

Javier Mauricio Duarte

List of Publications by Year in descending order

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Version: 2024-02-01

356
papers

14,831
citations

25031

57
h-index

30920

102
g-index

367
all docs

367
docs citations

367
times ranked

9323
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	3.9	541
2	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
3	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.	3.9	369
4	Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 421.	3.9	355
5	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	3.9	342
6	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.	4.7	320
7	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 235.	3.9	320
8	Measurement of the $B \rightarrow \mu^+ \mu^- \gamma$ branching fraction and search for $B \rightarrow \mu^+ \mu^- \gamma$ production. Physical Review Letters, 2018, 120, 231801.	7.8	282
9	Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV. European Physical Journal C, 2014, 74, 3036.	3.9	241
10	Fast inference of deep neural networks in FPGAs for particle physics. Journal of Instrumentation, 2018, 13, P07027-P07027.	1.2	232
11	Observation of Higgs Boson Decay to Bottom Quarks. Physical Review Letters, 2018, 121, 121801.	7.8	219
12	Observation of $H \rightarrow \tau^+ \tau^-$ production. Physical Review Letters, 2018, 120, 231801.	7.8	209
13	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	3.9	198
14	Measurement of the differential cross section for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 542.	3.9	191
15	Search for heavy neutrinos and W bosons with right-handed couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2014, 74, 3149.	3.9	179
16			

#	ARTICLE	IF	CITATIONS
19	Search for dark matter and large extra dimensions in monojet events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	4.7	168
20	Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 120, 221801.	7.8	160
21	Search for supersymmetry in hadronic final states with missing transverse energy using the variables \hat{t} and b-quark multiplicity in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2013, 73, 2568.	3.9	147
22	Measurement of differential top-quark-pair production cross sections in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 1.	3.9	125
23	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
24	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.	4.7	103
25	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.	4.7	101
26	Search for new phenomena with the M_{T2} variable in the all-hadronic final state produced in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 710.	3.9	98
27	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.	4.7	95
28	Machine Learning in High Energy Physics Community White Paper. Journal of Physics: Conference Series, 2018, 1085, 022008.	0.4	94
29	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.	4.7	92
30	Searches for new physics using the $t\bar{t}$ invariant mass distribution in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review Letters, 2013, 111, 211804.	7.8	90
31	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.	4.7	86
32	Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2014, 74, 2847.	3.9	85
33	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	1.2	84
34	Measurement of prompt and nonprompt charmonium suppression in $\sqrt{s} = 5.02$ TeV PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2018, 78, 509.	3.9	83
35	Search for narrow and broad dijet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter mediators and other new particles. Journal of High Energy Physics, 2018, 2018, 1.	4.7	82
36	Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. Journal of High Energy Physics, 2014, 2014, 1.	4.7	81

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37	JEDI-net: a jet identification algorithm based on interaction networks. European Physical Journal C, 2020, 80, 1.	3.9	81
38	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.	3.9	78
39	Search for Top-Quark Partners with Charge $\langle \mathcal{M} \rangle$ in the Same-Sign Dilepton Final State. Physical Review Letters, 2014, 112, 171801.	7.8	76
40	Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{NN}} = 5.02$ s NN = 5.02 TeV. European Physical Journal C, 2014, 74, 1.	3.9	75
41	Search for additional neutral MSSM Higgs bosons in the \tilde{l}_1, \tilde{l}_2 final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	73
42	Measurement of the Splitting Function in $p\bar{p}$ and Pb-Pb Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	7.8	70
43	Meson Azimuthal Anisotropy in Pb-Pb Collisions at $\sqrt{s}=2.76$ TeV. Physical Review Letters, 2011, 106, 122301.	7.8	70
44	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.	3.9	70
45	The LHC Olympics 2020 a community challenge for anomaly detection in high energy physics. Reports on Progress in Physics, 2021, 84, 124201.	20.1	70
46	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.	3.9	68
47	Measurement of the $t\bar{t}$ 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.	3.9	68
48	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	66
49	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.	3.9	65
50	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.	3.9	64
51	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.	4.7	63
52	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.	3.9	62
53	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
54	Observation of Two Excited States and Measurement of the S_{Tj} ETQq000rgBT/Overlock 10 Tf 50 42 Td (stretchy="false")	7.8	62

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55	Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	58
56	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$. <i>European Physical Journal C</i> , 2015, 75, 237.	3.9	58
57	Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at 8 TeV . <i>European Physical Journal C</i> , 2018, 78, 701.	3.9	58
58	Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. <i>European Physical Journal C</i> , 2017, 77, 578.	3.9	57
59	Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	57
60	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	57
61	Event activity dependence of Υ (nS) production in $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$ pPb and $\sqrt{s} = 2.76 \text{ TeV}$ pp collisions. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.	4.7	56
62	Measurement of masses in the $\overline{\text{tt}}$ system by kinematic endpoints in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. <i>European Physical Journal C</i> , 2013, 73, 2494.	3.9	55
63	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. <i>European Physical Journal C</i> , 2016, 76, 451.	3.9	55
64	Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. <i>European Physical Journal C</i> , 2015, 75, 288.	3.9	54
65	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $s = 8 \text{ TeV}$ and cross section ratios to 2.76 and 7 TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	54
66	Search for charged Higgs bosons in the $H_{\pm} \rightarrow \tau^{\pm} \nu_{\tau}$ decay channel in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	54
67	Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	54
68	Measurement of prompt and nonprompt J/ψ production in pp and pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$. <i>European Physical Journal C</i> , 2017, 77, 269.	3.9	53
69	Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ and impact on parton distribution functions. <i>European Physical Journal C</i> , 2017, 77, 459.	3.9	52
70	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 $\sqrt{s} = 13 \text{ TeV}$. <i>European Physical Journal C</i> , 2018, 78, 165.	3.9	52
71	Search for the associated production of the Higgs boson with a top-quark pair. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.	4.7	51
72	Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s} = 0.9, 2.76, 7 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	50

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73	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 121, 241802.	7.8	50
74	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 564.	3.9	50
75	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.	3.9	49
76	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.	3.9	48
77	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.	4.7	47
78	Search for the production of a Z boson and a top quark in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	7.8	47
79	Fast convolutional neural networks on FPGAs with hls4ml. Machine Learning: Science and Technology, 2021, 2, 045015.	5.0	47
80	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	4.7	46
81	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.	3.9	46
82	Search for Top Squark and Higgsino Production Using Diphoton Higgs Boson Decays. Physical Review Letters, 2014, 112, 161802.	7.8	45
83	Compressing deep neural networks on FPGAs to binary and ternary precision with hls4ml. Machine Learning: Science and Technology, 2021, 2, 015001.	5.0	45
84	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.	3.9	44
85	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.	3.9	43
86	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	43
87	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.	3.9	43
88	Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2018, 2018, 1.	4.7	43
89	The Dark Machines Anomaly Score Challenge: Benchmark Data and Model Independent Event Classification for the Large Hadron Collider. SciPost Physics, 2022, 12, .	4.9	43
90	Search for vector-like T and B quark pairs in final states with leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	42

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91	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	42
92	Measurement of the $t\bar{t}\hat{A}^-$ production cross section in the $e\hat{1}/4$ channel in proton-proton collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41
93	Measurement of the $\overline{\mathit{t}}\mathit{t}\hat{A}^-$ production cross section in the all-jets final state in pp collisions at $\sqrt{s}=8$ and 13 TeV. European Physical Journal C, 2016, 76, 128.	3.9	41
94	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 $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	41
95	Measurement of properties of $\mathit{B}_s^0\hat{A}^+\hat{1}/4+\hat{1}/4\hat{A}^-$ decays and search for $\mathit{B}_0\hat{A}^+\hat{1}/4+\hat{1}/4\hat{A}^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	4.7	41
96	Measurement of the $\overline{\mathit{t}}\mathit{t}\hat{A}^-$ production cross section using events in the $e\mu e\hat{1}/4$ final state in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 172.	3.9	40
97	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.	3.9	40
98	Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV and combination with the lepton+jets channel. European Physical Journal C, 2019, 79, 313.	3.9	40
99	Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	40
100	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.	3.9	40
101	Measurement of the ZZ production cross section and search for anomalous couplings in $2\hat{A}^+, 2\hat{A}^-, \hat{A}^2$ final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	4.7	39
102	Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	4.7	39
103	Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
104	MLPF: efficient machine-learned particle-flow reconstruction using graph neural networks. European Physical Journal C, 2021, 81, 1.	3.9	39
105	Measurement of the top-quark mass in $\overline{\mathit{t}}\mathit{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	4.7	38
106	Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 845.	3.9	38
107	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.	3.9	38
108	Suppression of Excited States Relative to the Ground State in Pb-Pb Collisions at $\sqrt{s}=2.76$ TeV. Physical Review Letters, 2018, 120, 142301.	7.8	38

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109	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying l, \bar{l} , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
110	Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	37
111	Fast inference of Boosted Decision Trees in FPGAs for particle physics. Journal of Instrumentation, 2020, 15, P05026-P05026.	1.2	37
112	Interaction networks for the identification of boosted $b\bar{b}$ decays. Physical Review D, 2020, 102, .	4.7	37
113	Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	4.7	36
114	Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b}\gamma\gamma$ final state in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	36
115	Search for Narrow Resonances in the $b\bar{b}\gamma\gamma$ -Tagged Dijet Mass Spectrum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 120, 201901.	7.8	36
116	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	36
117	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.	3.9	35
118	Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	35
119	Measurement of the cross section for top quark pair production in association with a W or Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	35
120	Measurement of exclusive Υ photoproduction from protons in $p\bar{p}$ collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2019, 79, 277.	3.9	35
121	Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 269.	3.9	35
122	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 488.	3.9	35
123	Observation of Z decays to four leptons with the CMS detector at the LHC. Journal of High Energy Physics, 2012, 2012, 1.	4.7	34
124	Searches for supersymmetry using the M_{T2} variable in hadronic events produced in pp collisions at 8 TeV. Journal of High Energy Physics, 2015, 2015, 1.	4.7	34
125	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.	3.9	34
126	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.	3.9	34

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127	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two \bar{l} , leptons in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	34
128	Measurement of the top quark mass with lepton+jets final states using $\mathcal{P} \rightarrow \text{lepton} + \text{jets}$ collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 891.	3.9	34
129	Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	34
130	FPGA-Accelerated Machine Learning Inference as a Service for Particle Physics Computing. Computing and Software for Big Science, 2019, 3, 1.	2.9	34
131	Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 90.	3.9	34
132	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.	3.9	33
133	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two \bar{l} , leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	33
134	Measurement of exclusive ρ^0 photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2019, 79, 702.	3.9	33
135	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 13.	3.9	33
136	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 3.	3.9	33
137	Measurement of normalised multi-differential cross sections in pp collisions at $\sqrt{s}=13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1.	3.9	33
138	Jet and underlying event properties as a function of charged-particle multiplicity in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2674.	3.9	32
139	Measurements of the Z production cross sections in the $2\ell 2\ell$ channel in proton-proton collisions at $\sqrt{s} = 7$ and $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 511.	3.9	32
140	Searches for pair production of third-generation squarks in $\sqrt{s}=13$ TeV pp collisions. European Physical Journal C, 2017, 77, 327.	3.9	32
141	Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2018, 121, 242301.	7.8	32
142	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	4.7	31
143	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.	4.7	31
144	Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2015, 75, 66.	3.9	31

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145	Search for top squark pair production in pp collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$ using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
146	Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	31
147	A multi-dimensional search for new heavy resonances decaying to boosted W or Z boson pairs in the dijet final state at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 237.	3.9	31
148	Distance-Weighted Graph Neural Networks on FPGAs for Real-Time Particle Reconstruction in High Energy Physics. Frontiers in Big Data, 2020, 3, 598927.	2.9	31
149	Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. European Physical Journal C, 2017, 77, 751.	3.9	30
150	Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at $\sqrt{s} = 13 \text{ TeV}$. Physical Review Letters, 2019, 122, 132003.	7.8	30
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