

Bhawna Gomber

List of Publications by Year in descending order

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Version: 2024-02-01

214
papers

11,894
citations

23500

58
h-index

32761

100
g-index

222
all docs

222
docs citations

222
times ranked

8506
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.	1.4	541
2	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	1.4	499
3	Study of high-p T charged particle suppression in PbPb compared to pp collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	369
4	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	1.4	342
5	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
6	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.	1.4	320
7	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.	1.4	241
8	Suppression of non-prompt J/ψ , prompt J/ψ , and $\Upsilon(1S)$ in PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	200
9	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
10	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.	1.4	191
11	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	181
12	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.	1.4	179
13			

#	ARTICLE	IF	CITATIONS
19	Search for supersymmetry in hadronic final states with missing transverse energy using the variables \hat{t} and b-quark multiplicity in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. European Physical Journal C, 2013, 73, 2568.	1.4	147
20	A search for a doubly-charged Higgs boson in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. European Physical Journal C, 2012, 72, 1.	1.4	129
21	Measurement of differential top-quark-pair production cross sections in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. European Physical Journal C, 2013, 73, 1.	1.4	125
22	Evidence for the 125 GeV Higgs boson decaying to a pair of \tilde{l} , leptons. Journal of High Energy Physics, 2014, 2014, 1.	1.6	123
23	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 14 \text{ TeV}$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	1.4	123
24	Searches for long-lived charged particles in pp collisions at $\sqrt{s} = 7 \text{ and } 8 \text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1.	1.6	118
25	Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	117
26	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	1.6	101
27	Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1.	1.6	100
28	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$. Journal of High Energy Physics, 2011, 2011, 1.	1.6	99
29	Search for supersymmetry in hadronic final states using M_{T2} in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	95
30	Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. European Physical Journal C, 2015, 75, 147.	1.4	88
31	Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	85
32	Study of double parton scattering using W + 2-jet events in proton-proton collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1.	1.6	85
33	Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1.	1.6	85
34	Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$. European Physical Journal C, 2014, 74, 2847.	1.4	85
35	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
36	Measurement of the single-top-quark t-channel cross section in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	83

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37	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
38	Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. Journal of High Energy Physics, 2014, 2014, 1.	1.6	81
39	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
40	Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	77
41	Study of exclusive two-photon production of $W+W\hat{\nu}$ 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
42	Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2014, 74, 1.	1.4	75
43	Measurement of the $X(3872)$ production cross section via decays to $J/\psi\epsilon + \bar{\psi}\hat{\nu}$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	73
44	Search for a standard model Higgs boson produced in association with a top-quark pair and decaying to bottom quarks using a matrix element method. European Physical Journal C, 2015, 75, 251.	1.4	73
45	Measurement of the t-channel single-top-quark production cross section and of the $ V_{tb} $ CKM matrix element in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	70
46	Measurement of the $\overline{\text{t}}\text{t}$ 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
47	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
48	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
49	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
50	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
51	Measurement of the inclusive 3-jet production differential cross section in proton-proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range. European Physical Journal C, 2015, 75, 186.	1.4	68
52	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.	1.6	66
53	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
54	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

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55	Measurement of the $W+W\bar{a}$ cross section in pp collisions at $\sqrt{s} = 7\text{ TeV}$ and limits on anomalous $WW\bar{t}^3$ and WWZ couplings. European Physical Journal C, 2013, 73, 1.	1.4	62
56	Measurement of prompt J/ψ pair production in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1.	1.6	61
57	Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7\text{ TeV}$ and first determination of the strong coupling constant in the TeV range. European Physical Journal C, 2013, 73, 1.	1.4	60
58	Search for anomalous $\bar{t}t$ production in the highly-boosted all-hadronic final state. Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
59	Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
60	Studies of jet mass in dijet and $W/Z + \text{jet}$ events. Journal of High Energy Physics, 2013, 2013, 1.	1.6	58
61	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$. European Physical Journal C, 2015, 75, 237.	1.4	58

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#	ARTICLE	IF	CITATIONS
73	Search for new physics with jets and missing transverse momentum in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	49
74	Search for leptonic decays of $W^{\pm 2}$ bosons in pp collisions at $\sqrt{s} = \{7\}$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	49
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.	1.4	49
76	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
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.	1.6	47
78	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
79	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	46
80	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
81	Search for microscopic black holes in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	44
82	Search for decays of stopped long-lived particles produced in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 151.	1.4	44
83	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
84	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	1.6	43
85	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
86	Measurement of the top-quark mass in $\overline{t}t$ events with dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	42
87	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
88	Measurement of properties of $B_{\text{s}}^0 \rightarrow \mu^+ \mu^-$ decays and search for $B_{\text{s}}^0 \rightarrow \mu^+ \mu^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	41
89	Search for same-sign top-quark pair production at $\sqrt{s} = 7$ TeV and limits on flavour changing neutral currents in the top sector. Journal of High Energy Physics, 2011, 2011, 1.	1.6	40
90	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

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91	Inclusive b-jet production in pp collisions at $\sqrt{s} = 7\text{TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
92	Measurement of the $Z/\gamma^* \rightarrow b\bar{b}$ -jet cross section in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
93	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
94	Measurement of the ZZ production cross section and search for anomalous couplings in $2\gamma, \gamma\gamma, \gamma\gamma^* \gamma$ final states in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
95	Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1.	1.6	39
96	Measurement of the top-quark mass in $t\bar{t} \rightarrow \ell^+\ell^-\bar{b}b$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	38
97	Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 8\text{ TeV}$. Journal of High Energy Physics, 2015, 2015, 1.	1.6	37
98	Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7\text{ TeV}$. Journal of High Energy Physics, 2011, 2011, 1.	1.6	36
99	Measurement of the top-quark mass in all-jets $t\bar{t} \rightarrow \ell^+\ell^-\bar{b}b$ events in pp collisions at $\sqrt{s} = 7\text{ TeV}$. European Physical Journal C, 2014, 74, 2758.	1.4	35
100	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13, 8\text{ TeV}$. European Physical Journal C, 2021, 81, 488.	1.4	35
101	Observation of Z decays to four leptons with the CMS detector at the LHC. Journal of High Energy Physics, 2012, 2012, 1.	1.6	34
102	Search for microscopic black holes in pp collisions at $\sqrt{s} = 7\text{TeV}$. Journal of High Energy Physics, 2012, 2012, 1.	1.6	34
103	Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or ≥ 3 b-quark jets in 7 TeV pp collisions using the variable \hat{E}_T . Journal of High Energy Physics, 2013, 2013, 1.	1.6	34
104	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.	1.6	34
105	Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$. European Physical Journal C, 2012, 72, 1.	1.4	33
106	Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8\text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1.	1.6	33
107	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13, 8\text{ TeV}$. European Physical Journal C, 2021, 81, 13.	1.4	33
108	Search for top squark pair production using dilepton final states in $p\bar{p}$ collision data collected at $\sqrt{s} = 13, 8\text{ TeV}$. European Physical Journal C, 2021, 81, 3.	1.4	33

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109	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
110	Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. Journal of High Energy Physics, 2013, 2013, 1.	1.6	32
111	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.	1.4	32
112	Measurements of the $Z Z$ production cross sections in the $2\ell 2\ell$ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. European Physical Journal C, 2015, 75, 511.	1.4	32
113	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
114	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.	1.4	31
115	Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	30
116	Search for a Higgs boson in the decay channel $H \rightarrow ZZ \rightarrow 4\ell$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	30
117	Measurement of the W-boson helicity in top-quark decays from t production in lepton+jets events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	30
118	Search for supersymmetry in events with b jets and missing transverse momentum at the LHC. Journal of High Energy Physics, 2011, 2011, 1.	1.6	29
119	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	29
120	Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	28
121	Study of Z production in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV in the dimuon and dielectron decay channels. Journal of High Energy Physics, 2015, 2015, 1.	1.6	27
122	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P02027-P02027.	0.5	27
123	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
124	Search for resonant t production in lepton+jets events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
125	Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	26
126	Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow 2\ell 2\ell$ channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26

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127	Measurement of the production cross section for pairs of isolated photons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
128	Search for $W \rightarrow \tau \nu$ decays in the lepton + jets final state in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	26
129	Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	26
130	Measurement of energy flow at large pseudorapidities in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	25
131	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
132	Measurement of the $t\bar{t}$ production cross section in the $t\bar{t} + \text{jets}$ channel in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 1.	1.4	24
133	Search for physics beyond the standard model in events with two leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	24
134	Search for third-generation scalar leptoquarks in the $t\bar{t}$ channel in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	24
135	Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure. Journal of High Energy Physics, 2015, 2015, 1.	1.6	24
136	Measurements of $p\bar{p} \rightarrow Z\bar{Z}$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	1.4	24
137	Measurement of WZ and ZZ production in pp collisions at $\sqrt{s} = 8$ TeV in final states with b-tagged jets. European Physical Journal C, 2014, 74, 2973.	1.4	23
138	Search for a light pseudoscalar Higgs boson in the boosted $t\bar{t} + \text{jets}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	23
139	Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 752.	1.4	23
140	Search for physics beyond the standard model in events with $t\bar{t}$, leptons, jets, and large transverse momentum imbalance in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2493.	1.4	22
141	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	1.3	21
142	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	21
143	Search for exotic resonances decaying into WZ/ZZ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	20
144	Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in events with a single lepton, jets, and missing transverse momentum. European Physical Journal C, 2013, 73, 2404.	1.4	20

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145	Measurements of the $\overline{\sigma}(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ charge asymmetry using the dilepton decay channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	20
146	Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	20
147	A search for the standard model Higgs boson decaying to charm quarks. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
148	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tilde{l}, \tilde{\nu}_\tau$ leptons in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
149	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. European Physical Journal C, 2021, 81, 723.	1.4	19
150	Search for quark compositeness in dijet angular distributions from pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	18
151	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. European Physical Journal C, 2021, 81, 629.	1.4	18
152	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. European Physical Journal C, 2021, 81, 970.	1.4	18
153	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. European Physical Journal C, 2022, 82, 290.	1.4	18
154	Search for stopped long-lived particles produced in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	17
155	Measurement of the Λ_b^0 lifetime in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	17
156	Search for standard model production of four top quarks in the lepton + jets channel in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	17
157	Probing color coherence effects in pp collisions at $\sqrt{s} = 7, 13.6$ TeV. European Physical Journal C, 2014, 74, 2901.	1.4	17
158	Measurement of the ratio of the production cross sections times branching fractions of B_c^{\pm} and B_s^{\pm} and B_c^0 and B_s^0 in pp collisions at $\sqrt{s} = 7, 13.6$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	17
159	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
160	Measurement of the $\overline{\sigma}(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ 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
161	Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	16
162	Measurement of jet multiplicity distributions in $\text{pp} \rightarrow \text{t}\bar{\text{t}} + \text{jets}$ production in pp collisions at $\sqrt{s} = 7, 13.6$ TeV. European Physical Journal C, 2014, 74, 3014.	1.4	16

#	ARTICLE	IF	CITATIONS
163	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
164	Search for a fermiophobic Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	15
165	Measurement of the mass difference between top and antitop quarks. Journal of High Energy Physics, 2012, 2012, 1.	1.6	15
166	Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	15
167	Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	14
168	Measurement of the production cross section for $\mathcal{Z}\gamma \rightarrow u\bar{u}\gamma$ in pp collisions at $\sqrt{s} = 7$ TeV and limits on $ZZ\gamma^3$ and $Z\gamma^3$ triple gauge boson couplings. Journal of High Energy Physics, 2013, 2013, 1.	1.6	14
169	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 153.	1.4	14
170	Measurement of the underlying event activity in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV with the novel jet-area/median approach. Journal of High Energy Physics, 2012, 2012, 1.	1.6	13
171	Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	13
172	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
173	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	13
174	Investigation into the event-activity dependence of $\bar{p}(nS)$ relative production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
175	Development and validation of HERWIG++7 tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	1.4	12
176	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	12
177	Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	11
178	Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	11
179	Search for the standard model Higgs boson in the $H \rightarrow \tau^+ \tau^- Z \rightarrow \tau^+ \tau^- \gamma \gamma$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	11
180	Measurement of the $Z\gamma^3$ production cross section in pp collisions at 8 TeV and search for anomalous triple gauge boson couplings. Journal of High Energy Physics, 2015, 2015, 1.	1.6	11

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181	Angular analysis of the decay $B \rightarrow K^* \bar{K}^* (892) \rightarrow \pi^+ \pi^- \pi^+ \pi^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
182	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	1.4	9
183	Search for the standard model Higgs boson produced 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	7
184	Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
185	Measurement of the cross section for production of $\bar{b} X b$ decaying to muons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	6
186	Distributions of topological observables in inclusive three- and four-jet events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2015, 75, 302.	1.4	6
187	Search for decays of the 125 GeV Higgs boson into a Z boson and a ρ meson. Journal of High Energy Physics, 2020, 2020, 1.	1.6	6
188	Determination of the strong coupling constant $\alpha_s(m_Z)$ from measurements of inclusive W^{\pm} and Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	6
189	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
190	Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
191	Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
192	Measurement of the cross section for $t\bar{t}$ production with additional jets and b jets in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	5
193	Measurement of energy flow at large pseudorapidities in pp collisions at ($\sqrt{s} = 0.9$) and 7 TeV. , 2011, 2011, 1.		5
194	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
195	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, .	1.6	5
196	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
197	Search for pair production of excited top quarks in the lepton + jets final state. Journal of High Energy Physics, 2014, 2014, 1.	1.6	4
198	Search for supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in events with high-momentum Z bosons and missing transverse momentum. Journal of High Energy Physics, 2020, 2020, 1.	1.6	4

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199	Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	4
200	Study of hadronic event-shape variables in multijet final states in pp collisions at $s = 7 \sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	3
201	Search for $W\epsilon^2 \hat{a}^t$ tb in proton-proton collisions at $s = 8 \sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	3
202	Search for the lepton flavor violating decay $\tilde{l}_i \rightarrow 3\hat{l}_j$ in proton-proton collisions at $\sqrt{\text{mathrm}\{s\}}$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
203	Measurement of the (\overline{t}) production cross section in the dilepton channel in pp collisions at $(\sqrt{s}) = 8$ TeV. , 2014, 2014, 1.		3
204	Measurement of the inclusive and differential $t\overline{t} \hat{t}^3$ cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
205	Measurement of the top quark pair production cross section in dilepton final states containing one \tilde{l} , lepton in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	2
206	Measurements of the differential cross sections of the production of Z + jets and \hat{t}^3 + jets and of Z boson emission collinear with a jet in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
207	Measurements of angular distance and momentum ratio distributions in three-jet and $\{Z\}$ + two-jet final states in $\{p\}\{p\}$ collisions. European Physical Journal C, 2021, 81, 852.	1.4	2
208	Search for new physics in events with same-sign dileptons and b jets in pp collisions at $(\sqrt{s}=8)$ TeV. , 2013, 2013, 1.		2
209	Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
210	Measurement of the inclusive $\text{mathrm}\{t\}\overline{\text{mathrm}\{t\}}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
211	Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	2
212	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	1
213	Observation of $B^0 \rightarrow \text{Supsi}(2S)K^0_{\text{mathrm}\{S\}} \text{uppi}^+ \text{uppi}^-$ and $B^0_{\text{mathrm}\{s\}} \rightarrow \text{Supsi}(2S)K^0_{\text{mathrm}\{S\}}$ decays. European Physical Journal C, 2022, 82, .	1.4	1
214	Limits on anomalous trilinear gauge couplings at the CMS with 7 TeV Large Hadron Collider data. Pramana - Journal of Physics, 2012, 79, 899-902.	0.9	0