170.	4.1	10
41	Modification of AlfvÃ©n wave dispersion and AlfvÃ©n wave heating in multiple ion species tokamak plasmas. Plasma Physics and Controlled Fusion, 1997, 39, 1551-1560.	2.1	10
42	Gamma rays from111Sn and116In. Il Nuovo Cimento B, 1967, 50, 345-354.	0.1	9
43	Simultaneous measurement of ion and electron temperatures in the scrapeâ€off layer of a small tokamak. Review of Scientific Instruments, 1991, 62, 2700-2708.	1.3	9
44	Tokamak research at University of Sï¿½o Paulo. Journal of Fusion Energy, 1993, 12, 295-302.	1.2	9
45	Plasma rotation in toroidal devices with circular cross-sections. Physics of Plasmas, 1998, 5, 3358-3365.	1.9	9
46	Scrape-off layer turbulence modulated by Mirnov oscillations. European Physical Journal D, 2005, 55, 265-270.	0.4	9
47	H-mode access and the role of spectral shift with electrode biasing in the TCABR tokamak. Physics of Plasmas, 2018, 25, .	1.9	9
48	Elastic Electron Scattering from theM7andM9Magnetization Density ofBi209. Physical Review Letters, 1976, 36, 566-569.	7.8	8
49	Fission decay of the giant quadrupole resonance forU234. Physical Review C, 1981, 23, 2595-2598.	2.9	8
50	Transport threshold model of subsonic neoclassical tearing modes in tokamaks. Physics of Plasmas, 2003, 10, 3975-3983.	1.9	8
51	Application of microwave reflectometry to register AlfvÃ©n wave resonances in the TCABR tokamak. Review of Scientific Instruments, 2004, 75, 655-660.	1.3	8
52	Temporal behaviour of toroidal rotation velocity in the TCABR tokamak. Nuclear Fusion, 2009, 49, 115026.	3.5	8
53	Extension of drift magnetic island theory beyond the common profile function approximation. Physics of Plasmas, 2000, 7, 4763-4765.	1.9	7
54	Possible resolution of the â€œmain intrigueâ€•of the neoclassical tearing mode theory. Physics of Plasmas, 2000, 7, 3474-3475.	1.9	7

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55	Particle flows in dusty plasmas of the tokamak edge. Physics of Plasmas, 2004, 11, 4138-4141.	1.9	7
56	Self-organized criticality in MHD driven plasma edge turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 753-757.	2.1	7
57	Concentration ofE2strength near the fission barrier ofTh232. Physical Review C, 1982, 25, 1689-1692.	2.9	5
58	Particle diffusion in TBR. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1984, 83, 1-11.	0.2	5
59	Influence of resonant magnetic perturbations on plasma edge turbulence. Physics of Plasmas, 1997, 4, 329-336.	1.9	5
60	Anomalous and neoclassical transport suppression by the radial electric field, induced by AlfvÃ©n waves in tokamaks. Physics of Plasmas, 1999, 6, 3548-3553.	1.9	5
61	On a bootstrap-like mechanism of radio frequency wave current drive in tokamaks. Physics of Plasmas, 2000, 7, 1060-1063.	1.9	5
62	Fluid treatment of convective-transport threshold model of neoclassical tearing modes in tokamaks. Physics of Plasmas, 2003, 10, 3790-3792.	1.9	5
63	Test ofE2virtual-photon spectra calculated in the distorted-wave Born approximation. Physical Review C, 1980, 22, 1794-1795.	2.9	4
64	Relativistic plasma viscosity of the Burnett kind. Physical Review E, 1999, 60, 4754-4759.	2.1	4
65	Runaway discharge in the small Brazilian Tokamak TBR-1. Physics of Plasmas, 1999, 6, 4002-4007.	1.9	4
66	Positive voltage spikes in runaway tokamak discharges. Physics of Plasmas, 2000, 7, 2894-2897.	1.9	4
67	Electron drift effects on magnetic islands. Physics of Plasmas, 2001, 8, 4020-4029.	1.9	4
68	Plasma recombination in runaway discharges in tokamak TCABR. Brazilian Journal of Physics, 2002, 32, 81-84.	1.4	4
69	Not completely flattened radial profile of the electron temperature in the vicinity of magnetic islands in Tokamak Chauffage AlfvÃ©n BrÃ©silien. Physics of Plasmas, 2005, 12, 052501.	1.9	4
70	Analysis of the electron temperature measurement in TCABR tokamak by Electron Cyclotron Emission and Infrared Thomson scattering diagnostics. Journal of Physics: Conference Series, 2014, 511, 012039.	0.4	4
71	Investigation of rotation at the plasma edge in TCABR. Nuclear Fusion, 2015, 55, 093001.	3.5	4
72	Simplified magnetic diagnostic methods for tokamaks. Nuclear Fusion, 1998, 38, 1385-1395.	3.5	3

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73	Calculations of AlfvÃ©n wave driving forces, plasma flow, and current drive in the Tokamak Chauffage AlfvÃ©n wave experiment in Brazil (TCABR). Physics of Plasmas, 2001, 8, 210-215.	1.9	3
74	Role of trapped and circulating particles in inducing current drive and radial electric field by AlfvÃ©n waves in tokamaks. Journal of Plasma Physics, 2002, 67, 301-308.	2.1	3
75	Overview of Recent Results of TCABR. AIP Conference Proceedings, 2006, , .	0.4	3
76	VUV spectral line emission measurements in the TCABR tokamak. Brazilian Journal of Physics, 2009, 39, 270-274.	1.4	3
77	Characterizing electrostatic turbulence in tokamak plasmas with high MHD activity. Journal of Physics: Conference Series, 2010, 246, 012014.	0.4	3
78	Dynamical analysis of turbulence in fusion plasmas and nonlinear waves. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 4690-4699.	3.3	3
79	Report on recent results obtained in TCABR. Journal of Physics: Conference Series, 2015, 591, 012001.	0.4	3
80	Spatial inhomogeneity effects on burst temperature estimation using a triple probe configuration in Tokamak Chauffage AlfvÃ©n BrÃ©silien tokamak. Journal of Plasma Physics, 2019, 85, .	2.1	3
81	Plasma resistivity determination in runaway discharges from positive voltage spikes on TCABR tokamak. Brazilian Journal of Physics, 2002, 32, 107-111.	1.4	3
82	TCABR interferometer. Brazilian Journal of Physics, 2002, 32, 123-130.	1.4	3
83	Electron temperature measurements in the TBR-1 tokamak by the two-foil absorbing method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 280, 593-596.	1.6	2
84	A complex probe for measurements of turbulence in the edge of magnetically confined plasmas. Review of Scientific Instruments, 1997, 68, 4418-4423.	1.3	2
85	High precision pick-up (Mirnov) coils for disruption studies in the T-11M and TCABR tokamaks. Review of Scientific Instruments, 1999, 70, 449-451.	1.3	2
86	Runaway discharges in TCABR. , 2001, , .		2
87	Drift stabilization of internal resistive-wall modes in tokamaks. Plasma Physics Reports, 2003, 29, 779-784.	0.9	2
88	Overview of plasma rotation studies on the TCABR tokamak. Plasma Physics and Controlled Fusion, 2021, 63, 075001.	2.1	2
89	Recurrence Analysis of Turbulent Fluctuations in Magnetically Confined Plasmas. Springer Proceedings in Physics, 2016, , 341-353.	0.2	2
90	Wall conditioning by ECR plasmas in a small tokamak. Journal of Nuclear Materials, 1989, 165, 233-237.	2.7	1

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91	Enhanced diffusion and isotope extraction driven by ion-cyclotron surface waves in a rippled magnetic field. Plasma Sources Science and Technology, 1998, 7, 410-415.	3.1	1
92	AlfvÃ©n wave heating, current drive, plasma flow and improved confinement scenarios in tokamaks. Plasma Physics and Controlled Fusion, 1999, 41, A487-A494.	2.1	1
93	AlfvÃ©n and fast wave forces, affecting ions in magnetic traps with closed magnetic surfaces. Physics of Plasmas, 1999, 6, 1378-1381.	1.9	1
94	Determination of rational surface position and magnetic island width from electron cyclotron emission (ECE) radiometry in TCABR. IEEE Transactions on Plasma Science, 2005, 33, 2046-2050.	1.3	1
95	Density Limit in TCABR Plasmas With Alfvèn Wave Heating. AIP Conference Proceedings, 2006, , .	0.4	1
96	Effect of upâ€“down and leftâ€“right asymmetry of dust and/or heavy impurity distribution on plasma dynamics in the tokamak edge. Physica Scripta, 2007, 76, 314-319.	2.5	1
97	Spectral Line Profile Analysis Using Higher Diffraction Order in Vacuum Ultraviolet Region. AIP Conference Proceedings, 2008, , .	0.4	1
98	Effect of plasma subsonic toroidal flows induced by AlfvÃ©n waves on transport processes in the edge of elongated tokamaks. Brazilian Journal of Physics, 2001, 31, 34-41.	1.4	1
99	Radiation physics (Report on the 4th International Symposium, SÃ£o Paulo, Brazil, 3â€“7 October 1988). Nuclear Fusion, 1989, 29, 855-857.	3.5	0
100	Eigenmodes of a Toroidal Cavity with a Conducting Separating Wall. Journal of Infrared, Millimeter and Terahertz Waves, 1998, 19, 1783-1793.	0.6	0
101	Effect of the radial electric field, induced by AlfvÃ©n waves, on transport processes in tokamaks. Nuclear Fusion, 1999, 39, 2119-2125.	3.5	0
102	Gas breakdown in the TCABR Tokamak: Model, simulation and experimental results. , 2001, , .		0
103	Bolometric calibration for TCABR performed with a synchrotron light source. , 2001, , .		0
104	A model for plasma discharges simulation in Tokamak devices. , 2001, , .		0
105	Identification of the AlfvÃ©n wave resonances in the TCABR tokamak by the microwave reflectometry. Brazilian Journal of Physics, 2004, 34, 1715-1721.	1.4	0
106	Electron Temperature and Density Measurements by the Unicity of Particle Confinement Time on the TCABR Tokamak. AIP Conference Proceedings, 2006, , .	0.4	0
107	Impurity Line Emissions in VUV Region of TCABR Tokamak. AIP Conference Proceedings, 2008, , .	0.4	0
108	Radial dependence of self-organized criticality behavior in TCABR tokamak. Journal of Physics: Conference Series, 2011, 285, 012004.	0.4	0

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109	Evidence of transport barrier in TCABR tokamak with high MHD activity. Journal of Physics: Conference Series, 2011, 285, 012010.	0.4	0
110	Error analysis in the electron temperature measurements in TCABR. Journal of Physics: Conference Series, 2012, 370, 012045.	0.4	0
111	Comparison of Plasma Visible Spectral Emissions Between Nova-UNICAMP and TCABR Tokamaks. Journal of Physics: Conference Series, 2014, 511, 012040.	0.4	0
112	Dynamical Effects in Confined Plasma Turbulence. Brazilian Journal of Physics, 2014, 44, 903-913.	1.4	0
113	Excitation of Global AlfvÃ©n Waves by Low RF Power on TCABR. Journal of Physics: Conference Series, 2015, 591, 012002.	0.4	0
114	Electron density profile reconstruction on the TCABR sweeping reflectometer. Journal of Physics: Conference Series, 2015, 591, 012006.	0.4	0