

# Wolfgang Adam

## List of Publications by Citations

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194  
papers

14,343  
citations

45  
h-index

118  
g-index

213  
ext. papers

16,655  
ext. citations

4.7  
avg, IF

2.78  
L-index

#	Paper	IF	Citations
194	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
193	The CMS experiment at the CERN LHC. <i>Journal of Instrumentation</i> , <b>2008</b> , 3, S08004-S08004	1	1276
192	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
191	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
190	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
189	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
188	Measurement of the properties of a Higgs boson in the four-lepton final state. <i>Physical Review D</i> , <b>2014</b> , 89,	4.9	260
187	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
186	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
185	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
184	Particle-flow reconstruction and global event description with the CMS detector. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P10003-P10003	1	234
183	The CMS trigger system. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P01020-P01020	1	210
182	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
181	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
180	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
179	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
178	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

177	Constraints on the spin-parity and anomalous HVV couplings of the Higgs boson in proton collisions at 7 and 8 TeV. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	142
176	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
175	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
174	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
173	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
172	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
171	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
170	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , <b>2010</b> , 70, 1165-1192	4.99	99
169	Observation of $t\bar{t}$ Production. <i>Physical Review Letters</i> , <b>2018</b> , 120, 231801	7.4	96
168	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
167	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
166	Observation of Higgs Boson Decay to Bottom Quarks. <i>Physical Review Letters</i> , <b>2018</b> , 121, 121801	7.4	79
165	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
164	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
163	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
162	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
161	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
160	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

159	Measurement of the top quark mass using proton-proton data at $\sqrt{s}=7$ and 8 TeV. <i>Physical Review D</i> , <b>2016</b> , 93,	4.9	69
158	Charged-particle nuclear modification factors in PbPb and pPb collisions at ( $\sqrt{s_{\mathrm{N};\mathrm{N}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	64
157	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
156	Search for long-lived particles that decay into final states containing two electrons or two muons in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2015</b> , 91,	4.9	62
155	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
154	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
153	Interpretation of searches for supersymmetry with simplified models. <i>Physical Review D</i> , <b>2013</b> , 88,	4.9	52
152	Search for new physics in final states with an energetic jet or a hadronically decaying W or Z boson and transverse momentum imbalance at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	51
151	Observation of Electroweak Production of Same-Sign W Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 081801	7.4	50
150	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
149	Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	42
148	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
147	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
146	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
145	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
144	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
143	Search for the standard model Higgs boson produced through vector boson fusion and decaying to $b\bar{b}$ . <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	37
142	Limits on the Higgs boson lifetime and width from its decay to four charged leptons. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	37

141	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
140	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
139	Search for the X(5568) State Decaying into $B_{(s)}^0 \pi^0$ in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 202005	7.4	36
138	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
137	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
136	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
135	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
134	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
133	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
132	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
131	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> , <b>2016</b> , 2016, 1	5.4	30
130	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
129	Measurement of diffractive dissociation cross sections in pp collisions at $s=7$ TeV. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	29
128	Performance of reconstruction and identification of $\tau$ leptons decaying to hadrons and $\nu$ in pp collisions at $\sqrt{s}=13$ TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P10005-P10005	1	29
127	Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 141802	7.4	28
126	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
125	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
124	Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in pp and p+Pb Collisions at the LHC. <i>Physical Review Letters</i> , <b>2018</b> , 120, 092301	7.4	27

123	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
122	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	26
121	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
120	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
119	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
118	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
117	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
116	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
115	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\tau$ leptons at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
114	Measurement of the ZZ production cross section and Z $\rightarrow \tau\tau$ 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
113	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
112	Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton+jets events from pp collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	20
111	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
110	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
109	Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 795, 281-307	4.2	19
108	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
107	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
106	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P06005-P06005	1	18



105	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
104	Search for ( $\overline{\text{t}}\text{H}$ ) production in the ( $\text{H}\rightarrow\overline{\text{b}}\text{b}$ ) decay channel with leptonic ( $\overline{\text{t}}\text{}$ ) 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
103	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
102	Searches for pair production of third-generation squarks in pp collisions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 327	4.2	17
101	Searches for physics beyond the standard model with the variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ . <i>European Physical Journal C</i> , <b>2020</b> , 80, 3	4.2	16
100	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
99	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
98	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
97	Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	16
96	Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $\sqrt{s}=8$ 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
95	Measurement of the differential cross sections for the associated production of a W boson and jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	15
94	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
93	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 797, 134876	4.2	15
92	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
91	Pileup mitigation at CMS in 13 TeV data. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P09018-P09018	1	14
90	Search for disappearing tracks 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> , 806, 135502	4.2	14
89	Measurement of the ( $\overline{\text{t}}\text{}$ ) 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
88	Measurements of production cross sections of WZ and same-sign WW 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> , <b>2020</b> , 809, 135710	4.2	14

87	Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	13
86	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
85	Search for $(\overline{t}t\text{H})$ 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
84	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
83	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
82	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> , <b>2020</b> , 124, 131802	7.4	12
81	Measurement of jet substructure observables in $t\bar{t}$ events from proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	12
80	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 $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 778, 263-291	4.2	12
79	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
78	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
77	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
76	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
75	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
74	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
73	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
72	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
71	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
70	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



69	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
68	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
67	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
66	Search for singly and pair-produced leptoquarks coupling to third-generation fermions 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, 136446	4-2	8
65	Search for Dark Matter Particles Produced in Association with a Top Quark Pair at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 011803	7-4	7
64	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
63	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
62	Search for long-lived particles using delayed photons in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4-9	7
61	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
60	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
59	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
58	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
57	Search for dark matter produced in association with a Higgs boson decaying to $\ell\bar{\ell}$ ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
56	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
55	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
54	Search for the associated production of the Higgs boson with a top-quark pair <b>2014</b> , 2014, 1		6
53	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
52	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

51	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
50	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
49	Search for a heavy resonance decaying into a Z boson and a vector boson in the ( $\nu$ $\overline{\nu}$ $\overline{\mathcal{Q}}$ $\overline{\mathcal{Q}}$ ) final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
48	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV <b>2011</b> , 2011, 1		5
47	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
46	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
45	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
44	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
43	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
42	Search for the pair production of light top squarks in the $e^+e^-$ 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
41	Search for long-lived particles using displaced jets in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	4
40	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
39	Search for top squark production in fully hadronic final states in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	4
38	Measurements of the ( $\mathcal{P} \rightarrow \mathcal{Z}$ ) production cross section and the ( $\mathcal{Z} \rightarrow 4\ell$ ) branching fraction, and constraints on anomalous triple gauge couplings at ( $\sqrt{s} = 13, \text{TeV}$ ) <b>2018</b> , 78, 1		3
37	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
36	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
35	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
34	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

33	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> , <b>2021</b> , 104,	4.9	3
32	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
31	The CMS Phase-1 pixel detector upgrade. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P02027-P02027	1	2
30	Search for $W^\pm$ bosons decaying to a top and a bottom quark at $\sqrt{s}=13\text{TeV}$ 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
29	Measurement of differential $t\bar{t}$ production cross sections in the full kinematic range using lepton+jets events from proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	1
28	Measurement of the electroweak production of $Z$ and two jets in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ and constraints on anomalous quartic gauge couplings. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	1
27	Study of the $(\mathbf{B}^+ \rightarrow \mathbf{J}/\psi \overline{\Lambda} \mathbf{p})$ decay in proton-proton collisions at $(\sqrt{s}) = 8\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	1
26	Development and validation of HERWIG tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , <b>2021</b> , 81, 312	4.2	1
25	Measurement of the CP-violating phase $\phi_s$ in the $B_s^0 \rightarrow \mu^+ \mu^- (1020)^- K^+ K^0$ 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
24	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 813, 136036	4.2	1
23	Measurement of the azimuthal anisotropy of $\Lambda$ and mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 819, 136385	4.2	1
22	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
21	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
20	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
19	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s}=5.02\text{ TeV}$ Using Leptonic Decays. <i>Physical Review Letters</i> , <b>2021</b> , 127, 191801	7.4	0
18	Search for the rare decay of the $W$ boson into a pion and a photon 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> , 819, 136409	4.2	0
17	Search for a heavy vector resonance decaying to a $W$ boson and a Higgs boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 688	4.2	0
16	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> , <b>2021</b> , 820, 136565	4.2	0

15	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	○
14	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of Leptons in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2022</b> , 128, 081805	7.4	○
13	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	○
12	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	○
11	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	○
10	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	○
9	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	○
8	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	○
7	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	○
6	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	○
5	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	○
4	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	○
3	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
2	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	
1	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	