

# Jesus Puerta Pelayo

## List of Publications by Citations

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531  
papers

19,412  
citations

67  
h-index

115  
g-index

549  
ext. papers

22,123  
ext. citations

5  
avg, IF

6.61  
L-index

#	Paper	IF	Citations
531	Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s}=7$ and 8 TeV with the ATLAS and CMS Experiments. <i>Physical Review Letters</i> , <b>2015</b> , 114, 191803	7.4	709
530	CMS Physics Technical Design Report, Volume II: Physics Performance. <i>Journal of Physics G: Nuclear and Particle Physics</i> , <b>2007</b> , 34, 995-1579	2.9	602
529	Determination of jet energy calibration and transverse momentum resolution in CMS. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P11002-P11002	1	463
528	Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 212	4.2	399
527	Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P10002-P10002	1	398
526	Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC. <i>Journal of High Energy Physics</i> , <b>2010</b> , 2010, 1	5.4	389
525	Identification of b-quark jets with the CMS experiment. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P04013-P04013		376
524	Study of high-p <sub>T</sub> charged particle suppression in PbPb compared to pp collisions at ( $\sqrt{s_{\text{NN}}}=2.76\text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	316
523	Description and performance of track and primary-vertex reconstruction with the CMS tracker. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, P10009-P10009	1	279
522	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
521	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 235	4.2	250
520	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
519	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
518	Measurement of the $B_s(0) \rightarrow \mu^+ \mu^-$ branching fraction and search for $B(0) \rightarrow \mu^+ \mu^-$ with the CMS experiment. <i>Physical Review Letters</i> , <b>2013</b> , 111, 101804	7.4	220
517	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
516	Search for supersymmetry at the LHC in events with jets and missing transverse energy. <i>Physical Review Letters</i> , <b>2011</b> , 107, 221804	7.4	188
515	Suppression of non-prompt $J/\psi$ and ( $\Upsilon$ )(1S) in PbPb collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	184

514	Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3036	4.2	183
513	Observation of sequential $\beta$ suppression in PbPb collisions. <i>Physical Review Letters</i> , <b>2012</b> , 109, 222301	7.4	172
512	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
511	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at ( $\sqrt{s_{NN}}=2.76 \text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	158
510	Search for dark matter and large extra dimensions in monojet events in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	155
509	Search for heavy neutrinos and [Formula: see text] bosons with right-handed couplings in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3149	4.2	149
508	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
507	Performance of photon reconstruction and identification with the CMS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P08010-P08010	1	141
506	Study of the inclusive production of charged pions, kaons, and protons in pp collisions at ( $\sqrt{s} = 0.9, 2.76, 7 \text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	133
505	Search for invisible decays of Higgs bosons in the vector boson fusion and associated ZH production modes. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2980	4.2	131
504	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
503	Prompt and non-prompt $J/\psi$ production in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>European Physical Journal C</i> , <b>2011</b> , 71, 1	4.2	118
502	Search for dijet resonances in 7 TeV pp collisions at CMS. <i>Physical Review Letters</i> , <b>2010</b> , 105, 211801	7.4	116
501	Search for dark matter and large extra dimensions in pp collisions yielding a photon and missing transverse energy. <i>Physical Review Letters</i> , <b>2012</b> , 108, 261803	7.4	116
500	A search for a doubly-charged Higgs boson in pp collisions at ( $\sqrt{s} = 7 \text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	111
499	Energy calibration and resolution of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P09009-P09009	1	111
498	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
497	Measurement of differential top-quark-pair production cross sections in pp collisions at ( $\sqrt{s} = 7 \text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	102

496	Evidence for the 125 GeV Higgs boson decaying to a pair of $\tau$ leptons. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	101
495	Search for a light charged Higgs boson in top quark decays in pp collisions at ( $\sqrt{s} = 7$ ;TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	101
494	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , <b>2010</b> , 70, 11654-1192	4.9	99
493	CMS Physics Technical Design Report: Addendum on High Density QCD with Heavy Ions. <i>Journal of Physics G: Nuclear and Particle Physics</i> , <b>2007</b> , 34, 2307-2455	2.9	99
492	Measurement of the differential cross section for top quark pair production in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 542	4.2	98
491	Observation of $t\bar{t}H$ Production. <i>Physical Review Letters</i> , <b>2018</b> , 120, 231801	7.4	96
490	Searches for long-lived charged particles in pp collisions at ( $\sqrt{s} = 7$ and 8 TeV). <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	96
489	Missing transverse energy performance of the CMS detector. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P09001-P09004	4.9	94
488	Search for supersymmetry in hadronic final states using $M_{T2}$ in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	92
487	Measurement of Long-Range Near-Side Two-Particle Angular Correlations in pp Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , <b>2016</b> , 116, 172302	7.4	90
486	Charged particle multiplicities in pp interactions at ( $\sqrt{s} = 0.9$ ), 2.36, and 7 TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	89
485	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at ( $\sqrt{s_{NN}} = 2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	87
484	Performance of the CMS missing transverse momentum reconstruction in pp data at $\sqrt{s} = 8$ TeV. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P02006-P02006	1	84
483	Search for supersymmetry in hadronic final states with missing transverse energy using the variables and b-quark multiplicity in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2568	4.2	82
482	Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at ( $\sqrt{s} = 8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	81
481	Performance of $\tau$ -lepton reconstruction and identification in CMS. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P01001-P01001	1	81
480	Observation of Higgs Boson Decay to Bottom Quarks. <i>Physical Review Letters</i> , <b>2018</b> , 121, 121801	7.4	79
479	Strange particle production 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	78

478	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
477	Searches for new physics using the $t\bar{t}$ invariant mass distribution in pp collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2013</b> , 111, 211804	7-4	76
476	Reconstruction and identification of $\tau$ lepton decays to hadrons and $\mu\tau$ at CMS. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P01019-P01019	1	75
475	The performance of the CMS muon detector in proton-proton collisions at $\sqrt{s}=7$ TeV at the LHC. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P11002-P11002	1	74
474	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
473	Measurement of jet fragmentation into charged particles in pp and PbPb collisions at ( $\sqrt{s_{\mathbf{NN}}} = 2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	73
472	Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for the Search for the Chiral Magnetic Effect. <i>Physical Review Letters</i> , <b>2017</b> , 118, 122301	7-4	72
471	Study of the production of charged pions, kaons, and protons in pPb collisions at [Formula: see text]5.02[Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2847	4-2	71
470	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
469	Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	70
468	Measurement of the single-top-quark t-channel cross section in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	70
467	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
466	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
465	$J/\psi$ and $\psi(2S)$ production in pp collisions at ( $\sqrt{s} = 7$ {text{TeV}}). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	69
464	Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at ( $\sqrt{s_{\mathbf{NN}}} = 5.02$ ) (,text {TeV}). <i>European Physical Journal C</i> , <b>2014</b> , 74, 1	4-2	67
463	Study of Z Boson Production in PbPb Collisions at $\sqrt{s_{\mathbf{NN}}}=2.76$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 106, 212301	7-4	66
462	Search for anomalous production of multilepton events in pp collisions at ( $\sqrt{s} = 7$ ,TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	65
461	Charged-particle nuclear modification factors in PbPb and pPb collisions at ( $\sqrt{s_{\mathbf{N};\mathbf{N}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	64

460	Measurement of the $(\overline{t}t)$ production cross section in the dilepton channel in pp collisions at $(\sqrt{s}=7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	64
459	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
458	Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 221801	7.4	62
457	Observation of the associated production of a single top quark and a W boson in pp collisions at $\sqrt{s} = 8$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 112, 231802	7.4	62
456	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
455	Study of double parton scattering using W + 2-jet events in proton-proton collisions at $(\sqrt{s}) = 7$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	61
454	Search for a charged Higgs boson in pp collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	61
453	Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at $(\sqrt{s_{NN}}) = 2.76$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	60
452	Suppression and azimuthal anisotropy of prompt and nonprompt $[Formula: see text]$ production in PbPb collisions at $[Formula: see text][Formula: see text]$ . <i>European Physical Journal C</i> , <b>2017</b> , 77, 252	4.2	58
451	Search for top-quark partners with charge 5/3 in the same-sign dilepton final state. <i>Physical Review Letters</i> , <b>2014</b> , 112, 171801	7.4	58
450	Search for anomalous $(\overline{t}t)$ production in the highly-boosted all-hadronic final state. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	57
449	Observation of a new B baryon. <i>Physical Review Letters</i> , <b>2012</b> , 108, 252002	7.4	57
448	Study of exclusive two-photon production of $W+W$ in pp collisions at $(\sqrt{s}=7)$ TeV and constraints on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	56
447	Measurement of the $W+W$ cross section in pp collisions at $(\sqrt{s} = 7)$ TeV and limits on anomalous $WW$ and $WWZ$ couplings. <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	56
446	Long-range and short-range dihadron angular correlations in central PbPb collisions at $(\sqrt{s_{NN}}) = 2.76$ TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	56
445	Search for a standard model Higgs boson produced in association with a top-quark pair and decaying to bottom quarks using a matrix element method. <i>European Physical Journal C</i> , <b>2015</b> , 75, 251	4.2	55
444	Measurement of the pseudorapidity and centrality dependence of the transverse energy density in Pb-Pb collisions at $(\sqrt{s_{NN}})=2.76$ TeV. <i>Physical Review Letters</i> , <b>2012</b> , 109, 152303	7.4	55
443	Search for new phenomena with the variable in the all-hadronic final state produced in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2017</b> , 77, 710	4.2	54

442	Search for signatures of extra dimensions in the diphoton mass spectrum at the large hadron collider. <i>Physical Review Letters</i> , <b>2012</b> , 108, 111801	7.4	53
441	Search for $(\text{B}^0 \rightarrow \text{e}^+ \text{e}^-)$ and $\text{B}^0 \rightarrow \text{e}^+ \text{e}^- \gamma$ decays. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	52
440	Search for a light pseudoscalar Higgs boson in the dimuon decay channel in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , <b>2012</b> , 109, 121801	7.4	51
439	Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 147	4.2	50
438	Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $(\sqrt{s} = 7 \text{ TeV})$ and first determination of the strong coupling constant in the TeV range. <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	50
437	Search for narrow and broad dijet resonances in proton-proton collisions at $(\sqrt{s} = 13)$ TeV and constraints on dark matter mediators and other new particles. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	50
436	Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2469	4.2	49
435	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 237	4.2	48
434	Measurement of the t-channel single-top-quark production cross section and of the $ V_{tb} $ CKM matrix element in pp collisions at $(\sqrt{s} = 8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	48
433	Measurement of the $(\text{t} \bar{\text{t}})$ production cross section and the top quark mass in the dilepton channel in pp collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	48
432	Measurement of the $\text{B}^0$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 106, 252001	7.4	48
431	Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $(\sqrt{s} = 13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	46
430	Search for flavor-changing neutral currents in top-quark decays $\text{t} \rightarrow \text{Z} \text{q}$ in pp collisions at $\sqrt{s} = 8$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 112, 171802	7.4	46
429	Measurement of the relative prompt production rate of $\text{t} \bar{\text{t}}$ and $\text{t} \bar{\text{t}} \text{Z}$ in pp collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2012</b> , 72, 2251	4.2	46
428	Combined 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>2018</b> , 2018, 1	5.4	45
427	Exclusive $\text{t} \bar{\text{t}} \text{Z}$ production in proton-proton collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	45
426	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
425	Search for exclusive or semi-exclusive $\text{t} \bar{\text{t}} \text{Z}$ production and observation of exclusive and semi-exclusive $\text{e}^+ \text{e}^- \text{t} \bar{\text{t}}$ production in pp collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	45



4 <sup>24</sup>	Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2283	4.2	45
4 <sup>23</sup>	Search for supersymmetry in pp collisions at $\sqrt{s}$ TeV in events with two photons and missing transverse energy. <i>Physical Review Letters</i> , <b>2011</b> , 106, 211802	7.4	45
4 <sup>22</sup>	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
4 <sup>21</sup>	Search for heavy bottom-like quarks in 4.9 fb <sup>-1</sup> of pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	44
4 <sup>20</sup>	Charged particle transverse momentum spectra 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	44
4 <sup>19</sup>	Search for B(s)0 $\rightarrow \mu\mu$ and B(0) $\rightarrow \mu\mu$ decays in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 107, 191802	7.4	44
4 <sup>18</sup>	Measurement of the ( $\overline{t}t$ ) production cross section in the dilepton channel in pp collisions at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	43
4 <sup>17</sup>	Measurement of the differential and double-differential Drell-Yan cross sections in proton-proton collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	43
4 <sup>16</sup>	Search for leptonic decays of W <sup>±</sup> bosons in pp collisions at ( $\sqrt{s} = \{7\}$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	43
4 <sup>15</sup>	Event activity dependence of ( $\Upsilon$ )(nS) production in ( $\sqrt{s_{NN}}$ ) = 5.02 TeV pPb and ( $\sqrt{s}$ ) = 2.76 TeV pp collisions. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	42
4 <sup>14</sup>	Search for additional neutral MSSM Higgs bosons in the $\tau\tau$ 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	42
4 <sup>13</sup>	Measurement of the inclusive 3-jet production differential cross section in proton-proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range. <i>European Physical Journal C</i> , <b>2015</b> , 75, 186	4.2	41
4 <sup>12</sup>	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
4 <sup>11</sup>	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
4 <sup>10</sup>	Studies of jet mass in dijet and W/Z + jet events. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	39
4 <sup>09</sup>	Study of the underlying event at forward rapidity in pp collisions at ( $\sqrt{s}=0.9, 2.76, \text{and } 7 \text{ TeV}$ ). <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	39
4 <sup>08</sup>	Measurement of the ZZ production cross section and search for anomalous couplings in $2\mu\mu$ final states in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	39
4 <sup>07</sup>	Search for same-sign top-quark pair production at ( $\sqrt{s} = 7$ ) TeV and limits on flavour changing neutral currents in the top sector. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	39



406	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
405	Measurement of Prompt $D^0$ Meson Azimuthal Anisotropy in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 202301	7-4	39
404	Search for new physics in events with same-sign dileptons and jets in pp collisions at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	38
403	Search for microscopic black holes in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	38
402	Measurement of prompt $\Upsilon(2S)$ to $J/\psi$ yield ratios in Pb-Pb and p-p collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 113, 262301	7-4	38
401	Search for top squark and Higgsino production using diphoton Higgs boson decays. <i>Physical Review Letters</i> , <b>2014</b> , 112, 161802	7-4	38
400	Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at ( $\sqrt{s} = 7$ ; {text{TeV}}). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5-4	38
399	Measurement of the [Formula: see text] cross section in pp collisions at [Formula: see text] TeV and limits on anomalous gauge couplings. <i>European Physical Journal C</i> , <b>2016</b> , 76, 401	4-2	38
398	Measurement of the $B^0$ Meson Nuclear Modification Factor in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 152301	7-4	37
397	Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 288	4-2	37
396	Measurement of the differential cross section and charge asymmetry for inclusive [Formula: see text] production at [Formula: see text] TeV. <i>European Physical Journal C</i> , <b>2016</b> , 76, 469	4-2	37
395	Jet production rates in association with W and Z bosons in pp collisions at ( $\sqrt{s} = 7$ {text{TeV}}). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	37
394	Measurement of masses in the [Formula: see text] system by kinematic endpoints in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2494	4-2	37
393	Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	37
392	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
391	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
390	Measurement of prompt and nonprompt charmonium suppression in collisions at 5.02. <i>European Physical Journal C</i> , <b>2018</b> , 78, 509	4-2	37
389	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

388	Measurement of the top-quark mass in $(\overline{\text{t}})$ events with dilepton final states in pp collisions at $(\sqrt{s}=7 \text{ TeV})$ . <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	36
387	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
386	Search for disappearing tracks in proton-proton collisions at $(\sqrt{s}=8) \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	35
385	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
384	Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	35
383	Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at $(\sqrt{s}=13) \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	35
382	Measurement of the $(\overline{\text{t}})$ production cross section in pp collisions at $(\sqrt{s}=7) \text{ TeV}$ using the kinematic properties of events with leptons and jets. <i>European Physical Journal C</i> , <b>2011</b> , 71, 1	4.2	35
381	Alignment of the CMS silicon tracker during commissioning with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03009-T03009	1	35
380	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $(\sqrt{s}=8) \text{ TeV}$ 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
379	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
378	Search for microscopic black holes in pp collisions at $(\sqrt{s} = \text{7 TeV})$ . <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	34
377	Search for heavy stable charged particles in pp collisions at $(\sqrt{s} = 7 \text{ TeV})$ . <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	34
376	Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03014-T03014	1	34
375	Search for decays of stopped long-lived particles produced in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 151	4.2	33
374	Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $(\sqrt{s}=8) \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	33
373	Search for a light charged Higgs boson decaying to $(\overline{\text{c}})$ in pp collisions at $(\sqrt{s}=8) \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-37	5.4	33
372	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
371	Search for resonances in the dilepton mass distribution in pp collisions at $(\sqrt{s} = 7) \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	32

370	Measurement of the Drell-Yan cross section in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	32
369	Observation of Two Excited $B_{c}^{+}$ States and Measurement of the $B_{c}^{+}(2S)$ Mass in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 132001	7.4	31
368	Performance and operation of the CMS electromagnetic calorimeter. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03010-T03010	1	31
367	Measurement of the ( $\overline{\text{tt}}$ ) 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
366	Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	30
365	Measurement of the top-quark mass in ( $\overline{\text{tt}}$ ) events with lepton+jets final states in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	30
364	Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at ( $\sqrt{s} = 7\text{--}8$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	30
363	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
362	Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or 3 b-quark jets in 7 TeV pp collisions using the variable $\cancel{E}_T$ . <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	29
361	Observation of $Y(1S)$ pair production in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	29
360	Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3060	4.2	29
359	Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3129	4.2	29
358	Performance of CMS muon reconstruction in cosmic-ray events. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03022-T03022		
357	Search for vector-like T and B quark pairs in final states with leptons at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	29
356	Search for heavy Majorana neutrinos in $e\bar{e}e\bar{e} + \text{jets}$ and $e\bar{e}\mu\bar{\mu} + \text{jets}$ events in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	28
355	Search for supersymmetry in events with b jets and missing transverse momentum at the LHC. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	28
354	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	28
353	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

352	Measurement of the Splitting Function in pp and Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 142302	7.4	27
351	Evidence for exclusive $\overline{B}W + W\overline{B}$ production and constraints on anomalous quartic gauge couplings in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	27
350	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
349	Performance of Glass Resistive Plate Chambers for a high-granularity semi-digital calorimeter. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P02001-P02001	1	27
348	Measurement of ( $\overline{B}B$ ) angular correlations based on secondary vertex reconstruction at ( $\sqrt{s} = 7, \text{TeV}$ ). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	27
347	Measurement of prompt and nonprompt $[B]$ production in $[B]$ and $[B]$ collisions at $[B]$ . <i>European Physical Journal C</i> , <b>2017</b> , 77, 269	4.2	26
346	Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	26
345	Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	26
344	Searches for supersymmetry using the $M_{T2}$ variable in hadronic events produced in pp collisions at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	26
343	Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at ( $\sqrt{s} = 7, \text{TeV}$ ). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	26
342	Measurement of the W-boson helicity in top-quark decays from ( $\overline{t}t$ ) production in lepton+jets events in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	25
341	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
340	Measurements of the $[B][B]$ production cross sections in the $[B]$ channel in proton-proton collisions at $[B]$ and $[B]$ and combined constraints on triple gauge couplings. <i>European Physical Journal C</i> , <b>2015</b> , 75, 511	4.2	25
339	Search for resonant ( $\overline{t}t$ ) production in lepton+jets events in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	25
338	Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks. <i>European Physical Journal C</i> , <b>2016</b> , 76, 371	4.2	25
337	Search for charged Higgs bosons in the $H\overline{B}B$ decay channel in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	24
336	Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at $[B]$ . <i>European Physical Journal C</i> , <b>2015</b> , 75, 325	4.2	24
335	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

334	Measurement of inclusive jet production and nuclear modifications in pPb collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 372	4.2	24
333	Jet and underlying event properties as a function of charged-particle multiplicity in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2674	4.2	24
332	Alignment of the CMS tracker with LHC and cosmic ray data. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, P06009-P06009	4.2	24
331	Measurement of the $Z/\bar{\nu} + b$ -jet cross section in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	24
330	Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	24
329	Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	24
328	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
327	Search for $W \rightarrow b$ decays in the lepton + jets final state in pp collisions at ( $\sqrt{s} = 8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	23
326	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
325	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
324	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
323	Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	22
322	Search for physics beyond the standard model in events with two leptons, jets, and missing transverse momentum in pp collisions at ( $\sqrt{s} = 8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	22
321	Measurement of the WZ production cross section in pp collisions at [Formula: see text] and 8[Formula: see text] and search for anomalous triple gauge couplings at [Formula: see text]. <i>European Physical Journal C</i> , <b>2017</b> , 77, 236	4.2	21
320	A search for new phenomena in pp collisions at [Formula: see text] in final states with missing transverse momentum and at least one jet using the [Formula: see text] variable. <i>European Physical Journal C</i> , <b>2017</b> , 77, 294	4.2	21
319	Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 66	4.2	21
318	Correlations between jets and charged particles 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
317	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



316	Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $(\sqrt{s}) = 7$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	21
315	Measurement of the top-quark mass in all-jets [Formula: see text] events in pp collisions at [Formula: see text] TeV. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2758	4.2	21
314	Measurement of the $(\overline{\text{t}}\text{t})$ production cross section in the $\text{t}\bar{\text{t}}$ jets channel in pp collisions at $(\sqrt{s}=7 \text{ TeV})$ . <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	21
313	Search for Low Mass Vector Resonances Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 111802	7.4	21
312	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
311	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
310	Search for a Higgs boson in the decay channel $H \rightarrow ZZ^* \rightarrow q(\overline{q}) \text{t}\bar{\text{t}}$ in pp collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	21
309	Inclusive b-hadron production cross section with muons in pp collisions at $(\sqrt{s} = 7; \text{TeV})$ . <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	21
308	Search for large extra dimensions in the diphoton final state at the Large Hadron Collider. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	21
307	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at $(\sqrt{s_{\text{NN}}}=2.76)$ TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	21
306	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
305	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	20
304	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
303	Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 140	4.2	20
302	Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	20
301	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
300	Search for anomalous single top quark production in association with a photon in pp collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	20
299	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 241802	7.4	20



298	Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	20
297	Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	20
296	Measurements of the [Formula: see text] production cross section in lepton+jets final states in pp collisions at 8 [Formula: see text] and ratio of 8 to 7 [Formula: see text] cross sections. <i>European Physical Journal C</i> , <b>2017</b> , 77, 15	4.2	19
295	Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	19
294	Search for resonant and nonresonant Higgs boson pair production in the ( $\overline{b}b\ell\nu\ell\nu$ ) 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	19
293	Search for massive WH resonances decaying into the [Formula: see text] final state at [Formula: see text] [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 237	4.2	19
292	Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	19
291	Search for massive resonances decaying into WW, WZ or ZZ bosons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	19
290	Search for third-generation scalar leptoquarks in the $t\bar{t}$ channel in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	19
289	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
288	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
287	Search for new physics in dijet angular distributions using proton-proton collisions at and constraints on dark matter and other models. <i>European Physical Journal C</i> , <b>2018</b> , 78, 789	4.2	19
286	Search for lepton flavour violating decays of the Higgs boson to $\tau\bar{\nu}$ and $e\bar{\nu}$ in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	19
285	Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 364	4.2	18
284	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
283	Observation of top quark pairs produced in association with a vector boson in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	18
282	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two $\tau$ leptons and two jets in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	18
281	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

280	Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	18
279	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	18
278	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
277	Search for ( $\overline{\text{t}}\text{H}$ ) production in the ( $\text{H}$ )to $\overline{\text{b}}\text{b}$ decay channel with leptonic ( $\overline{\text{t}}$ ) 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
276	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at = 13. <i>European Physical Journal C</i> , <b>2018</b> , 78, 291	4.2	17
275	Measurement of the inclusive jet cross section in pp collisions at ( $\sqrt{s}$ ) = 2.76, text {TeV}). <i>European Physical Journal C</i> , <b>2016</b> , 76, 1	4.2	17
274	Search for ( $\overline{\text{t}}$ ) resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	17
273	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
272	Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	17
271	Search for stopped long-lived particles produced in pp collisions at ( $\sqrt{s}$ ) = {text{7TeV}}. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	17
270	Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at ( $\sqrt{s}$ ) = 7 mathrm{TeV}. <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	17
269	Measurement of the inclusive Z cross section via decays to tau pairs in pp collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	17
268	Measurement of double-differential cross sections for top quark pair production in pp collisions at [Formula: see text][Formula: see text] and impact on parton distribution functions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 459	4.2	16
267	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
266	Search for new physics with the M T2 variable in all-jets final states produced in pp collisions at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
265	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\ell\ell$ leptons in pp collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
264	Measurement of WZ and ZZ production in pp collisions at [Formula: see text] in final states with b-tagged jets. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2973	4.2	16
263	Search for exotic resonances decaying into WZ/ZZ in pp collisions at ( $\sqrt{s}$ )=7 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	16

262	Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	16
261	Precise mapping of the magnetic field in the CMS barrel yoke using cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03021-T03021	1	16
260	Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	16
259	Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	16
258	Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	16
257	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
256	Measurements of ( $\overline{\sigma}$ ) differential cross sections in proton-proton collisions at ( $\sqrt{s}$ )=13 TeV using events containing two leptons. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	15
255	Measurements of the associated production of a Z boson and b jets in pp collisions at. <i>European Physical Journal C</i> , <b>2017</b> , 77, 751	4.2	15
254	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
253	Search for new particles decaying to a jet and an emerging jet. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	15
252	Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at ( $\sqrt{s}$ )=7 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	15
251	Search for supersymmetry in pp collisions at [Formula: see text] TeV in events with a single lepton, jets, and missing transverse momentum. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2404	4.2	15
250	Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	15
249	Search for standard model production of four top quarks in the lepton + jets channel in pp collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	15
248	Commissioning of the CMS experiment and the cosmic run at four tesla. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03001-T03001	1	15
247	Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s_{NN}}$ =5.02 TeV Using Isolated Photon-Tagged Jets. <i>Physical Review Letters</i> , <b>2018</b> , 121, 242301	7.4	15
246	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
245	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

244	Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	14
243	Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 460	4-2	14
242	Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	14
241	Measurement of the ( $\Lambda_{\text{b}}^0$ ) lifetime in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	14
240	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in the all-jet final state in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	14
239	Measurement of the ( $\overline{\text{t}}\text{t}$ ) 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
238	Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	14
237	Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	14
236	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two $\tau$ leptons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	14
235	Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	14
234	Search for supersymmetry in events with a $\tau$ lepton pair 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	14
233	Observation of proton-tagged, central (semi)exclusive production of high-mass lepton pairs in pp collisions at 13 TeV with the CMS-TOTEM precision proton spectrometer. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	14
232	Search for resonant ( $\overline{\text{t}}\text{t}$ ) 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
231	Measurement of the ratio of the production cross sections times branching fractions of $B \rightarrow J/\psi \mu^+ \mu^-$ and $B \rightarrow J/\psi \mu^+ \mu^-$ and $\mathcal{B}(\text{B} \rightarrow \text{C}^{\pm} \mu^{\mp}) / \mathcal{B}(\text{B} \rightarrow \text{C}^{\pm} \mu^{\mp}) / \mathcal{B}(\text{B} \rightarrow \text{C}^{\pm} \mu^{\mp})$ in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	13
230	Constraints on the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	13
229	Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 325	4-2	13
228	Measurement of exclusive $\phi$ photoproduction in ultraperipheral pPb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 702	4-2	13
227	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

226	Search for a fermiophobic Higgs boson in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	13
225	Measurement of the inclusive production cross sections for forward jets and for dijet events with one forward and one central jet in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	13
224	Measurement of the mass difference between top and antitop quarks. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	13
223	Measurement of ( $\bar{t}t$ ) normalised multi-differential cross sections in ( $pp$ ) collisions at ( $\sqrt{s}=13$ , {TeV}), and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	13
222	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
221	Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at ( $\sqrt{s_{\mathrm{N};\mathrm{N}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
220	Search for ( $\overline{t}t\mathrm{H}$ ) 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
219	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
218	Search for Narrow Resonances in the b-Tagged Dijet Mass Spectrum in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 201801	7.4	13
217	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
216	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
215	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
214	Suppression of Excited ? States Relative to the Ground State in Pb-Pb Collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 142301	7.4	12
213	Measurement of normalized differential ( $\overline{t}t$ ) cross sections in the dilepton channel from pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	12
212	Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	12
211	Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	12
210	Search for quark compositeness in dijet angular distributions from pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	12
209	Search for light resonances decaying into pairs of muons as a signal of new physics. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	12



208	Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	12
207	Studies of 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
206	Search for single production of vector-like quarks decaying to a b quark and a Higgs boson. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	12
205	Search for new physics in the monophoton 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	11
204	Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	11
203	Measurement of associated Z + charm production in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 287	4.2	11
202	Phenomenological MSSM interpretation of CMS searches in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	11
201	Measurement of jet multiplicity distributions in [Formula: see text] production in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3014	4.2	11
200	Observation of Top Quark Production in Proton-Nucleus Collisions. <i>Physical Review Letters</i> , <b>2017</b> , 119, 242001	7.4	11
199	Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	11
198	Search for new physics with dijet angular distributions in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	11
197	Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	11
196	Measurement of the underlying event activity in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV with the novel jet-area/median approach. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	11
195	Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	11
194	Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel in pp collisions at ( $\sqrt{s} = 7$ );{text{TeV}}). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	11
193	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
192	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
191	Charged-particle nuclear modification factors in XeXe collisions at ( $\sqrt{s_{\mathrm{NN}}}$ ) = 5.44 ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11



190	Search for $Z\bar{\nu}$ 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
189	Search for the decay of a Higgs boson in the $\bar{\nu}\nu$ channel in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
188	Search for beyond the standard model Higgs bosons decaying into a ( $\overline{\mathbf{b}}\mathbf{b}$ ) pair in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
187	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
186	Search for new neutral Higgs bosons through the ( $\mathbf{H}\rightarrow\mathbf{ZA}\rightarrow\{\ell\}^+\{\ell\}^-\overline{\mathbf{b}}\mathbf{b}$ ) process in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	10
185	A multi-dimensional search for new heavy resonances decaying to boosted $\tau\tau$ or boson pairs in the dijet final state at 13 TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 237	4.2	10
184	Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at ( $\sqrt{s}=8$ ) TeV using $\mathbf{H}\rightarrow\mathbf{WW}$ decays. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	10
183	Search for excited leptons in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	10
182	Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	10
181	Search for physics beyond the standard model in events with leptons, jets, and large transverse momentum imbalance in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2493	4.2	10
180	Measurements of jet charge with dijet events in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	10
179	Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	10
178	Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	10
177	Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	10
176	Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	10
175	Measurement of properties of ( $\mathbf{B}_s^0\rightarrow\mathbf{B}_s^0\mu\mu$ ) decays and search for $\mathbf{B}_s^0\rightarrow\mathbf{B}_s^0\mu\mu$ with the CMS experiment. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	10
174	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
173	Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	10

172	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
171	Measurement of associated production of a boson and a charm quark in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 269	4.2	9
170	Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	9
169	A search for the standard model Higgs boson decaying to charm quarks. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	9
168	Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	9
167	Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	9
166	Measurement of b hadron lifetimes in pp collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 457	4.2	9
165	Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at 13 TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 241801	7.4	9
164	Search for top quark partners with charge 5/3 in the same-sign dilepton and single-lepton final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	9
163	Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
162	Measurement of electroweak-induced production of $W\gamma$ with two jets in pp collisions at ( $\sqrt{s}=8$ ) TeV and constraints on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
161	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
160	Search for a light pseudoscalar Higgs boson in the boosted $\tau\tau$ final state in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	9
159	Search for lepton flavour violating decays of heavy resonances and quantum black holes to an $[e\mu]$ pair in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 317	4.2	9
158	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
157	Search for a singly produced third-generation scalar leptoquark decaying to a $\tau$ lepton and a bottom quark in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	9
156	Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
155	Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8

154	Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $\sqrt{s_{\text{NN}}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 152001	7.4	8
153	Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
152	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
151	Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at ( $\sqrt{s_{\text{NN}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	8
150	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
149	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
148	Search for single production of vector-like quarks decaying to a Z boson and a top or a bottom quark in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	8
147	Measurement of the top quark mass using single top quark events in proton-proton collisions at [Formula: see text] TeV. <i>European Physical Journal C</i> , <b>2017</b> , 77, 354	4.2	8
146	Measurement of the triple-differential dijet cross section in proton-proton collisions at and constraints on parton distribution functions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 746	4.2	8
145	Performance study of the CMS barrel resistive plate chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03017-T03017	1	8
144	Alignment of the CMS muon system with cosmic-ray and beam-halo muons. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03020-T03020	1	8
143	Search for electroweak production of a vector-like T quark using fully hadronic final states. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	8
142	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	8
141	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
140	Search for electroweak production of charginos in final states with two leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
139	Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	7
138	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
137	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

136	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
135	Search for supersymmetry in pp collisions at ( $\sqrt{s}$ )=13 TeV in the single-lepton final state using the sum of masses of large-radius jets. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	7
134	Measurement of top quark polarisation in t-channel single top quark production. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	7
133	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
132	Searches for $W^\pm$ bosons decaying to a top quark and a bottom quark in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	7
131	Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	7
130	Measurement of the $Z\gamma$ production cross section in pp collisions at 8 TeV and search for anomalous triple gauge boson couplings. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5-4	7
129	Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	7
128	Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	7
127	Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at $\sqrt{s}$ =13 TeV. <i>Physical Review Letters</i> , <b>2019</b> , 123, 231803	7-4	7
126	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
125	Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at ( $\sqrt{s}$ )=8 and 13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
124	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
123	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $Zq$ final states at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
122	Search for dark matter produced in association with a Higgs boson decaying to $\tau\bar{\tau}$ ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
121	Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state at ( $\sqrt{s}$ )=13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
120	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
119	Search for a Light Charged Higgs Boson Decaying to a W Boson and a CP-Odd Higgs Boson in Final States with $e\tau$ in Proton-Proton Collisions at $\sqrt{s}$ =13 TeV. <i>Physical Review Letters</i> , <b>2019</b> , 123, 131802	7-4	6

118	Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 132003	7.4	6
117	Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at ( $\sqrt{s}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	6
116	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
115	Measurement of electroweak production of a boson in association with two jets in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2020</b> , 80, 43	4.2	6
114	Constraints on the $\rho_{c1}$ versus $\rho_{c2}$ Polarizations in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 124, 162002	7.4	6
113	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\bar{\nu} \text{ and } e \nu$ proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	6
112	Measurement of dijet azimuthal decorrelation in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 536	4.2	6
111	Performance of the CMS drift tube chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03015-T03015		
110	Search for the associated production of the Higgs boson with a top-quark pair <b>2014</b> , 2014, 1		6
109	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
108	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
107	Search for new physics in top quark production in dilepton final states in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 886	4.2	6
106	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
105	Search for top squarks decaying via four-body or chargino-mediated modes in single-lepton 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	6
104	Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 221802	7.4	6
103	Search for a heavy resonance decaying into a Z boson and a vector boson in the ( $\bar{\nu} \text{ and } \nu$ ) final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
102	Measurement of the mass of the top quark in decays with a J/ $\psi$ meson in pp collisions at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	5
101	Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	5



100	Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	5
99	Comparison of the $Z/\bar{\nu} + \text{jets}$ to $\bar{\nu}$ jets cross sections in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5-4	5
98	Performance of CMS hadron calorimeter timing and synchronization using test beam, cosmic ray, and LHC beam data. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03013-T03013	1	5
97	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV <b>2011</b> , 2011, 1		5
96	Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	5
95	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
94	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
93	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
92	Search for resonances decaying to a pair of Higgs bosons in the $b(\overline{\text{b}})q(\overline{\text{q}})$ 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	5
91	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
90	Measurement of the groomed jet mass 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	5
89	Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	5
88	Measurement of the cross section in pp collisions at and validation of lepton analysis techniques. <i>European Physical Journal C</i> , <b>2018</b> , 78, 708	4-2	5
87	Search for a low-mass $\bar{\nu}$ resonance in association with a bottom quark in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	4
86	Search for the pair production of light top squarks in the $e\bar{\nu}$ 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
85	Search for nonresonant Higgs boson pair production in the ( $\text{b}\overline{\text{b}}\text{b}\overline{\text{b}}$ ) final state at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	4
84	Study of the underlying event in top quark pair production in collisions at 13. <i>European Physical Journal C</i> , <b>2019</b> , 79, 123	4-2	4
83	Distributions of topological observables in inclusive three- and four-jet events in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 302	4-2	4



82	Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 242	4.2	4
81	Pseudorapidity distributions of charged hadrons in proton-lead collisions at ( $\sqrt{s_{\mathrm{NN}}}=5.02$ ) and 8.16 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	4
80	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
79	Search for a $W'$ boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	4
78	Search for high-mass $Z$ resonances in $e^+e^-$ and $q\bar{q}$ final states in proton-proton collisions at ( $\sqrt{s}=8$ ) and 13 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	4
77	Search for CP violation in ( $\overline{t}$ ) production and decay in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	4
76	Offline calibration procedure of the CMS Drift Tube detectors. <i>Journal of Instrumentation</i> , <b>2009</b> , 4, P05002-P05002		
75	Performance of the CMS cathode strip chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03018-T03018	1	4
74	Aligning the CMS muon chambers with the muon alignment system during an extended cosmic ray run. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03019-T03019	1	4
73	Reconstruction of cosmic and beam-halo muons with the CMS detector. <i>European Physical Journal C</i> , <b>2008</b> , 56, 449-460	4.2	4
72	Measurement of differential cross sections and charge ratios for $s$ -channel single top quark production in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2020</b> , 80, 370	4.2	4
71	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
70	Observation of the $B_{\mathrm{s}}^0 \rightarrow X(3872)$ Decay. <i>Physical Review Letters</i> , <b>2020</b> , 125, 152001	7.4	4
69	Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	4
68	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
67	Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV via Higgs boson decays to leptons. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	3
66	Search for direct pair production of supersymmetric partners to the lepton in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2020</b> , 80, 189	4.2	3
65	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

64	Measurement of the inclusive ( $\overline{\text{t}}\text{t}$ ) 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
63	Search for ZZ resonances in the $2\ell\ell$ final state in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	3
62	Search for top quark partners with charge 5/3 in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	3
61	Study of hadronic event-shape variables in multijet final states in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	3
60	Measurement of the cross section for production of ( $\overline{\text{b}}\text{X}$ ) decaying to muons in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	3
59	Measurements of the ( $\text{p}\text{p}\rightarrow\text{Z}\text{Z}$ ) production cross section and the ( $\text{Z}\rightarrow 4\ell$ ) branching fraction, and constraints on anomalous triple gauge couplings at ( $\sqrt{s} = 13, \text{TeV}$ ) <b>2018</b> , 78, 1		3
58	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
57	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in the dilepton channel in pp collisions at ( $\sqrt{s} = 8$ TeV <b>2014</b> , 2014, 1		3
56	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
55	Investigation into the event-activity dependence of $\langle n_S \rangle$ relative production in proton-proton collisions at ( $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3
54	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
53	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
52	Event shape variables measured using multijet 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	3
51	Search for lepton-flavor violating decays of heavy resonances and quantum black holes to $e\ell$ 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	3
50	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
49	Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	2
48	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\chi_{\text{br}}^0$ meson. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
47	Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive $W\text{Z}$ 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

46	Measurement of differential cross sections in the kinematic angular variable $\theta^*$ for inclusive Z boson production in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	2
45	Search for dark matter particles in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV using the razor variables. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2
44	Search for $W \rightarrow \tau b$ in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2
43	Search for the production of an excited bottom quark decaying to $tW$ in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2
42	Inclusive search for supersymmetry in pp collisions at ( $\sqrt{s}=13$ ) TeV using razor variables and boosted object identification in zero and one lepton final states. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
41	Search for excited leptons in final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
40	Measurements of the $pp \rightarrow W\gamma$ and $pp \rightarrow Z\gamma$ cross sections and limits on anomalous quartic gauge couplings at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	2
39	Search for new phenomena with multiple charged leptons in proton-proton collisions at ( $\sqrt{s}=13$ ) (TeV). <i>European Physical Journal C</i> , <b>2017</b> , 77, 1	4.2	2
38	Calibration of the CMS drift tube chambers and measurement of the drift velocity with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03016-T03016	1	2
37	Fine synchronization of the CMS muon drift-tube local trigger using cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03004-T03004	1	2
36	CMS data processing workflows during an extended cosmic ray run. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03006-T03006	1	2
35	Search for supersymmetry using Higgs boson to diphoton decays at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
34	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
33	The production of isolated photons in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}$ ) = 5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
32	Bose-Einstein correlations of charged hadrons in proton-proton collisions at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
31	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
30	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
29	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

28	Search for the production of four top quarks in the single-lepton and opposite-sign dilepton final states in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
27	Search for W Boson Decays to Three Charged Pions. <i>Physical Review Letters</i> , <b>2019</b> , 122, 151802	7.4	1
26	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
25	Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
24	Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
23	Construction of a technological semi-digital hadronic calorimeter prototype for future linear collider experiments <b>2011</b> ,		1
22	Study of the $(\mathbf{B}^+ \rightarrow \mathbf{J}/\psi \overline{\Lambda} \mathbf{p})$ 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
21	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
20	Measurement of the cross section for $(\mathbf{t} \overline{\mathbf{t}})$ production with additional jets and b jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
19	Development and validation of HERWIG7 tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , <b>2021</b> , 81, 312	4.2	1
18	Observation of the $\mathbf{Z} \rightarrow \mathbf{b} \overline{\mathbf{b}}$ Decay in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 141801	7.4	1
17	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	1
16	Measurement of the top quark pair production cross section in dilepton final states containing one lepton in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	0
15	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
14	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	0
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	0
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	0
11	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	0

10	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	○
9	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	○
8	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	○
7	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	○
6	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	○
5	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	○
4	Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	
3	Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 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	