

# Maria Catarina Espírito Santo

## List of Publications by Year in descending order

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111  
papers

7,879  
citations

87723  
38  
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48187  
88  
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115  
all docs

115  
docs citations

115  
times ranked

8108  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-high energy cosmic rays: Present and future. <i>Cogent Physics</i> , 2015, 2, 1062216.	0.7	1
2	Identifying clouds over the Pierre Auger Observatory using infrared satellite data. <i>Astroparticle Physics</i> , 2013, 50-52, 92-101.	1.9	8
3	Electroweak measurements in electron-positron collisions at W-boson-pair energies at LEP. <i>Physics Reports</i> , 2013, 532, 119-244.	10.3	453
4	Ultrahigh Energy Neutrinos at the Pierre Auger Observatory. <i>Advances in High Energy Physics</i> , 2013, 2013, 1-18.	0.5	39
5	Interpretation of the depths of maximum of extensive air showers measured by the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 026-026.	1.9	27
6	CONSTRAINTS ON THE ORIGIN OF COSMIC RAYS ABOVE $10^{18}$ eV FROM LARGE-SCALE ANISOTROPY SEARCHES IN DATA OF THE PIERRE AUGER OBSERVATORY. <i>Astrophysical Journal Letters</i> , 2013, 762, L13.	3.0	67
7	Bounds on the density of sources of ultra-high energy cosmic rays from the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 009-009.	1.9	34
8	SEARCH FOR POINT-LIKE SOURCES OF ULTRA-HIGH ENERGY NEUTRINOS AT THE PIERRE AUGER OBSERVATORY AND IMPROVED LIMIT ON THE DIFFUSE FLUX OF TAU NEUTRINOS. <i>Astrophysical Journal Letters</i> , 2012, 755, L4.	3.0	55
9	Antennas for the detection of radio emission pulses from cosmic-ray induced air showers at the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2012, 7, P10011-P10011.	0.5	95
10	Measurement of the Proton-Air Cross Section at $\sqrt{s} = 57$ TeV recorded at the Pierre Auger Observatory. <i>Physical Review Letters</i> , 2012, 109, 062002.	2.9	212
11	A SEARCH FOR POINT SOURCES OF EeV NEUTRONS. <i>Astrophysical Journal</i> , 2012, 760, 148.	1.6	27
12	LARGE-SCALE DISTRIBUTION OF ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE $10^{18}$ eV AT THE PIERRE AUGER OBSERVATORY. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 34.	3.0	44
13	A search for anisotropy in the arrival directions of ultra high energy cosmic rays recorded at the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 040-040.	1.9	6
14	Search for signatures of magnetically-induced alignment in the arrival directions measured by the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2012, 35, 354-361.	1.9	32
15	Description of atmospheric conditions at the Pierre Auger Observatory using the Global Data Assimilation System (GDAS). <i>Astroparticle Physics</i> , 2012, 35, 591-607.	1.9	66
16	Search for ultrahigh energy neutrinos in highly inclined events at the Pierre Auger Observatory. <i>Physical Review D</i> , 2011, 84.	1.6	51
17	Anisotropy and chemical composition of ultra-high energy cosmic rays using arrival directions measured by the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 022-022.	1.9	9
18	The Lateral Trigger Probability function for the Ultra-High Energy Cosmic Ray showers detected by the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2011, 35, 266-276.	1.9	16

#	ARTICLE	IF	CITATIONS
19	A study of the b-quark fragmentation function with the DELPHI detector at LEP I and an averaged distribution obtained at the Z Pole. European Physical Journal C, 2011, 71, 1.	1.4	33
20	The exposure of the hybrid detector of the Pierre Auger Observatory. Astroparticle Physics, 2011, 34, 368-381.	1.9	54
21	Search for first harmonic modulation in the right ascension distribution of cosmic rays detected at the Pierre Auger Observatory. Astroparticle Physics, 2011, 34, 627-639.	1.9	73
22	Advanced functionality for radio analysis in the Offline software framework of the Pierre Auger Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 635, 92-102.	0.7	52
23	The effect of the geomagnetic field on cosmic ray energy estimates and large scale anisotropy searches on data from the Pierre Auger Observatory. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 022-022.	1.9	24
24	Measurements of CP-conserving trilinear gauge boson couplings $WWV (V_{\alpha\beta\gamma})$ in $e+e^-$ collisions at LEP2. European Physical Journal C, 2010, 66, 35-56.	1.4	20
25	Study of the dependence of direct soft photon production on jet characteristics in hadronic Z 0 decays. European Physical Journal C, 2010, 67, 343-366.	1.4	33
26	A study of the effect of molecular and aerosol conditions in the atmosphere on air fluorescence measurements at the Pierre Auger Observatory. Astroparticle Physics, 2010, 33, 108-129.	1.9	84
27	Update on the correlation of the highest energy cosmic rays with nearby extragalactic matter. Astroparticle Physics, 2010, 34, 314-326.	1.9	270
28	Trigger and aperture of the surface detector array of the Pierre Auger Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 613, 29-39.	0.7	151
29	Measurement of the energy spectrum of cosmic rays above 10 <sup>18</sup> eV using the Pierre Auger Observatory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 685, 239-246.	1.5	357
30	The fluorescence detector of the Pierre Auger Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 620, 227-251.	0.7	275
31	Measurement of the Depth of Maximum of Extensive Air Showers above $\sqrt{s} = 130$ GeV. Physical Review Letters, 2010, 104, 091101.	2.9	429
32	Inclusive single-particle production in two-photon collisions at LEP II with the DELPHI detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 678, 444-449.	1.5	1
33	Atmospheric effects on extensive air showers observed with the surface detector of the Pierre Auger Observatory. Astroparticle Physics, 2009, 32, 89-99.	1.9	43
34	Upper limit on the cosmic-ray photon fraction at EeV energies from the Pierre Auger Observatory. Astroparticle Physics, 2009, 31, 399-406.	1.9	117
35	A study of $b\bar{b}$ production in $e+e^-$ collisions at $\sqrt{s} = 130$ GeV. European Physical Journal C, 2009, 60, 1-15.	1.4	11
36	A model for net-baryon rapidity distribution. European Physical Journal C, 2009, 61, 391-399.	1.4	3

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37	Correlations between polarisation states of W particles in the reaction $e^+ e^- \rightarrow W^+ W^-$ at LEP2 energies $189\text{--}209\text{GeV}$ . European Physical Journal C, 2009, 63, 611-623.	1.4	1
38	Limit on the diffuse flux of ultrahigh energy tau neutrinos with the surface detector of the Pierre Auger Observatory. Physical Review D, 2009, 79, .	1.6	99
39	Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei. Astroparticle Physics, 2008, 29, 188-204.	1.9	305
40	Measurement of the tau lepton polarisation at LEP2. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 659, 65-73.	1.5	0
41	Upper limit on the cosmic-ray photon flux above $10^{19}\text{eV}$ using the surface detector of the Pierre Auger Observatory. Astroparticle Physics, 2008, 29, 243-256.	1.9	161
42	Higgs boson searches in CP-conserving and CP-violating MSSM scenarios with the DELPHI detector. European Physical Journal C, 2008, 54, 1.	1.4	3
43	Study of W-boson polarisations and triple gauge boson couplings in the reaction $e^+e^- \rightarrow W^+W^-$ at LEP 2. European Physical Journal C, 2008, 54, 345-364.	1.4	41
44	Measurement of the mass and width of the W boson in $e^+e^-$ collisions at $\sqrt{s} = 161\text{--}209\text{ GeV}$ . European Physical Journal C, 2008, 55, 1.	1.4	52
45	Study of b-quark mass effects in multijet topologies with the DELPHI detector at LEP. European Physical Journal C, 2008, 55, 525-538.	1.4	17
46	Di-jet production in $\bar{\chi}^0 \bar{\chi}^0$ collisions at LEP2. European Physical Journal C, 2008, 58, 531-541.	1.4	1
47	Observation of the muon inner bremsstrahlung at LEP1. European Physical Journal C, 2008, 57, 499-514.	1.4	16
48	Observation of the Suppression of the Flux of Cosmic Rays above $\sqrt{s} = 161\text{--}209\text{ GeV}$ . Physical Review Letters, 2008, 101, 061101.	1.4	500
49	Upper Limit on the Diffuse Flux of Ultrahigh Energy Tau Neutrinos from the Pierre Auger Observatory. Physical Review Letters, 2008, 100, 211101.	2.9	141
50	Percolation and high energy cosmic rays above $10^{17}\text{eV}$ . Astroparticle Physics, 2007, 27, 271-277.	1.9	5
51	Study of multi-muon bundles in cosmic ray showers detected with the DELPHI detector at LEP. Astroparticle Physics, 2007, 28, 273-286.	1.9	47
52	Search for pentaquarks in the hadronic decays of the Z boson with the DELPHI detector at LEP. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 653, 151-160.	1.5	5
53	Search for a fourth generation $b^{\pm}$ -quark at LEP-II at $\sqrt{s} = 196\text{--}209\text{GeV}$ . European Physical Journal C, 2007, 50, 507-518.	1.4	4
54	Investigation of Colour Reconnection in WW events with the DELPHI detector at LEP-2. European Physical Journal C, 2007, 51, 249.	1.4	15

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55	Ẑ³* production in e+e- interactions at $\sqrt{s} = 183\text{-}209\text{ GeV}$ . European Physical Journal C, 2007, 51, 503-523.	1.4	3
56	Study of triple-gauge-boson couplings ZZZ, ZẐ³ and Ẑ³̂³ at LEP. European Physical Journal C, 2007, 51, 525-542. Search for <math altimg="si1.gif" overflow="scroll">	1.4	24
57	Masses, lifetimes and production rates of <math altimg="si1.gif" overflow="scroll">	1.5	11
58	Masses, lifetimes and production rates of <math altimg="si1.gif" overflow="scroll">	1.5	3
59	Study of leading hadrons in gluon and quark fragmentation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 643, 147-157.	1.5	6
60	Precision electroweak measurements on the Z resonance. Physics Reports, 2006, 427, 257-454.	10.3	974
61	Measurement and interpretation of fermion-pair production at LEP energies above the Z resonance. European Physical Journal C, 2006, 45, 589-632.	1.4	39
62	A measurement of the tau hadronic branching ratios. European Physical Journal C, 2006, 46, 1-26.	1.4	7
63	Study of double-tagged ̂³̂³ events at LEPII. European Physical Journal C, 2006, 46, 559-568.	1.4	2
64	Determination of the b quark mass at the MZ scale with the DELPHI detector at LEP. European Physical Journal C, 2006, 46, 569-583.	1.4	15
65	Search for excited leptons in e+e- collisions at $\sqrt{s} = 189\text{-}209\text{ GeV}$ . European Physical Journal C, 2006, 46, 277.	1.4	13
66	A determination of the centre-of-mass energy at LEP2 using radiative two-fermion events. European Physical Journal C, 2006, 46, 295-305.	1.4	7
67	Evidence for an excess of soft photons in hadronic decays of Z0. European Physical Journal C, 2006, 47, 273-294.	1.4	42
68	Search for neutral MSSM Higgs bosons at LEP. European Physical Journal C, 2006, 47, 547.	1.4	592
69	The sensitivity of cosmic ray air shower experiments for excited lepton and leptoquark detection. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 609-628.	1.4	1
70	Percolation Effects in Very-High-Energy Cosmic Rays. Physical Review Letters, 2006, 96, 162001.	2.9	14
71	Determination of A FB b at the Z pole using inclusive charge reconstruction and lifetime tagging. European Physical Journal C, 2005, 40, 1-25.	1.4	4
72	Charged particle multiplicity in three-jet events and two-gluon systems. European Physical Journal C, 2005, 44, 311-331.	1.4	5

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73	Final results from DELPHI on the searches for SM and MSSM neutral Higgs bosons. European Physical Journal C, 2004, 32, 145-183.	1.4	36
74	b-tagging in DELPHI at LEP. European Physical Journal C, 2004, 32, 185-208.	1.4	53
75	Searches for neutral Higgs bosons in extended models. European Physical Journal C, 2004, 38, 1-28.	1.4	96
76	Measurement of the $\hat{t} \rightarrow b\bar{b}$ decay form factor. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 585, 63-84.	1.5	28
77	Search for single top production via FCNC at LEP at $\sqrt{s}=189-208$ GeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 590, 21-34.	1.5	39
78	Searches for invisibly decaying Higgs bosons with the DELPHI detector at LEP. European Physical Journal C, 2004, 32, 475-492.	1.4	35
79	Search for an LSP gluino at LEP with the DELPHI detector. European Physical Journal C, 2003, 26, 505-525.	1.4	12
80	Search for supersymmetric particles in light gravitino scenarios and sleptons NLSP. European Physical Journal C, 2003, 27, 153-172.	1.4	26
81	Search for resonant $Z \rightarrow l^+l^-$ production at $\sqrt{s} = 183$ to 208 GeV. European Physical Journal C, 2003, 28, 15-26.	1.4	9
82	A study of the energy evolution of event shape distributions and their means with the DELPHI detector at LEP. European Physical Journal C, 2003, 29, 285-312.	1.4	77
83	$ZZ$ production in $e^+e^-$ interactions at $\sqrt{s} = 183-209$ GeV. European Physical Journal C, 2003, 30, 447-466.	1.4	22
84	Measurement of the $e^+ + e^- \rightarrow W^+ + W^- \gamma$ cross-section and limits on anomalous quartic gauge couplings with DELPHI. European Physical Journal C, 2003, 31, 139-147.	1.4	32
85	Searches for supersymmetric particles in $e^+e^-$ collisions up to 208 GeV and interpretation of the results within the MSSM. European Physical Journal C, 2003, 31, 421-479.	1.4	221
86	The $\eta_c(2980)$ formation in two-photon collisions at LEP energies. European Physical Journal C, 2003, 31, 481-489.	1.4	6
87	A measurement of the branching fractions of the b-quark into charged and neutral b-hadrons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 576, 29-42.	1.5	17
88	Search for doubly charged Higgs bosons at LEP2. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 552, 127-137.	1.5	63
89	Inclusive b decays to wrong sign charmed mesons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 561, 26-40.	1.5	3
90	Study of inclusive $J/\psi$ production in two-photon collisions at LEP with the DELPHI detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 565, 76-86.	1.5	37

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91	Searches for neutral Higgs bosons in $\mathrm{e}^+ \mathrm{e}^-$ collisions from $\sqrt{s} = 191.6\text{ GeV}$ to 201.7 GeV. <i>European Physical Journal C</i> , 2002, 23, 409-435.	1.4	9
92	Search for charged Higgs bosons in $e+e^-$ collisions at $s=189\text{--}202\text{ GeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2002, 525, 17-28.	1.5	12
93	Measurement of the ZZ cross-section in $e+e^-$ interactions at $183\text{--}189\text{ GeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 497, 199-213.	1.5	6
94	Search for R-parity violation with a coupling at $\text{GeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 500, 22-36.	1.5	13
95	Search for the Standard Model Higgs boson at LEP in the year 2000. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 499, 23-37.	1.5	65
96	Search for a fermiophobic Higgs at LEP 2. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 507, 89-103.	1.5	25
97	Measurement of $V_{cb}$ from the decay process. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 510, 55-74.	1.5	35
98	Single intermediate vector boson production in $e+e^-$ collisions at $s=183$ and $189\text{ GeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 515, 238-254.	1.5	8
99	Rapidity-rank structure of pairs in hadronic Z0 decays. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 490, 61-70.	1.5	3
100	Determination of the $e+e^- \rightarrow \ell^+\ell^-$ cross-section at centre-of-mass energies ranging from 189 GeV to 202 GeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 491, 67-80.	1.5	15
101	Search for the sgoldstino at from 189 to 202 GeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 494, 203-214.	1.5	7
102	The small angle tile calorimeter in the DELPHI experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1999, 425, 106-139.	0.7	22
103	Performance of the DELPHI small angle tile calorimeter. <i>IEEE Transactions on Nuclear Science</i> , 1996, 43, 1496-1500.	1.2	1
104	Search for high mass $\ell^+\ell^-$ resonances in $e^+ e^- \rightarrow \ell^+\ell^- \gamma\gamma$ at LEP I. <i>Zeitschrift fÃ¼r Physik C-Particles and Fields</i> , 1996, 72, 179-190.	1.5	3
105	Study of rareb decays with the DELPHI detector at LEP. <i>Zeitschrift fÃ¼r Physik C-Particles and Fields</i> , 1996, 72, 207-220.	1.5	26
106	A precise measurement of the tau lepton lifetime. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 365, 448-460.	1.5	16
107	Search for exclusive decays of the $b\bar{b}$ baryon and measurement of its mass. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 374, 351-361.	1.5	26
108	Search for the lightest chargino at GeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 382, 323-336.	1.5	16

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109	Search for neutralinos, scalar leptons and scalar quarks in $e+e^-$ interactions at. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 387, 651-666.	1.5	14
110	Performance of the DELPHI detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 378, 57-100.	0.7	294
111	An upper limit for $\text{Br}(Z0 \rightarrow ggg)$ from symmetric 3-jet Z0 hadronic decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 389, 405-415.	1.5	1