

Pedro Manuel Vieira de Castro Ferreira

List of Publications by Year in descending order

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Version: 2024-02-01

362
papers

21,004
citations

9234

74
h-index

15683

125
g-index

370
all docs

370
docs citations

370
times ranked

9676
citing authors

#	ARTICLE	IF	CITATIONS
1	CMS Physics Technical Design Report, Volume II: Physics Performance. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 995-1579.	1.4	683
2	Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 \sqrt{s} TeV. European Physical Journal C, 2015, 75, 212.	1.4	541
3	Determination of jet energy calibration and transverse momentum resolution in CMS. Journal of Instrumentation, 2011, 6, P11002-P11002.	0.5	508
4	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	1.4	499
5	Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC. Journal of High Energy Physics, 2010, 2010, 1.	1.6	497
6	Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV. Journal of Instrumentation, 2012, 7, P10002-P10002.	0.5	467
7	Identification of b-quark jets with the CMS experiment. Journal of Instrumentation, 2013, 8, P04013-P04013.	0.5	418
8	Study of high-p T charged particle suppression in PbPb compared to pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	369
9	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	1.4	342
10	Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	320
11	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at $\sqrt{s} = 8$ and $\sqrt{s} = 7$ TeV. European Physical Journal C, 2015, 75, 235.	1.4	320
12	Measurement of the $B \rightarrow B^0 \hat{a}^+$ branching fraction and search for $B \rightarrow B^0 \hat{a}^+$ for $B \rightarrow B^0 \hat{a}^+$. Physical Review Letters, 2012, 109, 222301.	2.9	282
13	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 0.9$ and 2.36 TeV. Journal of High Energy Physics, 2010, 2010, 1.	1.6	230
14	Observation of Sequential $B \rightarrow B^0 \hat{a}^+$ Suppression in PbPb Collisions. Physical Review Letters, 2012, 109, 222301.	2.9	220
15	Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy. Physical Review Letters, 2011, 107, 221804.	2.9	208
16	Suppression of non-prompt J/ψ , prompt J/ψ , and $\Upsilon(1S)$ in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	200
17	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	1.4	198
18	Measurement of the differential cross section for top quark pair production in pp collisions at $\sqrt{s} = 8$ and $\sqrt{s} = 7$ TeV. European Physical Journal C, 2015, 75, 542.	1.4	191

#	ARTICLE	IF	CITATIONS
19	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ mTeV. European Physical Journal C, 2012, 72, 1.	1.4	181

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#	ARTICLE	IF	CITATIONS
37	Measurements of inclusive W and Z cross sections in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	122
38	CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192.	1.4	120
39	The performance of the CMS muon detector in proton-proton collisions at $\sqrt{s} = 7$ TeV at the LHC. Journal of Instrumentation, 2013, 8, P11002-P11002.	0.5	119
40	Searches for long-lived charged particles in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	118
41	Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	117
42	Evidence for the direct decay of the 125 GeV Higgs boson to fermions. Nature Physics, 2014, 10, 557-560. https://arxiv.org/abs/1312.5355	6.5	114
43	Observation of the Associated Production of a Single Top Quark and a W or Z Boson in pp Collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	2.9	108
44	Charged particle multiplicities in pp interactions at $\sqrt{s} = 0.9$, 2.36, and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	106
45	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	103
46	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	101
47	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	99
48	Measurement of the underlying event activity at the LHC with $\sqrt{s} = 7$ TeV and comparison with $\sqrt{s} = 0.9$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	97
49	Search for supersymmetry in hadronic final states using M_{T2} in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	95
50	Searches for invisible decays of the Higgs boson in pp collisions at $\sqrt{s} = 7, 8,$ and 13 TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	95
51	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. Journal of High Energy Physics, 2015, 2015, 1.	1.6	92
52	Performance of τ, q -lepton reconstruction and identification in CMS. Journal of Instrumentation, 2012, 7, P01001-P01001.	0.5	91
53	Searches for new physics using $\theta^{\text{invariant}}$ invariant mass distribution in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review Letters, 2013, 111, 211804.	2.9	90
54	Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 8$ and $\sqrt{s} = 13$ TeV. European Physical Journal C, 2015, 75, 147.	1.4	88

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55	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	86
56	Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	85
57	A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider. Science, 2012, 338, 1569-1575.	6.0	85
58	Study of double parton scattering using W + 2-jet events in proton-proton collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	85
59	Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	85
60	Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{\text{NN}}}=5.02$ TeV. European Physical Journal C, 2014, 74, 2847.	1.4	85
61	Reconstruction and identification of \tilde{l}, \tilde{l}^* decays to hadrons and $\tilde{l}^* \rightarrow \tilde{l} + \gamma$ at CMS. Journal of Instrumentation, 2016, 11, P01019-P01019.	0.5	85
62	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
63	Measurement of the single-top-quark t-channel cross section in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	83
64	Measurement of the differential cross section and charge asymmetry for inclusive $p \rightarrow p + W^{\pm} + X$ production at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 469.	1.4	83
65	Measurement of prompt and nonprompt charmonium suppression in PbPb collisions at 5.02 TeV. European Physical Journal C, 2018, 78, 509.	1.4	83
66	Suppression and azimuthal anisotropy of prompt and nonprompt J/ψ production in PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. European Physical Journal C, 2017, 77, 252.	1.4	82
67	J/ψ and $\psi(2S)$ production in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	81
68	Search for a charged Higgs boson in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	81
69	Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	78
70	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 75.	1.4	78
71	Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	77
72	Search for Top-Quark Partners with Charge $\neq 0$ in the Same-Sign Dilepton Final State. Physical Review Letters, 2014, 112, 171801.	2.9	76

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73	Study of exclusive two-photon production of $W+W\hat{a}^{\sim}$ in pp collisions at $\sqrt{s}=7$ TeV and constraints on anomalous quartic gauge couplings. Journal of High Energy Physics, 2013, 2013, 1.	1.6	75
74	Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{\text{NN}}}=5.02$ TeV. European Physical Journal C, 2014, 74, 1.	1.4	75
75	Measurement of the $X(3872)$ production cross section via decays to $J/\psi + \hat{a}^{\sim}$ in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	73
76	Measurement of the Splitting Function in $p\bar{p}$ and Pb-Pb Collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2018, 120, 142302.	2.9	70
77	Searches for physics beyond the standard model with the M_{T2} variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 3.	1.4	70
78	Measurement of the $\overline{\text{tt}}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	69
79	Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	69
80	Search for anomalous production of multilepton events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	68
81	Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC. European Physical Journal C, 2013, 73, 2469.	1.4	68
82	Measurement of the differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	68
83	Measurement of the $\overline{\text{tt}}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2019, 79, 368.	1.4	68
84	Search for a Light Pseudoscalar Higgs Boson in the Dimuon Decay Channel in $p\bar{p}$ Collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2012, 108, 252002.	2.9	65
85	Observation of a New $Z\hat{a}^{\sim}$ Baryon. Physical Review Letters, 2012, 108, 252002.	2.9	65
86	Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2014, 74, 3129.	1.4	65
87	Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2013, 73, 2283.	1.4	64
88	Search for Flavor-Changing Neutral Currents in Top-Quark Decays. Physical Review Letters, 2012, 108, 111801.	2.9	64
89	Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2016, 76, 439.	1.4	64
90	Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider. Physical Review Letters, 2012, 108, 111801.	2.9	63

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91	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	63
92	Measurement of the Pseudorapidity and Centrality Dependence of the Transverse Energy Density in Pb-Pb Collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physical Review Letters, 2012, 109, 152303.	2.9	62
93	Measurement of the $W+W\bar{a}$ cross section in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous $WW\bar{f}^3$ and WWZ couplings. European Physical Journal C, 2013, 73, 1.	1.4	62
94	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 13.	1.4	62
95	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	62
96	Measurement of prompt J/ψ pair production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	61
97	Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV and first determination of the strong coupling constant in the TeV range. European Physical Journal C, 2013, 73, 1.	1.4	60
98	Performance and operation of the CMS electromagnetic calorimeter. Journal of Instrumentation, 2010, 5, T03010-T03010.	0.5	59
99	Alignment of the CMS silicon tracker during commissioning with cosmic rays. Journal of Instrumentation, 2010, 5, T03009-T03009.	0.5	59
100	Search for anomalous $t\bar{t}$ production in the highly-boosted all-hadronic final state. Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
101	Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
102	Studies of jet mass in dijet and W/Z + jet events. Journal of High Energy Physics, 2013, 2013, 1.	1.6	58
103	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2015, 75, 237.	1.4	58
104	Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2018, 78, 701.	1.4	58
105	Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter. Journal of Instrumentation, 2010, 5, T03014-T03014.	0.5	57
106			

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109	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	57
110	Exclusive $\hat{t}\hat{t}^* + \hat{t}\hat{t}^*$ production in proton-proton collisions at $\sqrt{s} = \{7\}$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	56
111	Event activity dependence of Υ (nS) production in $\sqrt{s_{NN}} = 5.02$ TeV pPb and $\sqrt{s} = 2.76$ TeV pp collisions. Journal of High Energy Physics, 2014, 2014, 1.	1.6	56
112	Measurement of masses in the $\overline{\text{t}}\text{t}$ system by kinematic endpoints in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2013, 73, 2494.	1.4	55
113	Measurement of associated W + charm production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	55
114	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 451.	1.4	55
115	Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2015, 75, 288.	1.4	54
116	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $\sqrt{s} = 8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	54
117	Measurement of prompt and nonprompt J/ψ production in pp and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2017, 77, 269.	1.4	53
118	Performance of CMS muon reconstruction in cosmic-ray events. Journal of Instrumentation, 2010, 5, T03022-T03022.	0.5	52
119	Measurement of the $\overline{\text{t}}\text{t}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	52
120	Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV and impact on parton distribution functions. European Physical Journal C, 2017, 77, 459.	1.4	52
121	Measurements of the $\text{pp} \rightarrow \text{ZZ}$ production cross section and the $\text{Z} \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	1.4	52
122	Search for exclusive or semi-exclusive $\hat{t}\hat{t}^*$ production and observation of exclusive and semi-exclusive e^+e^- production in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	51
123	Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1.	1.6	51
124	First measurement of the underlying event activity at the LHC with $\sqrt{s} = 0.9$ TeV. European Physical Journal C, 2010, 70, 555-572.	1.4	50
125	Search for $B_s \rightarrow \hat{t}\hat{t}^* + \hat{t}\hat{t}^*$ and $B \rightarrow \hat{t}\hat{t}^* + \hat{t}\hat{t}^*$ Decays in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2014, 107, 151802.	1.6	50
126	Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s}=0.9, 2.76, 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	50

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127	Search for leptonic decays of W^{\pm} bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	49
128	Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV by the CMS and TOTEM experiments. European Physical Journal C, 2014, 74, 1.	1.4	49
129	Search for new physics in events with same-sign dileptons and jets in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	48
130	Observation of $Y(1S)$ pair production in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	48
131	Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 364.	1.4	48
132	Search for Supersymmetry in pp Collisions at $\sqrt{s} = 7$ TeV in Events with Two Photons and Missing Transverse Energy. Physical Review Letters, 2011, 106, 211802.	2.9	47
133	Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	47
134	Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	46
135	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	46
136	Search for third-generation scalar leptoquarks decaying to a top quark and a τ , lepton at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 707.	1.4	46
137	Search for heavy bottom-like quarks in 4.9 fb^{-1} of pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	45
138	Search for Top Squark and Higgsino Production Using Diphoton Higgs Boson Decays. Physical Review Letters, 2014, 112, 161802.	2.9	45
139	Search for microscopic black holes in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	44
140	Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 140.	1.4	44
141	Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2014, 74, 3060.	1.4	43
142	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	1.6	43
143	Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 325.	1.4	43
144	Measurement of the top-quark mass in $t\bar{t}$ events with dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	42

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145	Evidence for exclusive $\hat{t}\hat{t}^* W + W \hat{t}^*$ production and constraints on anomalous quartic gauge couplings in pp collisions at $s = 7 \sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	42
146	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	42
147	Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	41
148	Measurement of the $t \bar{t} \hat{t}^*$ production cross section in the $e\hat{t}^*$ channel in proton-proton collisions at $s = 7 \sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	41
149	Measurement of the $\overline{\text{t}} \text{t} \hat{t}^*$ production cross section in the all-jets final state in pp collisions at $\sqrt{s} = 8$ and $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 128.	1.4	41
150	Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	41
151	Measurement of the $\overline{\text{t}} \text{t} \hat{t}^*$ production cross section using events in the $e\hat{t}^*$ final state in pp collisions at $\sqrt{s} = 13$ and $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 172.	1.4	40
152	Search for new physics in dijet angular distributions using proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter and other models. European Physical Journal C, 2018, 78, 789.	1.4	40
153	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 378.	1.4	40
154	Search for resonances in the dilepton mass distribution in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	39
155	Inclusive b-jet production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
156	Measurement of the $Z\hat{t}^*b$ -jet cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
157	Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
158	Measurement of the ZZ production cross section and search for anomalous couplings in $2\hat{t}^*$, $2\hat{t}^*$, \hat{t}^*e^2 final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
159	Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $s = 7 \sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	39
160	Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ and $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	1.4	39
161	Search for heavy stable charged particles in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	38
162	Measurement of the top-quark mass in $\overline{\text{t}} \text{t}^*$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	38

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163	Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 636.	1.4	38
164	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying l, ν leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38
165	Commissioning of the CMS experiment and the cosmic run at four tesla. Journal of Instrumentation, 2010, 5, T03001-T03001.	0.5	37
166	Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	37
167	Measurement of the WZ production cross section in pp collisions at $\sqrt{s} = 7$ and 8 TeV and search for anomalous triple gauge couplings at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2017, 77, 236.	1.4	37
168	Precise mapping of the magnetic field in the CMS barrel yoke using cosmic rays. Journal of Instrumentation, 2010, 5, T03021-T03021.	0.5	36
169	Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	36
170	Measurement of the top-quark mass in all-jets $t\bar{t}$ events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2014, 74, 2758.	1.4	35
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176	Measurement of $t\bar{t}$ production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 379.	1.4	34
177	Measurements of the $t\bar{t}$ production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections. European Physical Journal C, 2017, 77, 15.	1.4	34
178	Measurement of the top quark mass with lepton+jets final states using pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 891.	1.4	34
179	Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	33
180	Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	33

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182	Measurement of exclusive ρ^0 photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02$, $\sqrt{s} = 7.7$ TeV. European Physical Journal C, 2019, 79, 702.	1.4	33
183	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13$, $\sqrt{s} = 13.6$ TeV. European Physical Journal C, 2021, 81, 13.	1.4	33
184	Search for top squark pair production using dilepton final states in pp collision data collected at $\sqrt{s} = 13$, $\sqrt{s} = 13.6$ TeV. European Physical Journal C, 2021, 81, 3.	1.4	33
185	Measurement of normalised multi-differential cross sections in pp collisions at $\sqrt{s} = 13$, $\sqrt{s} = 13.6$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1.	1.4	33
186	Measurement of $\overline{B}B$ angular correlations based on secondary vertex reconstruction at $\sqrt{s} = 7$, $\sqrt{s} = 7.7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	32
187	Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in events with a single lepton, jets, and missing transverse momentum. Journal of High Energy Physics, 2011, 2011, 1.	1.6	32
188	Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. Journal of High Energy Physics, 2013, 2013, 1.	1.6	32
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193	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $\sqrt{s} = 7$, $\sqrt{s} = 7.7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	31
194	Measurement of the triple-differential cross section for photon + jets production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	31
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196	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at $\sqrt{s_{\text{NN}}} = 2.76$, $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	31
197	Search for top squark pair production in pp collisions at $\sqrt{s} = 13$, $\sqrt{s} = 13.6$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
198	Measurement of Bose-Einstein correlations in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	30

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200	Search for a Higgs boson in the decay channel $H \rightarrow ZZ^*(\gamma) \rightarrow q\bar{q}$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	30
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225	Performance of the CMS drift tube chambers with cosmic rays. Journal of Instrumentation, 2010, 5, T03015-T03015.	0.5	24
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227	Search for physics beyond the standard model in events with two leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2015, 2015, 1.	1.6	24
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273	Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	17
274	Measurement of the inclusive production cross sections for forward jets and for dijet events with one forward and one central jet in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	16
275	Measurement of the $\overline{\text{t}}\text{t}$ production cross section in the all-jet final state in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	16
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280	Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	16
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287	Search for new physics with dijet angular distributions in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	15
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290	Search for s channel single top quark production in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	14
291	Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	14
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320	Search for a heavy resonance decaying into a Z boson and a vector boson in the $\text{u}\overline{\text{q}}\overline{\text{q}}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
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