

# Gilvan Augusto Alves

## List of Publications by Citations

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295  
papers

16,763  
citations

55  
h-index

125  
g-index

308  
ext. papers

19,423  
ext. citations

4.6  
avg, IF

2.87  
L-index

#	Paper	IF	Citations
295	Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 716, 30-61	4.2	5161
294	Observation of the Top Quark. <i>Physical Review Letters</i> , <b>1995</b> , 74, 2632-2637	7.4	909
293	Observation of long-range, near-side angular correlations in pPb collisions at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 718, 795-814	4.2	452
292	Combined results of searches for the standard model Higgs boson in pp collisions at . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 710, 26-48	4.2	437
291	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[Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 212	4.2	399
290	Observation and studies of jet quenching in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physical Review C</i> , <b>2011</b> , 84,	2.7	395
289	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at square root of $s = 7$ TeV. <i>Physical Review Letters</i> , <b>2010</b> , 105, 022002	7.4	353
288	Multiplicity and transverse momentum dependence of two- and four-particle correlations in pPb and PbPb collisions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 724, 213-240	4.2	315
287	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> , <b>2013</b> , 2013, 1	5.4	261
286	Event generator tunes obtained from underlying event and multiparton scattering measurements. <i>European Physical Journal C</i> , <b>2016</b> , 76, 155	4.2	250
285	Observation of the diphoton decay of the Higgs boson and measurement of its properties. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3076	4.2	239
284	Study of the mass and spin-parity of the Higgs boson candidate via its decays to Z boson pairs. <i>Physical Review Letters</i> , <b>2013</b> , 110, 081803	7.4	235
283	Particle-flow reconstruction and global event description with the CMS detector. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P10003-P10003	1	234
282	The CMS trigger system. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P01020-P01020	1	210
281	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at ( $\sqrt{s} = 0.9$ ) and 2.36 TeV. <i>Journal of High Energy Physics</i> , <b>2010</b> , 2010, 1	5.4	201
280	Evidence for collectivity in pp collisions at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 765, 193-220	4.2	171
279	Search for top-squark pair production in the single-lepton final state in pp collisions at ( $\sqrt{s}=8$ $\text{TeV}$ ). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	162

278	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at ( $\sqrt{s_{NN}} = 2.76$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	158
277	Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P05011-P05011	1	152
276	Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P02014-P02014	1	149
275	Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review C</i> , <b>2013</b> , 87,	2.7	148
274	Jet momentum dependence of jet quenching in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 712, 176-197	4.2	144
273	Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	144
272	Study of the inclusive production of charged pions, kaons, and protons in pp collisions at ( $\sqrt{s} = 0.9, 2.76$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	133
271	Modification of jet shapes in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2014</b> , 730, 243-263	4.2	124
270	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> , <b>2011</b> , 2011, 1	5.4	121
269	Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P06015-P06015	1	118
268	Constraints on the Higgs boson width from off-shell production and decay to Z-boson pairs. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2014</b> , 736, 64-85	4.2	116
267	Measurement of isolated photon production in pp and PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 710, 256-277	4.2	111
266	Measurement of higher-order harmonic azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review C</i> , <b>2014</b> , 89,	2.7	109
265	Evidence for transverse-momentum- and pseudorapidity-dependent event-plane fluctuations in PbPb and pPb collisions. <i>Physical Review C</i> , <b>2015</b> , 92,	2.7	104
264	Measurements of inclusive W and Z cross sections in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	104
263	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , <b>2010</b> , 70, 1165-1192	4.2	99
262	Measurement of jet fragmentation in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review C</i> , <b>2014</b> , 90,	2.7	89
261	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 793, 520-551	4.2	86

260	Observation of a peaking structure in the $J/\psi$ mass spectrum from $B \rightarrow J/\psi K$ decays. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2014</b> , 734, 261-281	4.2	83
259	Observation of the Higgs boson decay to a pair of $\tau$ leptons with the CMS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 283-316	4.2	78
258	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> , <b>2017</b> , 2017, 1	5.4	77
257	Study of W boson production in PbPb and pp collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 715, 66-87	4.2	76
256	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=7$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 722, 5-27	4.2	74
255	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> , <b>2015</b> , 2015, 1	5.4	73
254	A new boson with a mass of 125 GeV observed with the CMS experiment at the Large Hadron Collider. <i>Science</i> , <b>2012</b> , 338, 1569-75	33.3	71
253	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> , <b>2011</b> , 2011, 1	5.4	70
252	Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	69
251	Charged-particle nuclear modification factors in PbPb and pPb collisions at ( $\sqrt{s_{\text{N};\text{N}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	64
250	Long-range two-particle correlations of strange hadrons with charged particles in pPb and PbPb collisions at LHC energies. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 742, 200-224	4.2	64
249	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> , <b>2018</b> , 2018, 1	5.4	63
248	Study of vector boson scattering and search for new physics in events with two same-sign leptons and two jets. <i>Physical Review Letters</i> , <b>2015</b> , 114, 051801	7.4	62
247	Evidence of b-jet quenching in PbPb collisions at ( $\sqrt{s_{NN}}=2.76$ ) TeV. <i>Physical Review Letters</i> , <b>2014</b> , 113, 132301	7.4	62
246	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. <i>European Physical Journal C</i> , <b>2020</b> , 80, 4	4.2	61
245	Nuclear modification factor of $D_0$ mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 782, 474-496	4.2	61
244	Coherent $J/\psi$ photoproduction in ultra-peripheral PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV with the CMS experiment. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 489-511	4.2	58
243	Suppression and azimuthal anisotropy of prompt and nonprompt $[Formula: see text]$ production in PbPb collisions at $[Formula: see text]$ . <i>European Physical Journal C</i> , <b>2017</b> , 77, 252	4.2	58

242	Suppression of $\chi(1S)$ , $\chi(2S)$ , and $\chi(3S)$ quarkonium states in PbPb collisions at $\sqrt{s_{NN}}=2.76\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 770, 357-379	4.2	57
241	Observation of a new $\Lambda$ baryon. <i>Physical Review Letters</i> , <b>2012</b> , 108, 252002	7.4	57
240	Measurement of inclusive W and Z boson production cross sections in pp collisions at $\sqrt{s} = 8$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 112, 191802	7.4	54
239	Interpretation of searches for supersymmetry with simplified models. <i>Physical Review D</i> , <b>2013</b> , 88,	4.9	52
238	Search for the associated production of the Higgs boson with a top-quark pair. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	45
237	Measurement of the $X(3872)$ production cross section via decays to $J/\psi \pi\pi$ in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	44
236	Search for $W\text{-}t\bar{b}$ resonances with left- and right-handed couplings to fermions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2011</b> , 699, 145-150	4.2	42
235	Measurement of the inelastic proton-proton cross section at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	41
234	Measurement of nuclear modification factors of $\chi(1S)$ , $\chi(2S)$ , and $\chi(3S)$ mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 790, 270-293	4.2	40
233	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> , <b>2018</b> , 2018, 1	5.4	40
232	Search for displaced supersymmetry in events with an electron and a muon with large impact parameters. <i>Physical Review Letters</i> , <b>2015</b> , 114, 061801	7.4	39
231	Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s} = 13$ TeV using the CMS detector. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P07004-P07004	1	39
230	Measurement of the ZZ production cross section and search for anomalous couplings in $2\ell\ell$ final states in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	39
229	Search for natural and split supersymmetry in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV in final states with jets and missing transverse momentum. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	39
228	Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at ( $\sqrt{s} = 8$ ) TeV by the CMS and TOTEM experiments. <i>European Physical Journal C</i> , <b>2014</b> , 74, 1	4.2	37
227	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> , <b>2018</b> , 2018, 1	5.4	37
226	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 451	4.2	36
225	Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 797, 134826	4.2	35

224	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> , <b>2016</b> , 76, 13	4.2	35
223	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> , <b>2017</b> , 2017, 1	5.4	34
222	Pseudorapidity distribution of charged hadrons in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 751, 143-163	4.2	34
221	Search for new physics in same-sign dilepton events in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 439	4.2	34
220	Cross section measurement of t-channel single top quark production in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 752-776	4.2	32
219	Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 775, 1-24	4.2	32
218	Identification techniques for highly boosted W bosons that decay into hadrons. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	32
217	Search for new physics in $e^+e^-$ data at D using SLEUTH: A quasi-model-independent search strategy for new physics. <i>Physical Review D</i> , <b>2000</b> , 62,	4.9	32
216	Search for a . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 718, 1229-1251	4.2	31
215	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in the $e^+e^-$ channel in proton-proton collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	30
214	Measurements of the production cross section and the branching fraction, and constraints on anomalous triple gauge couplings at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 165	4.2	29
213	Performance of reconstruction and identification of $\tau$ leptons decaying to hadrons and $\nu_{\tau}$ in pp collisions at $\sqrt{s}=13$ TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P10005-P10005	1	29
212	Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 791, 96-129	4.2	27
211	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> , <b>2019</b> , 79, 368	4.2	27
210	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at ( $\sqrt{s}=7$ ; TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	27
209	Measurement of the WW production cross section in pp collisions at square root[ $s$ ]=1.96 TeV. <i>Physical Review Letters</i> , <b>2005</b> , 94, 151801	7.4	27
208	Search for a non-standard-model Higgs boson decaying to a pair of new light bosons in four-muon final states. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 726, 564-586	4.2	26
207	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> , <b>2020</b> , 805, 135425	4.2	25

206	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> , <b>2017</b> , 2017, 1	5.4	25
205	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> , <b>2015</b> , 75, 511	4.2	25
204	Quasi-model-independent search for new physics at large transverse momentum. <i>Physical Review D</i> , <b>2001</b> , 64,	4.9	25
203	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> , <b>2020</b> , 80, 75	4.2	24
202	Quasi-model-independent search for new high $p(T)$ physics at D0. <i>Physical Review Letters</i> , <b>2001</b> , 86, 3712-74	4.2	24
201	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P10017-P10017	1	23
200	Search for third-generation scalar leptoquarks decaying to a top quark and a lepton at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 707	4.2	23
199	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $[Formula: see text]$ leptons at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
198	Measurement of the WZ production cross section in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 766, 268-290	4.2	22
197	Measurement of the $[Formula: see text]$ production cross section using events in the $[Formula: see text]$ final state in pp collisions at $[Formula: see text]$ . <i>European Physical Journal C</i> , <b>2017</b> , 77, 172	4.2	22
196	Measurement of the ZZ production cross section and Z $\rightarrow [Formula: see text]$ branching fraction in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 763, 280-303	4.2	22
195	Measurement of the $[Formula: see text]$ production cross section in the all-jets final state in pp collisions at $[Formula: see text][Formula: see text]$ . <i>European Physical Journal C</i> , <b>2016</b> , 76, 128	4.2	21
194	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. <i>European Physical Journal C</i> , <b>2017</b> , 77, 578	4.2	21
193	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> , <b>2017</b> , 2017, 1	5.4	21
192	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	21
191	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> , <b>2019</b> , 2019, 1	5.4	21
190	Measurement of $[Formula: see text]$ production with additional jet activity, including $[Formula: see text]$ quark jets, in the dilepton decay channel using pp collisions at $[Formula: see text]$ . <i>European Physical Journal C</i> , <b>2016</b> , 76, 379	4.2	20
189	Observation of a diffractive contribution to dijet production in proton-proton collisions at $s=7$ TeV. <i>Physical Review D</i> , <b>2013</b> , 87,	4.9	20

188	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> , <b>2017</b> , 77, 636	4.2	20
187	Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 795, 281-307	4.2	19
186	Study of excited $B_0$ states decaying to $B_0\pi$ in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 803, 135345	4.2	19
185	Measurement of exclusive photoproduction from protons in Pb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 277	4.2	19
184	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s}=0.9$ ) and 7 TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	19
183	Measurement of differential cross sections for boson production in association with jets in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 965	4.2	19
182	Study of Z production in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ ) TeV in the dimuon and dielectron decay channels. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	18
181	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P06005-P06005	1	18
180	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> , <b>2017</b> , 2017, 1	5.4	18
179	Hard single diffraction in p p collisions at $\sqrt{s}=630$ and $1800\text{GeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2002</b> , 531, 52-60	4.2	18
178	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	18
177	Search for ( $\overline{t}t\text{H}$ ) production in the ( $\text{H}\rightarrow\overline{b}b$ ) decay channel with leptonic ( $\overline{t}t$ ) decays in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	17
176	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> , <b>2018</b> , 78, 291	4.2	17
175	Searches for pair production of third-generation squarks in [Formula: see text][Formula: see text] pp collisions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 327	4.2	17
174	Color coherent radiation in multijet events from collisions at. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1997</b> , 414, 419-427	4.2	17
173	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> , <b>2020</b> , 80, 3	4.2	16
172	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tau\tau$ leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
171	Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 798, 134985	4.2	16

170	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> , <b>2018</b> , 2018, 1	5.4	16
169	Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $s=8$ TeV using the $\cancel{E}_T$ variable. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 767, 403-430	4.2	15
168	Measurement of the cross section ratio $\sigma(\text{t}\bar{\text{t}}\text{bb})/\sigma(\text{t}\bar{\text{t}}\text{jj})$ in pp collisions at $s=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 746, 132-153	4.2	15
167	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> , <b>2016</b> , 2016, 1	5.4	15
166	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> , <b>2019</b> , 797, 134876	4.2	15
165	Measurements of $\text{t}\bar{\text{t}}\text{H}$ 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> , <b>2020</b> , 125, 061801	7.4	15
164	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> , <b>2018</b> , 2018, 1	5.4	15
163	Measurement of the jet mass in highly boosted [Formula: see text] events from pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2017</b> , 77, 467	4.2	14
162	Observation of prompt $\text{J}/\psi$ meson elliptic flow in high-multiplicity pPb collisions at $s_{\text{NN}}=8.16$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 791, 172-194	4.2	14
161	Pileup mitigation at CMS in 13 TeV data. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P09018-P09018	1	14
160	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> , <b>2020</b> , 806, 135502	4.2	14
159	Search for heavy resonances decaying to a top quark and a bottom quark in the lepton+jets final state in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 777, 39-63	4.2	14
158	Measurement of the ( $\text{t}\bar{\text{t}}$ ) 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> , <b>2017</b> , 2017, 1	5.4	14
157	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> , <b>2020</b> , 809, 135710	4.2	14
156	Evidence for Higgs boson decay to a pair of muons. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	14
155	Search for resonant ( $\text{t}\bar{\text{t}}$ ) production in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	13
154	Measurement of exclusive $\gamma$ photoproduction in ultraperipheral pPb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 702	4.2	13
153	Measurement of the top quark mass in the all-jets final state at and combination with the lepton+jets channel. <i>European Physical Journal C</i> , <b>2019</b> , 79, 313	4.2	13

152	Probing color coherence effects in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2901	4.2	13
151	Measurement of $(\bar{h})$ normalised multi-differential cross sections in $(pp)$ collisions at $(\sqrt{s}=13, \text{TeV})$ , and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	13
150	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> , <b>2020</b> , 2020, 1	5.4	13
149	Search for $(\overline{t}tH)$ production in the all-jet final state in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	13
148	Measurement of the top quark mass with lepton+jets final states using collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 891	4.2	13
147	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> , <b>2019</b> , 79, 280	4.2	12
146	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> , <b>2020</b> , 2020, 1	5.4	12
145	Measurements of $tt$ cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 776, 355-378	4.2	12
144	Studies of $\eta$ and mesons including the observation of the decay in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 939	4.2	12
143	Electroweak production of two jets in association with a Z boson in proton-proton collisions at $(\sqrt{s}=) 13, \text{TeV}$ . <i>European Physical Journal C</i> , <b>2018</b> , 78, 1	4.2	12
142	Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 778, 263-291	4.2	12
141	Measurement of the associated production of a single top quark and a Z boson in pp collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 358-384	4.2	11
140	Measurements of differential Z boson production cross sections in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	11
139	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P02027-P02027	1	11
138	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P05014	1	11
137	Charged-particle nuclear modification factors in XeXe collisions at $(\sqrt{s_{\text{NN}}}) = 5.44$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
136	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> , <b>2018</b> , 2018, 1	5.4	11
135	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> , <b>2019</b> , 2019, 1	5.4	10

134	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> , <b>2019</b> , 798, 134952	4.2	10
133	Measurement of properties of $(\mathbf{B})_{\mathbf{s}}^0$ decays and search for $B_0$ with the CMS experiment. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	10
132	Measurement of the $Y(1S)$ pair production cross section and search for resonances decaying to $Y(1S)$ in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 808, 135578	4.2	10
131	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> , <b>2016</b> , 2016, 1	5.4	10
130	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> , <b>2018</b> , 2018, 1	5.4	10
129	Search for anomalous triple gauge couplings in $WW$ and $WZ$ production in lepton + jet events in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	9
128	Search for a light pseudoscalar Higgs boson in the boosted final state in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	9
127	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> , <b>2018</b> , 2018, 1	5.4	9
126	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 697	4.2	9
125	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> , <b>2020</b> , 2020, 1	5.4	8
124	Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at $(\sqrt{s_{\mathbf{NN}}}=5.02)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	8
123	Search for s channel single top quark production in pp collisions at $(\sqrt{s}=7)$ and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 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> , <b>2019</b> , 2019, 1	5.4	8
121	Asymmetries in the production of $\bar{D}$ in 250 GeV/c $\bar{p}$ , $K^+$ and $p$ nucleon interactions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2003</b> , 559, 179-186	4.2	8
120	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> , <b>2018</b> , 2018, 1	5.4	8
119	Search for R-parity violating supersymmetry in pp collisions at $\sqrt{s}=13$ TeV using b jets in a final state with a single lepton, many jets, and high sum of large-radius jet masses. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 783, 114-139	4.2	8
118	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> , <b>2021</b> , 819, 136446	4.2	8
117	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> , <b>2019</b> , 2019, 1	5.4	7

116	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> , <b>2020</b> , 2020, 1	5-4	7
115	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> , <b>2020</b> , 2020, 1	5-4	7
114	Jet properties in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}$ )=5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
113	Search for dark matter produced in association with a leptonically decaying boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 13	4-2	7
112	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> , <b>2018</b> , 2018, 1	5-4	7
111	Precision measurement of the structure of the CMS inner tracking system using nuclear interactions. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P10034-P10034	1	7
110	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> , <b>2018</b> , 2018, 1	5-4	7
109	Search for dark matter produced in association with a Higgs boson decaying to $\ell\bar{\nu}\nu\ell$ ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
108	Precision luminosity measurement in proton-proton collisions at in 2015 and 2016 at CMS. <i>European Physical Journal C</i> , <b>2021</b> , 81, 800	4-2	7
107	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in collisions at and 5.02. <i>European Physical Journal C</i> , <b>2020</b> , 80, 534	4-2	6
106	Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton + jets final state in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	6
105	Search for the associated production of the Higgs boson with a top-quark pair <b>2014</b> , 2014, 1		6
104	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> , <b>2021</b> , 2021, 1	5-4	6
103	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> , <b>2016</b> , 2016, 1	5-4	6
102	Measurement of the differential Drell-Yan cross section in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	6
101	Measurements of production cross sections of polarized same-sign W 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> , <b>2021</b> , 812, 136018	4-2	6
100	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> , <b>2018</b> , 2018, 1	5-4	6
99	Search for a heavy resonance decaying into a Z boson and a vector boson in the ( $\nu\bar{\nu}\ell\bar{\ell}$ ) final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	6

98	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV <b>2011</b> , 2011, 1		5
97	Observation of the $B_0 \rightarrow \mu \mu$ decay in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 802, 135203	4-2	5
96	Measurements of production cross sections and constraints on anomalous triple gauge couplings at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 200	4-2	5
95	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> , <b>2021</b> , 81, 378	4-2	5
94	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> , <b>2021</b> , 81, 488	4-2	5
93	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	5
92	Search for top squark pair production using dilepton final states in collision data collected at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 3	4-2	5
91	Search for the pair production of light top squarks in the $e\mu$ final state in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	4
90	Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	4
89	Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P10002-P10002	1	4
88	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> , <b>2020</b> , 2020, 1	5-4	4
87	Observation of the $B_{\{s\}^0} \rightarrow K(3872) \mu \mu$ Decay. <i>Physical Review Letters</i> , <b>2020</b> , 125, 152001	7-4	4
86	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 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
85	Search for new physics in top quark production with additional leptons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV using effective field theory. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
84	MUSiC: a model-unspecific search for new physics in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 629	4-2	4
83	Odderon Exchange from Elastic Scattering Differences between pp and $pp[\overline{p}]$ Data at 1.96 TeV and from pp Forward Scattering Measurements. <i>Physical Review Letters</i> , <b>2021</b> , 127, 062003	7-4	4
82	Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 812, 135992	4-2	4
81	Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3

80	Measurement of the inclusive ( $\overline{\text{t}}$ ) cross section in pp collisions at ( $\sqrt{s}=5.02$ ) TeV using final states with at least one charged lepton. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	3
79	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 970	4-2	3
78	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> , <b>2020</b> , 2020, 1	5-4	3
77	Observation of electroweak production of $W\bar{\nu}$ with two jets in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 811, 135988	4-2	3
76	Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 808, 135609	4-2	3
75	Investigation into the event-activity dependence of $\tau$ (nS) relative production in proton-proton collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3
74	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. <i>Computing and Software for Big Science</i> , <b>2020</b> , 4, 10	6	3
73	Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 125, 102001	7-4	3
72	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> , <b>2021</b> , 2021, 1	5-4	3
71	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> , <b>2021</b> , 2021, 1	5-4	3
70	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> , <b>2021</b> , 81, 723	4-2	3
69	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\tau$ meson. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
68	Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P06009-P06009	1	2
67	Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive $W\bar{\nu}$ and Z boson production cross sections in proton-proton collisions at ( $\sqrt{s}$ ) = 7 and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
66	Experiences from the RPC data taking during the CMS RUN-2. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C10027-C10027	10	2
65	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 125, 151802	7-4	2
64	The production of isolated photons in PbPb and pp collisions at ( $\sqrt{s_{NN}}$ ) = 5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
63	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> , <b>2020</b> , 124, 202001	7-4	2

62	Study of central exclusive production in proton-proton collisions at and 13TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 718	4.2	2
61	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> , <b>2020</b> , 80, 752	4.2	2
60	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> , <b>2021</b> , 2021, 1	5.4	2
59	Angular analysis of the decay $B^+ \rightarrow K^*(892)^0 \mu^+ \nu_\mu$ in proton-proton collisions at $(\sqrt{s}) = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2
58	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2
57	Performance of the CMS muon trigger system in proton-proton collisions at $(\sqrt{s}) = 13$ . <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P07001	1	2
56	Search for $W^\pm$ bosons decaying to a top and a bottom quark at $s=13$ TeV in the hadronic final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 820, 136535	4.2	2
55	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. <i>Physical Review Letters</i> , <b>2020</b> , 125, 222001	7.4	1
54	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> , <b>2020</b> , 2020, 1	5.4	1
53	Search for dijet resonances using events with three jets in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 805, 135448	4.2	1
52	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> , <b>2022</b> , 128, 032001	7.4	1
51	Improved-RPC for the CMS muon system upgrade for the HL-LHC. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C11012-C11012	1	1
50	Study of the $(B^+ \rightarrow J/\psi \overline{\Lambda} p)$ decay in proton-proton collisions at $(\sqrt{s}) = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	1
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48	Strange hadron production in pp and pPb collisions at $s_{NN}=5.02$ TeV. <i>Physical Review C</i> , <b>2020</b> , 101,	2.7	1
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43	CMS phase-II upgrade of the RPC Link System. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, C05003	1	1
42	Front-end electronics for CMS iRPC detectors. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, C05002	1	1
41	Measurement of the CP-violating phase $\phi_s$ in the $B_s^0 \rightarrow D(1020)^- K^+ K^0$ channel in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 816, 136188	4.2	1
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34	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	1
33	Search for $W$ resonances in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ using hadronic decays of Lorentz-boosted $W$ bosons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2022</b> , 826, 136888	4.2	0
32	Measurement of single-diffractive dijet production in proton-proton collisions at with the CMS and TOTEM experiments. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1164	4.2	0
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30	RPC system in the CMS Level-1 Muon Trigger. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C10007-C10007	1	0
29	CMS RPC activities during LHC LS-2. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C10025-C10025	1	0
28	Aging study on Resistive Plate Chambers of the CMS Muon Detector for HL-LHC. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C11002-C11002	1	0
27	CMS RPC background studies and measurements. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, C04005	1	0

26	Research and development of the back-end electronics for the two-dimensional improved resistive plate chambers in CMS upgrade. <i>Radiation Detection Technology and Methods</i> , <b>2021</b> , 5, 181-191	0.7	○
25	Measurement of b jet shapes in proton-proton collisions at $(\sqrt{s}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
24	Study of Drell-Yan dimuon production in proton-lead collisions at $(\sqrt{s_{\mathrm{NN}}}) = 8.16$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
23	Measurement of the W Production Cross Section in Proton-Proton Collisions at $\sqrt{s}=13$ TeV and Constraints on Effective Field Theory Coefficients. <i>Physical Review Letters</i> , <b>2021</b> , 126, 252002	7.4	○
22	Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 819, 136409	4.2	○
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20	First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 820, 136565	4.2	○
19	Measurements of angular distance and momentum ratio distributions in three-jet and + two-jet final states in collisions. <i>European Physical Journal C</i> , <b>2021</b> , 81, 852	4.2	○
18	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of $\Upsilon$ Leptons in pp Collisions at $\sqrt{s}=13$ TeV.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 081805	7.4	○
17	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. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
16	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 153	4.2	○
15	A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2022</b> , 17, P03014	1	○
14	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 213	4.2	○
13	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 290	4.2	○
12	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. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
11	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
10	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> , <b>2022</b> , 2022, 1	5.4	○
9	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> , <b>2022</b> , 2022, 1	5.4	○

8	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> , <b>2022</b> , 2022, 1	5-4	○
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4	Measurements of the differential cross sections of the production of Z + jets and $\bar{\chi}_1^0$ jets and of Z boson emission collinear with a jet in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	
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