

Zhen Hu

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

208
papers

5,088
citations

31
h-index

67
g-index

230
ext. papers

6,399
ext. citations

5.1
avg. IF

5.2
L-index

#	Paper	IF	Citations
208	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 TeV. <i>European Physical Journal C</i> , 2015 , 75, 212	4.2	399
207	Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV. <i>Journal of Instrumentation</i> , 2012 , 7, P10002-P10002	1	398
206	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at square root of $s = 7$ TeV. <i>Physical Review Letters</i> , 2010 , 105, 022002	7.4	353
205	Observation of the rare $B(s)(0) \rightarrow \mu^+ \mu^-$ decay from the combined analysis of CMS and LHCb data. <i>Nature</i> , 2015 , 522, 68-72	50.4	326
204	Observation of a new boson with mass near 125 GeV in pp collisions at ($\sqrt{s}=7$) and 8 TeV. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5.4	261
203	Event generator tunes obtained from underlying event and multiparton scattering measurements. <i>European Physical Journal C</i> , 2016 , 76, 155	4.2	250
202	Measurement of the $B_s(0) \rightarrow \mu^+ \mu^-$ branching fraction and search for $B(0) \rightarrow \mu^+ \mu^-$ with the CMS experiment. <i>Physical Review Letters</i> , 2013 , 111, 101804	7.4	220
201	Suppression of non-prompt J/ψ and $(\Upsilon)(1S)$ in PbPb collisions at ($\sqrt{s} = 2.76$) TeV. <i>Journal of High Energy Physics</i> , 2012 , 2012, 1	5.4	184
200	Observation of sequential Υ suppression in PbPb collisions. <i>Physical Review Letters</i> , 2012 , 109, 222301	7.4	172
199	Search for top-squark pair production in the single-lepton final state in pp collisions at ($\sqrt{s}=8$ TeV). <i>European Physical Journal C</i> , 2013 , 73, 1	4.2	162
198	Measurement of the inclusive W and Z production cross sections in pp collisions at ($\sqrt{s} = 7$) TeV with the CMS experiment. <i>Journal of High Energy Physics</i> , 2011 , 2011, 1	5.4	121
197	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , 2010 , 70, 116541	11.92	99
196	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at ($\sqrt{s} = 2.76$) TeV. <i>Journal of High Energy Physics</i> , 2011 , 2011, 1	5.4	87
195	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	77
194	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1	5.4	73
193	Measurement of the underlying event activity at the LHC with ($\sqrt{s} = 7$) TeV and comparison with ($\sqrt{s} = 0.9$) TeV. <i>Journal of High Energy Physics</i> , 2011 , 2011, 1	5.4	70
192	Search for high-mass resonances in dilepton final states in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	63

191	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. <i>European Physical Journal C</i> , 2020 , 80, 4	4.2	61
190	Suppression and azimuthal anisotropy of prompt and nonprompt [Formula: see text] production in PbPb collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , 2017 , 77, 252	4.2	58
189	Measurement of the relative prompt production rate of and in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2012 , 72, 2251	4.2	46
188	Search for the associated production of the Higgs boson with a top-quark pair. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5.4	45
187	Measurement of the inelastic proton-proton cross section at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	41
186	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	40
185	Measurement of the ZZ production cross section and search for anomalous couplings in $2\mu\mu$ final states in pp collisions at ($\sqrt{s}=7$) TeV. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5.4	39
184	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	37
183	Measurement of prompt and nonprompt charmonium suppression in collisions at 5.02. <i>European Physical Journal C</i> , 2018 , 78, 509	4.2	37
182	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2016 , 76, 451	4.2	36
181	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2016 , 76, 13	4.2	35
180	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. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	34
179	Search for new physics in same-sign dilepton events in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2016 , 76, 439	4.2	34
178	Identification techniques for highly boosted W bosons that decay into hadrons. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5.4	32
177	Measurement of the ($\overline{\text{t}}\text{t}$) production cross section in the $e\bar{e}$ channel in proton-proton collisions at ($\sqrt{s}=7$) and 8 TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	30
176	Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5.4	30
175	Measurements of the production cross section and the branching fraction, and constraints on anomalous triple gauge couplings at. <i>European Physical Journal C</i> , 2018 , 78, 165	4.2	29
174	Measurement of the production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at. <i>European Physical Journal C</i> , 2019 , 79, 368	4.2	27

173	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at ($\sqrt{s}=7$;TeV). <i>Journal of High Energy Physics</i> , 2012 , 2012, 1	5.4	27
172	Detecting and studying high-energy collider neutrinos with FASER at the LHC. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	26
171	A measurement of the Higgs boson mass in the diphoton decay channel. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020 , 805, 135425	4.2	25
170	Search for top squark pair production in pp collisions at ($\sqrt{s}=13$) TeV using single lepton events. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	25
169	Measurements of the [Formula: see text][Formula: see text] production cross sections in the [Formula: see text] channel in proton-proton collisions at [Formula: see text] and [Formula: see text] and combined constraints on triple gauge couplings. <i>European Physical Journal C</i> , 2015 , 75, 511	4.2	25
168	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at. <i>European Physical Journal C</i> , 2020 , 80, 75	4.2	24
167	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2020 , 15, P10017-P10017	1	23
166	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying τ leptons at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	23
165	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	21
164	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	20
163	Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at. <i>European Physical Journal C</i> , 2017 , 77, 636	4.2	20
162	Measurement of differential cross sections for boson production in association with jets in proton-proton collisions at. <i>European Physical Journal C</i> , 2018 , 78, 965	4.2	19
161	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. <i>Journal of Instrumentation</i> , 2020 , 15, P06005-P06005	1	18
160	Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	18
159	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	18
158	Search for ($\overline{\text{t}}\text{H}$) production in the (H)to $\overline{\text{b}}\text{b}$) decay channel with leptonic ($\overline{\text{t}}\text{t}$) decays in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	17
157	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$. <i>European Physical Journal C</i> , 2018 , 78, 291	4.2	17
156	Searches for pair production of third-generation squarks in [Formula: see text][Formula: see text] pp collisions. <i>European Physical Journal C</i> , 2017 , 77, 327	4.2	17

155	Searches for physics beyond the standard model with the variable in hadronic final states with and without disappearing tracks in proton-proton collisions at. <i>European Physical Journal C</i> , 2020 , 80, 3	4.2	16
154	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into τ leptons in pp collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	16
153	Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	16
152	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at ($\sqrt{s}=7$) and 8 TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	15
151	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019 , 797, 134876	4.2	15
150	Measurements of $t\bar{t}\overline{H}$ Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel. <i>Physical Review Letters</i> , 2020 , 125, 061801	7.4	15
149	Search for high-mass resonances in final states with a lepton and missing transverse momentum at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	15
148	Pileup mitigation at CMS in 13 TeV data. <i>Journal of Instrumentation</i> , 2020 , 15, P09018-P09018	1	14
147	Search for disappearing tracks in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020 , 806, 135502	4.2	14
146	Measurement of the ($\overline{t}t$) production cross section using events with one lepton and at least one jet in pp collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	14
145	Measurements of production cross sections of WZ and same-sign WW boson pairs in association with two jets in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020 , 809, 135710	4.2	14
144	Evidence for Higgs boson decay to a pair of muons. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	14
143	Probing color coherence effects in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2014 , 74, 2901	4.2	13
142	Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	13
141	Search for ($\overline{t}t\overline{H}$) production in the all-jet final state in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	13
140	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at. <i>European Physical Journal C</i> , 2019 , 79, 280	4.2	12
139	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	12
138	Search for a Narrow Resonance Lighter than 200[GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , 2020 , 124, 131802	7.4	12

137	Measurements of differential Z boson production cross sections in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	11
136	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at \sqrt{s} = 13 TeV. <i>Journal of Instrumentation</i> , 2020 , 15, P02027-P02027	1	11
135	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. <i>Journal of Instrumentation</i> , 2021 , 16, P05014	1	11
134	Search for Z resonances using leptonic and hadronic final states in proton-proton collisions at (\sqrt{s} =13) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	11
133	Measurements of the pp \rightarrow WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	10
132	A multi-dimensional search for new heavy resonances decaying to boosted $\tau\tau$ or boson pairs in the dijet final state at 13 TeV. <i>European Physical Journal C</i> , 2020 , 80, 237	4.2	10
131	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019 , 798, 134952	4.2	10
130	Measurement of properties of $(\mathcal{B} \rightarrow \mathcal{S})^0 \rightarrow \mu\mu$ decays and search for $B_0 \rightarrow \mu\mu$ with the CMS experiment. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	10
129	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at (\sqrt{s} =8) TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	10
128	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at (\sqrt{s} =13) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	10
127	A search for the standard model Higgs boson decaying to charm quarks. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	9
126	Review of bottomonium measurements from CMS. <i>International Journal of Modern Physics A</i> , 2017 , 32, 1730015	1.2	9
125	Search for a light pseudoscalar Higgs boson in the boosted $\tau\tau$ final state in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	9
124	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at (\sqrt{s} =13) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	9
123	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	8
122	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. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	8
121	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at (\sqrt{s} =13) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	8
120	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at \sqrt{s} =13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021 , 819, 136446	4.2	8

119	Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	7
118	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at (\sqrt{s}) = 13 TeV and constraints on anomalous quartic couplings. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	7
117	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	7
116	Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , 2019 , 100,	4.9	7
115	Search for dark matter produced in association with a leptonically decaying boson in proton-proton collisions at. <i>European Physical Journal C</i> , 2021 , 81, 13	4.2	7
114	Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	7
113	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\ell q$ final states at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	7
112	Search for dark matter produced in association with a Higgs boson decaying to $\tau\bar{\tau}$ ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	7
111	Precision luminosity measurement in proton-proton collisions at in 2015 and 2016 at CMS. <i>European Physical Journal C</i> , 2021 , 81, 800	4.2	7
110	Constraints on the ρ_{c1} versus ρ_{c2} Polarizations in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , 2020 , 124, 162002	7.4	6
109	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\tau\bar{\tau}$ and $e\bar{e}$ in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	6
108	Bottomonium production measured in PbPb and pp collisions by CMS. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2011 , 38, 124071	2.9	6
107	Search for the associated production of the Higgs boson with a top-quark pair 2014 , 2014, 1		6
106	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. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	6
105	Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	6
104	Measurement of the differential Drell-Yan cross section in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	6
103	Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021 , 812, 136018	4.2	6
102	Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	6

101	Search for a heavy resonance decaying into a Z boson and a vector boson in the $(\nu\bar{\nu})$ final state. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5-4	6
100	Observation of the $B_0 \rightarrow \mu\mu$ decay in proton-proton collisions at $\sqrt{s}=13\text{TeV}$. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020 , 802, 135203	4-2	5
99	Measurements of production cross sections and constraints on anomalous triple gauge couplings at. <i>European Physical Journal C</i> , 2021 , 81, 200	4-2	5
98	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at. <i>European Physical Journal C</i> , 2021 , 81, 378	4-2	5
97	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at. <i>European Physical Journal C</i> , 2021 , 81, 488	4-2	5
96	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $(\sqrt{s}) = 13\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5-4	5
95	Search for top squark pair production using dilepton final states in collision data collected at. <i>European Physical Journal C</i> , 2021 , 81, 3	4-2	5
94	Search for the pair production of light top squarks in the $e\bar{e}$ final state in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5-4	4
93	Measurement of differential cross sections and charge ratios for s -channel single top quark production in proton-proton collisions at. <i>European Physical Journal C</i> , 2020 , 80, 370	4-2	4
92	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5-4	4
91	Observation of the $B_{(s)} \rightarrow \mu\mu$ Decay. <i>Physical Review Letters</i> , 2020 , 125, 152001	7-4	4
90	Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at $(\sqrt{s}) = 13\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5-4	4
89	Search for new physics in top quark production with additional leptons in proton-proton collisions at $(\sqrt{s}) = 13\text{ TeV}$ using effective field theory. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5-4	4
88	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$. <i>Physical Review D</i> , 2021 , 104,	4-9	4
87	MUSIC: a model-unspecific search for new physics in proton-proton collisions at. <i>European Physical Journal C</i> , 2021 , 81, 629	4-2	4
86	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$. <i>Physical Review D</i> , 2021 , 104,	4-9	4
85	Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at $(\sqrt{s}) = 13\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5-4	3
84	Measurements of the $(\text{pp}) \rightarrow \text{ZZ}$ production cross section and the $(\text{ZZ}) \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{TeV})$ 2018 , 78, 1		3

83	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at. <i>European Physical Journal C</i> , 2021 , 81, 970	4.2	3
82	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	3
81	Dependence of inclusive jet production on the anti-kT distance parameter in pp collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	3
80	Investigation into the event-activity dependence of $\langle n_S \rangle$ relative production in proton-proton collisions at (\sqrt{s}) = 7 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	3
79	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. <i>Computing and Software for Big Science</i> , 2020 , 4, 10	6	3
78	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	3
77	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	3
76	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at. <i>European Physical Journal C</i> , 2021 , 81, 723	4.2	3
75	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state. <i>Physical Review D</i> , 2021 , 104,	4.9	3
74	Search for decays of the 125 GeV Higgs boson into a Z boson and a Υ meson. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	2
73	Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive W and Z boson production cross sections in proton-proton collisions at (\sqrt{s}) = 7 and 8 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	2
72	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $B\bar{b}$ final state at 13 TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	2
71	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , 2020 , 125, 151802	7.4	2
70	The production of isolated photons in PbPb and pp collisions at ($\sqrt{s_{NN}}$) = 5.02 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	2
69	Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , 2020 , 124, 202001	7.4	2
68	Study of central exclusive production in proton-proton collisions at and 13TeV. <i>European Physical Journal C</i> , 2020 , 80, 718	4.2	2
67	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. <i>European Physical Journal C</i> , 2020 , 80, 752	4.2	2
66	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	2

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64	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5-4	2
63	Performance of the CMS muon trigger system in proton-proton collisions at $(\sqrt{s}) = 13$. <i>Journal of Instrumentation</i> , 2021 , 16, P07001	1	2
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61	The trigger and data acquisition system of the FASER experiment. <i>Journal of Instrumentation</i> , 2021 , 16, P12028	1	2
60	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. <i>Physical Review Letters</i> , 2020 , 125, 222001	7-4	1
59	Search for supersymmetry in proton-proton collisions at $(\sqrt{s}) = 13$ TeV in events with high-momentum Z bosons and missing transverse momentum. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5-4	1
58	Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5-4	1
57	Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , 2022 , 128, 032001	7-4	1
56	Measurement of differential $t\bar{t}$ production cross sections in the full kinematic range using lepton+jets events from proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , 2021 , 104,	4-9	1
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50	Measurement of the cross section for $(t\bar{t})$ production with additional jets and b jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5-4	1
49	Measurement of differential cross sections for Z bosons produced in association with charm jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5-4	1
48	Development and validation of HERWIG tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , 2021 , 81, 312	4-2	1

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39	Search for a heavy resonance decaying to a top quark and a W boson at $\sqrt{s} = 13\text{ TeV}$ in the fully hadronic final state. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	1
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37	Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5.4	0
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33	Measurement of b jet shapes in proton-proton collisions at $(\sqrt{s}) = 5.02\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	0
32	Study of Drell-Yan dimuon production in proton-lead collisions at $(\sqrt{s_{\text{mathrm}\{NN}\}}) = 8.16\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	0
31	In-medium modification of dijets in PbPb collisions at $(\sqrt{s_{\text{mathrm}\{NN}\}}) = 5.02\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	0
30	Measurement of the W Production Cross Section in Proton-Proton Collisions at $\sqrt{s}=13\text{ TeV}$ and Constraints on Effective Field Theory Coefficients. <i>Physical Review Letters</i> , 2021 , 126, 252002	7.4	0

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27	First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at $\sqrt{s}=13\text{TeV}$. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021 , 820, 136565	4.2	○
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23	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at .. <i>European Physical Journal C</i> , 2022 , 82, 153	4.2	○
22	Search for long-lived particles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5.4	○
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20	A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s} = 13\text{ TeV}$. <i>Journal of Instrumentation</i> , 2022 , 17, P03014	1	○
19	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at .. <i>European Physical Journal C</i> , 2022 , 82, 213	4.2	○
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12	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5.4	○

11	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. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5-4	○
10	Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5-4	○
9	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5-4	○
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