

# Alexander Tapper

## List of Publications by Citations

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534 papers	14,395 citations	57 h-index	93 g-index
561 ext. papers	16,946 ext. citations	4.9 avg, IF	1.36 L-index

#	Paper	IF	Citations
534	Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8[Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 212	4.2	399
533	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
532	Study of high-p T charged particle suppression in PbPb compared to pp collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76\sim\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	316
531	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
530	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 235	4.2	250
529	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
528	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
527	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
526	Suppression of non-prompt J/[psi]prompt J/[psi]and ( $\Upsilon$ )(1S) in PbPb collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	184
525	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
524	Search for top-squark pair production in the single-lepton final state in pp collisions at ( $\sqrt{s}=8\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	162
523	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	158
522	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
521	Combined measurements of Higgs boson couplings in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 421	4.2	153
520	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
519	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
518	Study of the inclusive production of charged pions, kaons, and protons in pp collisions at ( $\sqrt{s}=0.9, 2.76, \mathrm{and } 7\sim\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	133

517	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
516	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
515	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
514	A search for a doubly-charged Higgs boson in pp collisions at ( $\sqrt{s} = 7$ mbox{TeV}). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	111
513	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
512	Measurement of differential top-quark-pair production cross sections in pp collisions at ( $\sqrt{s} = 7$ mathrm{TeV}). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	102
511	Evidence for the 125 GeV Higgs boson decaying to a pair of $\ell$ leptons. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	101
510	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
509	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , <b>2010</b> , 70, 116541192 99	4.2	99
508	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
507	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
506	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
505	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
504	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at ( $\sqrt{s_{\text{NN}}} = 2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	87
503	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
502	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
501	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
500	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

499	Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at $(\sqrt{s}) = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	74
498	Searches for invisible decays of the Higgs boson in pp collisions at $(\sqrt{s}) = 7, 8$ , and 13 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	74
497	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
496	Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $(\sqrt{s_{\mathrm{NN}}}) = 2.76$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	73
495	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
494	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
493	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
492	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
491	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
490	J/ψ and ψ(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
489	Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $(\sqrt{s_{\mathrm{NN}}} = 5.02)$ (TeV). <i>European Physical Journal C</i> , <b>2014</b> , 74, 1	4-2	67
488	Search for anomalous production of multilepton events in pp collisions at $(\sqrt{s} = 7, \text{TeV})$ . <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	65
487	Charged-particle nuclear modification factors in PbPb and pPb collisions at $(\sqrt{s_{\mathrm{NN}}}=5.02)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	64
486	Measurement of the $(\overline{\mathrm{t}}\mathrm{t})$ 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
485	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
484	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
483	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
482	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

481	Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at ( $\sqrt{s_{\text{NN}}}$ ) = 2.76 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	60
480	Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	59
479	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
478	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
477	Study of exclusive two-photon production of $W+W\gamma$ 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
476	Measurement of the $W+W\gamma$ cross section in pp collisions at ( $\sqrt{s} = 7 \text{ TeV}$ ) and limits on anomalous $WW\gamma$ and $WWZ$ couplings. <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	56
475	Long-range and short-range dihadron angular correlations in central PbPb collisions at ( $\sqrt{s_{\text{NN}}}$ ) = 2.76 TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	56
474	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
473	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
472	Search for ( $\{B\}_{\text{tag}}^0 \rightarrow \pi^0 \pi^0$ ) and $B^0 \rightarrow \pi^0 \pi^0$ decays. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	52
471	Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 147	4.2	50
470	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
469	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
468	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
467	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 237	4.2	48
466	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
465	Measurement of the ( $t\bar{t}$ ) 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
464	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

463	Measurement of the relative prompt production rate of $t\bar{t}$ and $b\bar{b}$ in pp collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2012</b> , 72, 2251	4.2	46
462	Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	46
461	Search for new physics with jets and missing transverse momentum in pp collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	46
460	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
459	Exclusive $t\bar{t}l\bar{l}$ 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
458	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
457	Search for exclusive or semi-exclusive $t\bar{t}$ production and observation of exclusive and semi-exclusive $e+e\bar{l}$ production in pp collisions at $(\sqrt{s}=7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	45
456	Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2283	4.2	45
455	Measurement of the $X(3872)$ production cross section via decays to $J/\psi \eta$ in pp collisions at $(\sqrt{s}=7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	44
454	Search for heavy bottom-like quarks in 4.9 fb $^{-1}$ of pp collisions at $(\sqrt{s} = 7)$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	44
453	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
452	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
451	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
450	Search for leptonic decays of $W^\pm$ bosons in pp collisions at $(\sqrt{s} = \{7\})$ TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	43
449	Event activity dependence of $(Y)(n_S)$ 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
448	Search for additional neutral MSSM Higgs bosons in the $bb\tau\tau$ 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
447	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
446	Measurement of prompt $J/\psi$ pair production in pp collisions at $(\sqrt{s}) = 7$ TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	41



445	Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	4 <sup>1</sup>
444	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	4 <sup>1</sup>
443	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	4 <sup>0</sup>
442	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
441	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
44 <sup>0</sup>	Measurement of the ZZ production cross section and search for anomalous couplings in 200 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
439	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
438	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
437	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
436	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
435	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
434	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
433	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
432	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
431	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
43 <sup>0</sup>	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
429	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
428	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

427	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
426	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
425	Measurement of the top-quark mass in ( $\overline{\text{t}}\text{t}$ ) events with dilepton final states in pp collisions at ( $\sqrt{s}=7$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4-2	36
424	First measurement of the underlying event activity at the LHC with ( $\sqrt{s} = 0.9$ ) TeV. <i>European Physical Journal C</i> , <b>2010</b> , 70, 555-572	4-2	36
423	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
422	Search for disappearing tracks in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5-4	35
421	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
420	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
419	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 ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	35
418	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in pp collisions at ( $\sqrt{s}=7$ ) 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
417	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at ( $\sqrt{s}=8$ ) TeV and cross section ratios to 2.76 and 7 TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	34
416	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
415	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
414	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
413	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
412	Search for new physics in events with same-sign dileptons and b jets in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	33
411	Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5-4	33
410	Search for a light charged Higgs boson decaying to ( $\overline{\text{c}}\text{s}$ ) in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-37	5-4	33



409	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
408	Search for resonances in the dilepton mass distribution in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5-4	32
407	Search for supersymmetry in pp collisions at ( $\sqrt{s} = 7$ ) TeV in events with a single lepton, jets, and missing transverse momentum. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5-4	32
406	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
405	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in the e $\overline{\text{e}}$ 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
404	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
403	Inclusive b-jet production in pp collisions at ( $\sqrt{s} = 7$ TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	30
402	Observation of Z decays to four leptons with the CMS detector at the LHC. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	30
401	Measurement of the top-quark mass in ( $\overline{\text{t}}\text{t}$ ) 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
400	Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at ( $\sqrt{s} = 7$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4-2	30
399	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
398	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
397	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
396	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
395	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
394	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
393	Search for heavy Majorana neutrinos in e $\overline{\text{e}}$ + jets and e $\overline{\text{e}}$ + 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
392	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

391	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
390	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
389	Evidence for exclusive $\mathbb{W} + W$ 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
388	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
387	Measurement of ( $\overline{\text{B}}\text{B}$ ) 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
386	Measurement of prompt and nonprompt [Formula: see text] production in [Formula: see text] and [Formula: see text] collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2017</b> , 77, 269	4.2	26
385	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
384	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
383	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
382	The design, construction and performance of the MICE scintillating fibre trackers. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2011</b> , 659, 136-153	1.2	26
381	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
380	Measurement of the W-boson helicity in top-quark decays from ( $\overline{\text{t}}\text{t}$ ) 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
379	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
378	Measurements of the [Formula: see text][Formula: see text] production cross sections in the [Formula: see text] channel in proton-proton collisions at [Formula: see text] and [Formula: see text] and combined constraints on triple gauge couplings. <i>European Physical Journal C</i> , <b>2015</b> , 75, 511	4.2	25
377	Search for resonant ( $\overline{\text{t}}\text{t}$ ) 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
376	Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in collisions at 8. <i>European Physical Journal C</i> , <b>2018</b> , 78, 701	4.2	25
375	Search for charged Higgs bosons in the $H\mathbb{W} \rightarrow \mathbb{W}\mathbb{W}$ 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
374	Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 325	4.2	24

373	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
372	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
371	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
370	Measurement of the $Z/\gamma + b$ -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
369	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
368	Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow 2\ell 2\ell$ channel in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	24
367	Long-baseline neutrino oscillation physics potential of the DUNE experiment. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	24
366	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
365	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
364	Search for $W^\pm \rightarrow b$ 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
363	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
362	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\ell$ leptons at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
361	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
360	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
359	Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2017</b> , 77, 845	4.2	22
358	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
357	Measurement of Bose-Einstein correlations 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	22
356	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

355	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
354	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
353	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
352	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
351	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
350	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
349	Measurement of the ( $\mathrm{t}\bar{\mathrm{t}}$ ) production cross section in the $\ell\bar{\ell}$ jets channel in pp collisions at ( $\sqrt{s}=7$ mbox{TeV}). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	21
348	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
347	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
346	Search for a Higgs boson in the decay channel $H \rightarrow ZZ(*) \rightarrow q(\overline{q}) \ell\bar{\ell}$ in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	21
345	Inclusive b-hadron production cross section with muons in pp collisions at ( $\sqrt{s} = 7$ ; {TeV}). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	21
344	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
343	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	21
342	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
341	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
340	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
339	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
338	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 564	4.2	20

337	Measurement of the production cross section for pairs of isolated photons in pp collisions at ( $\sqrt{s} = 7$ ;TeV ). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	20
336	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
335	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
334	An FPGA based track finder for the L1 trigger of the CMS experiment at the High Luminosity LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P12019-P12019	1	20
333	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
332	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
331	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
330	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
329	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
328	Search for resonant and nonresonant Higgs boson pair production in the ( $\overline{\text{b}}\text{b}\ell\ell$ ) 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
327	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
326	Measurement of exclusive photoproduction from protons in Pb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 277	4.2	19
325	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
324	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
323	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
322	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
321	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
320	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



319	Search for lepton flavour violating decays of the Higgs boson to $\mu\mu$ and $e\mu$ in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	19
318	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
317	Study of Z production in PbPb and pp collisions at $(\sqrt{s_{\mathrm{NN}}}=2.76)$ TeV in the dimuon and dielectron decay channels. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	18
316	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
315	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two 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
314	. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	18
313	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
312	Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying leptons and two jets in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	18
311	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
310	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
309	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
308	Search for $(\overline{\mathrm{t}}\mathrm{t})\mathrm{H}$ production in the $\mathrm{H}\rightarrow\overline{\mathrm{b}}\mathrm{b}$ decay channel with leptonic $(\overline{\mathrm{t}}\mathrm{t})$ 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
307	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ . <i>European Physical Journal C</i> , <b>2018</b> , 78, 291	4.2	17
306	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
305	Search for $(\overline{\mathrm{t}}\mathrm{t})$ 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
304	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
303	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
302	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



301	Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at ( $\sqrt{s} = 7 \text{ TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	17
300	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
299	Measurement of double-differential cross sections for top quark pair production in pp collisions at [Formula: see text] and impact on parton distribution functions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 459	4.2	16
298	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
297	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
296	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
295	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
294	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
293	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
292	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
291	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
290	Supernova neutrino burst detection with the Deep Underground Neutrino Experiment. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	16
289	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
288	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
287	Measurements of ( $\overline{\text{t}}\text{t}$ ) 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
286	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
285	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
284	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

283	Measurement of the triple-differential cross section for photon + jets production in proton-proton collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	15
282	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
281	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
280	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
279	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
278	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
277	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
276	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
275	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
274	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
273	Measurement of the ( $\Lambda_{\mathrm{b}}^0$ ) lifetime in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	14
272	Measurement of the ( $\overline{\mathrm{t}}\mathrm{t}$ ) 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
271	Measurement of the ( $\overline{\mathrm{t}}\mathrm{t}$ ) 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
270	Prospects for beyond the Standard Model physics searches at the Deep Underground Neutrino Experiment: DUNE Collaboration. <i>European Physical Journal C</i> , <b>2021</b> , 81, 322	4-2	14
269	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
268	Evidence for Higgs boson decay to a pair of muons. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	14
267	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
266	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two 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

265	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
264	Search for supersymmetry in events with a dilepton 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
263	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
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261	Measurement of the ratio of the production cross sections times branching fractions of $B \rightarrow J/\psi \ell \ell$ and $B \rightarrow J/\psi \ell \ell$ and ( $\mathrm{mathcal{B}}\left(\mathrm{B}\right)_{\mathrm{c}}^{\mathrm{to}}\mathrm{mathrm{J}/\psi \ell \ell}/\mathrm{mathrm{J}/\psi \ell \ell}$ ) in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	13
260	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
259	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
258	Measurement of exclusive photoproduction in ultraperipheral pPb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 702	4.2	13
257	Measurement of the top quark mass in the all-jets final state at and combination with the lepton+jets channel. <i>European Physical Journal C</i> , <b>2019</b> , 79, 313	4.2	13
256	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
255	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
254	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
253	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
252	Measurement of ( $\overline{\mathrm{t}}\mathrm{t}$ ) normalised multi-differential cross sections in ( $\sqrt{s}=13$ , 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
251	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
250	Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at ( $\sqrt{s_{NN}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
249	Search for ( $\overline{\mathrm{t}}\mathrm{t}\mathrm{H}$ ) 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
248	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

247	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
246	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
245	Measurement of normalized differential ( $\overline{\sigma}(\mathbf{t})$ ) 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
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243	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
242	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
241	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
240	Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at ( $\sqrt{s}=7$ ;TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	12
239	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
238	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
237	Studies of $\eta$ and mesons including the observation of the decay in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 939	4.2	12
236	Electroweak production of two jets in association with a Z boson in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>European Physical Journal C</i> , <b>2018</b> , 78, 1	4.2	12
235	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
234	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
233	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
232	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
231	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
230	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

229	Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	11
228	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
227	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
226	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
225	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
224	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
223	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
222	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
221	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
220	Charged-particle nuclear modification factors in XeXe collisions at ( $\sqrt{s_{\text{NN}}} = 5.44$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
219	Search for Z resonances using leptonic and hadronic final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
218	Search for the decay of a Higgs boson in the $\ell\bar{\ell}$ 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
217	Search for beyond the standard model Higgs bosons decaying into a ( $\text{b}\overline{\text{b}}$ ) pair in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
216	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
215	Search for new neutral Higgs bosons through the ( $\text{H} \rightarrow \text{ZA} \rightarrow \ell\ell^+ \ell\ell^- \text{b}\overline{\text{b}}$ ) process in pp collisions at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	10
214	A multi-dimensional search for new heavy resonances decaying to boosted $\ell\ell$ , $\ell\gamma$ , 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
213	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
212	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



211	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 <sup>4.2</sup>	10
210	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
209	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
208	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
207	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
206	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
205	Measurement of properties of ( $\mathrm{B}_{\mathrm{s}}^0 \rightarrow \mu^+ \mu^-$ ) decays and search for $\mathrm{B}_0 \rightarrow \mu^+ \mu^-$ with the CMS experiment. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4 10
204	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
203	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
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200	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
199	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
198	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
197	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
196	Search for associated production of dark matter with a Higgs boson decaying to ( $\mathrm{b} \overline{\mathrm{b}}$ ) or $\mathrm{t} \overline{\mathrm{t}}$ at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4 9
195	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
194	Measurement of electroweak-induced production of $W$ 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



193	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
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190	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
189	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 697	4.2	9
188	Search for a singly produced third-generation scalar leptoquark decaying to a $\Upsilon$ 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
187	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
186	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
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184	Volume III. DUNE far detector technical coordination. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, T08009-T08009		8
183	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
182	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
181	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
180	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
179	Measurement of the top quark mass using single top quark events in proton-proton collisions at $[\text{Formula: see text}]$ TeV. <i>European Physical Journal C</i> , <b>2017</b> , 77, 354	4.2	8
178	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
177	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
176	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

175	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
174	Search for electroweak production of charginos in final states with two $\ell$ leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	7
173	Measurement of the production cross section of a $W\ell$ boson in association with two b jets in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2017</b> , 77, 92	4-2	7
172	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at ( $\sqrt{s}=13$ ,text {TeV} ). <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	7
171	Search for rare decays of $\eta$ and Higgs bosons to $\eta$ and a photon in proton-proton collisions at $\sqrt{s}=13$ . <i>European Physical Journal C</i> , <b>2019</b> , 79, 94	4-2	7
170	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
169	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
168	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
167	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
166	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
165	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
164	Jet properties in PbPb and pp collisions at ( $\sqrt{s_{NN}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
163	Measurement of the semileptonic ( $t\bar{t} \rightarrow \ell\bar{\ell}$ ) production cross section in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	7
162	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
161	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
160	Measurement of the $Z\ell\ell$ 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
159	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
158	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

157	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
156	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
155	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
154	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\ell q$ final states at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	7
153	Search for dark matter produced in association with a Higgs boson decaying to $\ell\bar{\nu} + \ell\nu$ at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	7
152	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
151	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
150	Search for single production of vector-like quarks decaying to a top quark and a boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 90	4.2	6
149	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
148	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
147	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
146	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\ell\bar{\nu} + \ell\nu$ in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	6
145	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
144	Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton + jets final state in pp collisions at ( $\sqrt{s} = 13$ ,text {TeV}). <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	6
143	Development and testing of an upgrade to the CMS level-1 calorimeter trigger. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, C01006-C01006	1	6
142	Search for the standard model Higgs boson produced in association with W and Z bosons in pp collisions at ( $\sqrt{s}=7$ )TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	6
141	Search for the associated production of the Higgs boson with a top-quark pair <b>2014</b> , 2014, 1		6
140	Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	6

139	Triggering on electrons, jets and tau leptons with the CMS upgraded calorimeter trigger for the LHC RUN II. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, C02008-C02008	1	6
138	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
137	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
136	Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 893	4.2	6
135	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
134	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
133	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
132	Search for a heavy resonance decaying into a Z boson and a vector boson in the ( $\nu\bar{\nu}\gamma\gamma$ ) final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
131	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
130	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
129	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
128	Comparison of the $Z/\gamma^* + \text{jets}$ to $\gamma^* + \text{jets}$ 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
127	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s}=0.9$ ) and 7 TeV <b>2011</b> , 2011, 1		5
126	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
125	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
124	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
123	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
122	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	5

121	Search for resonances decaying to a pair of Higgs bosons in the $b(\overline{\mathrm{b}})q(\overline{\mathrm{q}})$ 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
120	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
119	Measurement of the groomed jet mass in PbPb and pp collisions at $(\sqrt{s_{\mathrm{NN}}})=5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	5
118	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
117	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
116	Search for a low-mass $\chi$ 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
115	Search for the pair production of light top squarks in the $e\mu\chi$ 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
114	Search for nonresonant Higgs boson pair production in the $(b\overline{b}b\overline{b})$ final state at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	4
113	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
112	Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 20	4-2	4
111	Evidence for $(W)W$ production from double-parton interactions in proton-proton collisions at $(\sqrt{s} = 13, \text{TeV})$ . <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4-2	4
110	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
109	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
108	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
107	An FPGA-based track finder for the L1 trigger of the CMS experiment at the high luminosity LHC <b>2016</b> ,		4
106	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
105	Search for a heavy resonance decaying to a top quark and a vector-like top quark at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	4
104	The CMS Level-1 Calorimeter Trigger for the LHC Run II. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, C01065-C01065		4



103	Search for high-mass $Z\ell$ resonances in $e^+e^-$ and $t\bar{t}\ell\ell$ 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
102	Search for CP violation in ( $\overline{t}t$ ) 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
101	Measurement of differential cross sections and charge ratios for $\gamma$ -channel single top quark production in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2020</b> , 80, 370	4-2	4
100	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
99	Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
98	Search for new physics in top quark production with additional leptons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV using effective field theory. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
97	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
96	Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at ( $\sqrt{s}=13$ ~hbox{TeV}). <i>European Physical Journal C</i> , <b>2018</b> , 78, 1	4-2	4
95	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
94	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 $\ell\ell$ leptons. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	3
93	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
92	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
91	Measurement of the inclusive ( $\overline{t}t$ ) 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
90	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
89	Search for pair production of excited top quarks in the lepton + jets final state. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5-4	3
88	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
87	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
86	Measurement of the cross section for production of ( $\overline{b}X$ ) 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



85	Measurements of the $\sigma(\mathrm{p}\mathrm{p}\rightarrow\mathrm{Z}\mathrm{Z})$ production cross section and the $\sigma(\mathrm{Z}\rightarrow\mathrm{e}\mathrm{e})$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13\text{ TeV}$ ) <b>2018</b> , 78, 1		3
84	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
83	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	3
82	Dependence of inclusive jet production on the anti-kT distance parameter in pp collisions at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	3
81	Investigation into the event-activity dependence of $\eta$ relative production in proton-proton collisions at $\sqrt{s} = 7\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	3
80	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. <i>Computing and Software for Big Science</i> , <b>2020</b> , 4, 10	6	3
79	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	3
78	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	3
77	Event shape variables measured using multijet final states in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
76	Search for lepton-flavor violating decays of heavy resonances and quantum black holes to eFinal states in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
75	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
74	Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 305	4.2	2
73	Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
72	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\tau$ meson. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
71	Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive $W\gamma$ 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
70	Measurement of differential cross sections in the kinematic angular variable $\phi^*$ for inclusive Z boson production in pp collisions at $\sqrt{s}=8\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	2
69	Search for dark matter particles in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ using the razor variables. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2
68	Search for $W\gamma\rightarrow\tau\bar{\tau}$ in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2

67	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
66	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
65	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
64	Measurements of the $pp \rightarrow W\ell$ and $pp \rightarrow Z\ell\ell$ 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
63	The CMS Level-1 electron and photon trigger: for Run II of LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, C02014-C02014	1	2
62	Search for new phenomena with multiple charged leptons in proton-proton collisions at ( $\sqrt{s}=13$ ) (,text {TeV}). <i>European Physical Journal C</i> , <b>2017</b> , 77, 1	4-2	2
61	Performance of the CMS Global Calorimeter Trigger. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2010</b> , 623, 546-548 <sup>1,2</sup>		2
60	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $B\bar{B}$ final state at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2
59	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
58	The production of isolated photons in PbPb and pp collisions at ( $\sqrt{s_{\mathrm{NN}}}$ ) = 5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
57	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
56	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
55	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
54	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2
53	Angular analysis of the decay $B^+ \rightarrow K^{*}(892)^0 \pi^+$ in proton-proton collisions at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2
52	L1 track finding for a time multiplexed trigger. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2016</b> , 824, 268-269	1-2	2
51	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
50	Search for supersymmetry in events with a photon, jets, $\gamma$ -jets, and missing transverse momentum in proton-proton collisions at 13. <i>European Physical Journal C</i> , <b>2019</b> , 79, 444	4-2	1

49	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
48	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
47	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
46	Run 2 upgrades to the CMS Level-1 calorimeter trigger. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, C01051-C01051	1	1
45	A novel FPGA-based track reconstruction approach for the level-1 trigger of the CMS experiment at CERN <b>2017</b> ,		1
44	CMS level-1 upgrade calorimeter trigger prototype development. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, C02013-C02013	1	1
43	Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb <sup>-1</sup> of proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
42	Measurements of the $pp \rightarrow W\Xi$ and $pp \rightarrow Z\Xi$ cross sections at $(\sqrt{\mathrm{s}}) = 13$ TeV and limits on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
41	Study of the $(\mathrm{B}^+ \rightarrow \mathrm{J}/\psi \overline{\Lambda} \mathrm{p})$ 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
40	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
39	Measurement of the cross section for $(\mathrm{t} \overline{\mathrm{t}})$ 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
38	Measurement of differential cross sections for Z bosons produced in association with charm jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
37	Development and validation of HERWIG <sup>7</sup> tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , <b>2021</b> , 81, 312	4.2	1
36	Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 969	4.2	1
35	Search for the lepton flavor violating decay $\Xi \rightarrow \Xi \ell \ell$ in proton-proton collisions at $(\sqrt{\mathrm{s}}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
34	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	1
33	Search for a heavy resonance decaying to a top quark and a W boson at $\sqrt{s} = 13$ TeV in the fully hadronic final state. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
32	Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 773	4.2	0

31	Measurement of double-parton scattering in inclusive production of four jets with low 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	o
30	Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	o
29	Measurement of single-diffractive dijet production in proton-proton collisions at with the CMS and TOTEM experiments. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1164	4.2	o
28	Observation of $t\bar{t}$ production in the single-lepton channel in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
27	Measurement of b jet shapes in proton-proton collisions at $(\sqrt{s}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
26	Study of Drell-Yan dimuon production in proton-lead collisions at $(\sqrt{s_{\mathrm{NN}}}) = 8.16$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
25	In-medium modification of dijets in PbPb collisions at $(\sqrt{s_{\mathrm{NN}}}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
24	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	o
23	Search for a heavy vector resonance decaying to a lepton and a Higgs boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 688	4.2	o
22	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	o
21	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	o
20	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	o
19	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	o
18	Measurement of the inclusive and differential $t\bar{t}$ cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
17	Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
16	Probing effective field theory operators in the associated production of top quarks with a Z boson in multilepton final states at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	o
15	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	o
14	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	o

13	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	○
12	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	○
11	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	○
10	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	○
9	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	
8	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	
7	Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P05002-P05002	1	
6	Measurements of the differential cross sections of the production of Z + jets and $\bar{\chi}_1^0$ jets and of Z boson emission collinear with a jet in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	
5	Measurement of the Z boson differential production cross section using its invisible decay mode ( $Z \rightarrow \bar{\nu} \nu$ ) in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	
4	The CMS Level-1 trigger for LHC Run II. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, C02040-C02040	1	
3	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	
2	Measurement of prompt open-charm production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	
1	Measurement of the inclusive $\sigma(\bar{t}t)$ 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	