

# Edgar Carrera

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2805583/edgar-carrera-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

586  
papers

16,731  
citations

58  
h-index

102  
g-index

620  
ext. papers

20,143  
ext. citations

4.9  
avg, IF

6.52  
L-index

#	Paper	IF	Citations
586	Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s}=7$ and 8 TeV with the ATLAS and CMS Experiments. <i>Physical Review Letters</i> , <b>2015</b> , 114, 191803	7.4	709
585	Determination of jet energy calibration and transverse momentum resolution in CMS. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P11002-P11002	1	463
584	Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P10002-P10002	1	398
583	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
582	Identification of b-quark jets with the CMS experiment. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P04013-P04013		376
581	Observation of the rare $B(s)(0) \rightarrow \mu^+ \mu^-$ decay from the combined analysis of CMS and LHCb data. <i>Nature</i> , <b>2015</b> , 522, 68-72	50.4	326
580	Study of high- $p_T$ charged particle suppression in PbPb compared to pp collisions at ( $\sqrt{s_{\text{NN}}}=2.76 \sim \text{TeV}$ ). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	316
579	Description and performance of track and primary-vertex reconstruction with the CMS tracker. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, P10009-P10009	1	279
578	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 235	4.2	250
577	Particle-flow reconstruction and global event description with the CMS detector. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P10003-P10003	1	234
576	Measurement of the $B_s(0) \rightarrow \mu^+ \mu^-$ branching fraction and search for $B(0) \rightarrow \mu^+ \mu^-$ with the CMS experiment. <i>Physical Review Letters</i> , <b>2013</b> , 111, 101804	7.4	220
575	Search for supersymmetry at the LHC in events with jets and missing transverse energy. <i>Physical Review Letters</i> , <b>2011</b> , 107, 221804	7.4	188
574	Suppression of non-prompt $J/\psi$ and $(\Upsilon)(1S)$ in PbPb collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	184
573	Observation of sequential $\psi$ suppression in PbPb collisions. <i>Physical Review Letters</i> , <b>2012</b> , 109, 222301	7.4	172
572	Evidence for collectivity in pp collisions at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 765, 193-220	4.2	171
571	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ mTeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	158
570	Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , <b>2019</b> , 79, 421	4.2	153

569	Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P05011-P05011	1	152
568	Performance of photon reconstruction and identification with the CMS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P08010-P08010	1	141
567	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
566	Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P06015-P06015	1	118
565	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
564	Search for dijet resonances in 7 TeV pp collisions at CMS. <i>Physical Review Letters</i> , <b>2010</b> , 105, 211801	7.4	116
563	Search for dark matter and large extra dimensions in pp collisions yielding a photon and missing transverse energy. <i>Physical Review Letters</i> , <b>2012</b> , 108, 261803	7.4	116
562	Energy calibration and resolution of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P09009-P09009	1	111
561	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
560	CMS tracking performance results from early LHC operation. <i>European Physical Journal C</i> , <b>2010</b> , 70, 116541-1192	9.9	99
559	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
558	Observation of $t\bar{t}$ Production. <i>Physical Review Letters</i> , <b>2018</b> , 120, 231801	7.4	96
557	Missing transverse energy performance of the CMS detector. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P09001-P09001	9.9	94
556	Measurement of Long-Range Near-Side Two-Particle Angular Correlations in pp Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , <b>2016</b> , 116, 172302	7.4	90
555	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
554	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at ( $\sqrt{s_{NN}} = 2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	87
553	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 793, 520-551	4.2	86
552	Performance of the CMS missing transverse momentum reconstruction in pp data at $\sqrt{s} = 8$ TeV. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P02006-P02006	1	84

551	Performance of $\bar{b}$ -lepton reconstruction and identification in CMS. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P01001-P01001	1	81
550	Observation of Higgs Boson Decay to Bottom Quarks. <i>Physical Review Letters</i> , <b>2018</b> , 121, 121801	7-4	79
549	Observation of the Higgs boson decay to a pair of $\mu$ leptons with the CMS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 283-316	4-2	78
548	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
547	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
546	Searches for new physics using the $t\bar{t}$ invariant mass distribution in pp collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2013</b> , 111, 211804	7-4	76
545	Reconstruction and identification of $\mu$ lepton decays to hadrons and $B\tau$ CMS. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P01019-P01019	1	75
544	Search for dijet resonances in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter and other models. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 769, 520-542	4-2	74
543	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
542	Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for the Search for the Chiral Magnetic Effect. <i>Physical Review Letters</i> , <b>2017</b> , 118, 122301	7-4	72
541	A new boson with a mass of 125 GeV observed with the CMS experiment at the Large Hadron Collider. <i>Science</i> , <b>2012</b> , 338, 1569-75	33-3	71
540	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
539	$J/\psi$ and $\psi(2S)$ production in pp collisions at ( $\sqrt{s} = 7$ {text{TeV}}). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	69
538	Study of Z Boson Production in PbPb Collisions at $\sqrt{NN}=2.76$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 106, 212301	7-4	66
537	Charged-particle nuclear modification factors in PbPb and pPb collisions at ( $\sqrt{s_{\mathrm{N};\mathrm{N}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	64
536	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
535	Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 221801	7-4	62
534	Observation of the associated production of a single top quark and a W boson in pp collisions at $\sqrt{s} = 8$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 112, 231802	7-4	62

533	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
532	Search for Resonant Production of High-Mass Photon Pairs in Proton-Proton Collisions at $\sqrt{s}=8$ and 13 TeV. <i>Physical Review Letters</i> , <b>2016</b> , 117, 051802	7.4	61
531	Nuclear modification factor of D0 mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 782, 474-496	4.2	61
530	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
529	Search for top-quark partners with charge 5/3 in the same-sign dilepton final state. <i>Physical Review Letters</i> , <b>2014</b> , 112, 171801	7.4	58
528	Suppression of $\chi(1S)$ , $\chi(2S)$ , and $\chi(3S)$ quarkonium states in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 770, 357-379	4.2	57
527	Search for Narrow Resonances in Dijet Final States at $\sqrt{s}=8$ TeV with the Novel CMS Technique of Data Scouting. <i>Physical Review Letters</i> , <b>2016</b> , 117, 031802	7.4	57
526	Observation of a new $\Lambda$ baryon. <i>Physical Review Letters</i> , <b>2012</b> , 108, 252002	7.4	57
525	Long-range and short-range dihadron angular correlations in central PbPb collisions at ( $\sqrt{s_{NN}}$ ) = 2.76 TeV. <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	56
524	Search for high-mass diphoton resonances in proton-proton collisions at 13 TeV and combination with 8 TeV search. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 767, 147-170	4.2	55
523	Measurement of the pseudorapidity and centrality dependence of the transverse energy density in Pb-Pb collisions at ( $\sqrt{s_{NN}}$ )=2.76 TeV. <i>Physical Review Letters</i> , <b>2012</b> , 109, 152303	7.4	55
522	Search for long-lived charged particles in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	55
521	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
520	Search for signatures of extra dimensions in the diphoton mass spectrum at the large hadron collider. <i>Physical Review Letters</i> , <b>2012</b> , 108, 111801	7.4	53
519	Search for new physics in final states with an energetic jet or a hadronically decaying W or Z boson and transverse momentum imbalance at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	51
518	Search for a light pseudoscalar Higgs boson in the dimuon decay channel in pp collisions at $\sqrt{s}=7$ TeV. <i>Physical Review Letters</i> , <b>2012</b> , 109, 121801	7.4	51
517	Search for narrow resonances in dilepton mass spectra in proton-proton collisions at $\sqrt{s}=13$ TeV and combination with 8 TeV data. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 768, 57-80	4.2	50
516	Search for supersymmetry in multijet events with missing transverse momentum in proton-proton collisions at 13 TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	50

515	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
514	Observation of Electroweak Production of Same-Sign W Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 081801	7.4	50
513	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
512	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
511	Measurement of the ( $\bar{t}t$ ) 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
510	Measurement of the $B_0$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 106, 252001	7.4	48
509	Evidence for the Higgs boson decay to a bottom quark-antiquark pair. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 501-532	4.2	47
508	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
507	Search for flavor-changing neutral currents in top-quark decays $t \rightarrow b q$ in pp collisions at $\sqrt{s} = 8$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 112, 171802	7.4	46
506	Measurement of the relative prompt production rate of and in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2012</b> , 72, 2251	4.2	46
505	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
504	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
503	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
502	Exclusive $\bar{t}t$ 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
501	Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2283	4.2	45
500	Search for supersymmetry in pp collisions at 7 TeV in events with two photons and missing transverse energy. <i>Physical Review Letters</i> , <b>2011</b> , 106, 211802	7.4	45
499	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
498	Search for $B(s)0 \rightarrow \bar{t}t$ and $B(0) \rightarrow \bar{t}t$ decays in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , <b>2011</b> , 107, 191802	7.4	44

497	Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at 8 TeV. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	44
496	Measurement of angular parameters from the decay $B_0 \rightarrow K^* \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s}=8\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 781, 517-541 <sup>2</sup>	4.1	44
495	Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	42
494	Search for additional neutral MSSM Higgs bosons in the $\mu\mu$ 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
493	Measurement of differential cross sections for top quark pair production using the lepton+jets final state in proton-proton collisions at 13 TeV. <i>Physical Review D</i> , <b>2017</b> , 95,	4.9	41
492	Measurement of the inelastic proton-proton cross section at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	41
491	Measurement of nuclear modification factors of $\rho(1S)$ , $\rho(2S)$ , and $\rho(3S)$ mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 790, 270-293	4.2	40
490	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	40
489	Constraints on the chiral magnetic effect using charge-dependent azimuthal correlations in pPb and PbPb collisions at the CERN Large Hadron Collider. <i>Physical Review C</i> , <b>2018</b> , 97,	2.7	40
488	Measurement of inclusive jet cross sections in pp and PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physical Review C</i> , <b>2017</b> , 96,	2.7	39
487	Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s}=13$ TeV using the CMS detector. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P07004-P07004	1	39
486	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
485	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
484	Measurement of Prompt $D^0$ Meson Azimuthal Anisotropy in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 202301	7.4	39
483	Measurement of prompt $\rho(2S)$ to $J/\psi$ yield ratios in Pb-Pb and p-p collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physical Review Letters</i> , <b>2014</b> , 113, 262301	7.4	38
482	Search for top squark and Higgsino production using diphoton Higgs boson decays. <i>Physical Review Letters</i> , <b>2014</b> , 112, 161802	7.4	38
481	Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at ( $\sqrt{s}=7$ ; $\sqrt{s_{NN}}=7$ ; $\sqrt{s_{NN}}=7$ ). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	38
480	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

479	Measurement of the $B^{\{\boxplus\}}$ Meson Nuclear Modification Factor in Pb-Pb Collisions at $\sqrt{s_{\{\text{NN}\}}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 152301	7-4	37
478	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
477	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
476	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
475	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
474	Search for the X(5568) State Decaying into $B_{\{s\}}^{\{0\}}\{\boxplus\}$ in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 202005	7-4	36
473	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
472	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
471	Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at $\sqrt{s_{\text{NN}}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 797, 134826	4-2	35
470	Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 121803	7-4	35
469	Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity p+Pb Collisions at $\sqrt{s_{\{\text{NN}\}}}=8.16$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 082301	7-4	35
468	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
467	Measurement of the ( $\text{tbar}\{\text{t}\}$ ) 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
466	Alignment of the CMS silicon tracker during commissioning with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03009-T03009	1	35
465	Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 778, 101-127	4-2	35
464	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
463	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
462	Search for microscopic black holes in pp collisions at ( $\sqrt{s} =$ {text{7TeV}} ). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	34



461	Search for heavy stable charged particles in pp collisions at ( $\sqrt{s} = 7$ TeV). <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5-4	34
460	Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03014-T03014	1	34
459	Search for new physics in events with two soft oppositely charged leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 782, 440-467	4-2	34
458	Measurement of charged pion, kaon, and proton production in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4-9	33
457	Cross section measurement of t-channel single top quark production in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 752-776	4-2	32
456	Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 775, 1-24	4-2	32
455	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
454	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
453	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
452	Observation of Two Excited $B_{c}^{+}$ States and Measurement of the $B_{c}^{+}(2S)$ Mass in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 132001	7-4	31
451	Performance and operation of the CMS electromagnetic calorimeter. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03010-T03010	1	31
450	Inclusive Search for a Highly Boosted Higgs Boson Decaying to a Bottom Quark-Antiquark Pair. <i>Physical Review Letters</i> , <b>2018</b> , 120, 071802	7-4	30
449	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section in the e $\bar{\nu}$ 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
448	Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 758, 152-180	4-2	30
447	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
446	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
445	Search for an L $\bar{L}$ gauge boson using $Z \rightarrow \mu\bar{\mu}$ events in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 792, 345-368	4-2	29
444	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

443	Search for pair production of vector-like quarks in the $b\bar{W}W$ channel from proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 82-106	4.2	29
442	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
441	Measurement of vector boson scattering and constraints on anomalous quartic couplings from events with four leptons and two jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 774, 682-705	4.2	29
440	Performance of CMS muon reconstruction in cosmic-ray events. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03022-T03022		
439	Performance of reconstruction and identification of $\tau$ leptons decaying to hadrons and $\nu_{\tau}$ in pp collisions at $\sqrt{s}=13\text{TeV}$ . <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P10005-P10005	1	29
438	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
437	Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physical Review Letters</i> , <b>2017</b> , 119, 141802	7.4	28
436	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
435	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two b quarks and two $\tau$ leptons in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 785, 462-488	4.2	28
434	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
433	Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 791, 96-129	4.2	27
432	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
431	Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in pp and p+Pb Collisions at the LHC. <i>Physical Review Letters</i> , <b>2018</b> , 120, 092301	7.4	27
430	Measurement of the Splitting Function in pp and Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ . <i>Physical Review Letters</i> , <b>2018</b> , 120, 142302	7.4	27
429	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $(\sqrt{s}=7;\text{TeV})$ . <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	27
428	Measurement of $(\overline{B}B)$ angular correlations based on secondary vertex reconstruction at $(\sqrt{s}=7,\{\text{TeV}\})$ . <i>Journal of High Energy Physics</i> , <b>2011</b> , 2011, 1	5.4	27
427	Azimuthal anisotropy of charged particles with transverse momentum up to $100\text{GeV}/c$ in PbPb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 776, 195-216	4.2	27
426	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

425	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	26
424	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
423	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
422	Constraints on models of scalar and vector leptoquarks decaying to a quark and a neutrino at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	26
421	A measurement of the Higgs boson mass in the diphoton decay channel. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 805, 135425	4.2	25
420	Combination of searches for heavy resonances decaying to $WW$ , $WZ$ , $ZZ$ , $WH$ , and $ZH$ boson pairs in proton-proton collisions at $s=8$ and 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 774, 533-558	4.2	25
419	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
418	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
417	Search for charged Higgs bosons in the $H \rightarrow H \rightarrow \tau\tau$ 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
416	Search for supersymmetric partners of electrons and muons in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 790, 140-166	4.2	24
415	Search for long-lived particles decaying into displaced jets in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	24
414	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
413	Search for single production of a vector-like T quark decaying to a Z boson and a top quark in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 781, 574-600	4.2	24
412	Search for heavy gauge $W'$ bosons in events with an energetic lepton and large missing transverse momentum at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 770, 278-301	4.2	24
411	Alignment of the CMS tracker with LHC and cosmic ray data. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, P06009-P06009	4.2	24
410	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
409	Search for Higgs boson pair production in the $Bb\gamma$ final state in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 788, 7-36	4.2	24
408	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

407	Search for Dark Matter and Supersymmetry with a Compressed Mass Spectrum in the Vector Boson Fusion Topology in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 118, 021802	7.4	23
406	Multiplicity and rapidity dependence of strange hadron production in pp, pPb, and PbPb collisions at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 768, 103-129	4.2	23
405	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
404	Search for Evidence of the Type-III Seesaw Mechanism in Multilepton Final States in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 221802	7.4	23
403	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
402	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\tau$ leptons at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
401	Measurement of the WZ production cross section in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 766, 268-290	4.2	22
400	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
399	Measurement of the cross section for electroweak production of $Z\tau\tau$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 770, 380-402	4.2	22
398	Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 021801	7.4	22
397	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
396	Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark final state in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 781, 244-269	4.2	22
395	Study of Jet Quenching with Z+jet Correlations in Pb-Pb and pp Collisions at $\sqrt{s}_{NN}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 082301	7.4	22
394	Search for anomalous couplings in boosted WW/WZ- $\tau\tau$ production in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 21-42	4.2	22
393	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
392	Measurement of the ZZ production cross section and Z $\rightarrow \tau\tau$ branching fraction in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 763, 280-303	4.2	22
391	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
390	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

389	Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 793, 320-347	4.2	21
388	Study of jet quenching with isolated-photon+jet correlations in PbPb and pp collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 785, 14-39	4.2	21
387	Search for Low Mass Vector Resonances Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 119, 111802	7.4	21
386	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
385	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
384	Search for a Higgs boson in the decay channel $H \rightarrow ZZ^{(*)} \rightarrow q\bar{q}$ in pp collisions at ( $\sqrt{s} = 7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5.4	21
383	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
382	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
381	Measurement of the integrated and differential $t\bar{t}$ production cross sections for high-pT top quarks in pp collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	21
380	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
379	Measurement of quarkonium production cross sections in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 251-272	4.2	20
378	Search for massive resonances decaying into WW, WZ, ZZ, qW, and qZ with dijet final states at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	20
377	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
376	Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton+jets events from pp collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	20
375	Search for new long-lived particles at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 432-454	4.2	20
374	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
373	Search for pair production of second-generation leptoquarks at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	20
372	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

371	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
370	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 241802	7.4	20
369	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
368	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
367	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
366	Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 795, 281-307	4.2	19
365	Study of excited $B_0$ states decaying to $B_0\pi\pi$ in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 803, 135345	4.2	19
364	Search for resonant and nonresonant Higgs boson pair production in the ( $\overline{b}b\ell\ell$ ) 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
363	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
362	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
361	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
360	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
359	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
358	Search for lepton flavour violating decays of the Higgs boson to $\mu\tau$ and $e\tau$ in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	19
357	Measurement and interpretation of differential cross sections for Higgs boson production at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 792, 369-396	4.2	18
356	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
355	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P06005-P06005	1	18
354	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

353	Relative Modification of Prompt $\mathbb{Q}S$ and $J/\psi$ Yields from pp to PbPb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2017</b> , 118, 162301	7.4	18
352	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
351	Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying $\mathbb{L}$ 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
350	Search for pair production of vectorlike quarks in the fully hadronic final state. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	18
349	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
348	Non-Gaussian elliptic-flow fluctuations in PbPb collisions at $s_{NN}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 789, 643-665	4.2	17
347	Search for ( $\overline{\mathbb{H}}\mathbb{H}$ ) production in the ( $\mathbb{H}$ to $\overline{\mathbb{b}}\mathbb{b}$ ) decay channel with leptonic ( $\overline{\mathbb{H}}\mathbb{H}$ ) 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
346	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
345	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two muons and two b quarks in pp collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 795, 398-423	4.2	17
344	Search for ( $\overline{\mathbb{H}}\mathbb{H}$ ) 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
343	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
342	Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at ( $\sqrt{s}=7$ TeV). <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	17
341	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
340	Measurement of the W boson helicity fractions in the decays of top quark pairs to lepton + jets final states produced in pp collisions at $\sqrt{s}=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 762, 512-534	4.2	17
339	Measurement of double-differential cross sections for top quark pair production in pp collisions at [Formula: see text][Formula: see text] and impact on parton distribution functions. <i>European Physical Journal C</i> , <b>2017</b> , 77, 459	4.2	16
338	A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 796, 131-154	4.2	16
337	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
336	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

335	Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 798, 134985	4.2	16
334	Precise mapping of the magnetic field in the CMS barrel yoke using cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03021-T03021	1	16
333	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
332	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
331	Observation of the $\chi_{b1}(3P)$ and $\chi_{b2}(3P)$ and Measurement of their Masses. <i>Physical Review Letters</i> , <b>2018</b> , 121, 092002	7.4	16
330	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
329	Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	16
328	Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $\sqrt{s}=8$ TeV using the $\cancel{E}_T$ variable. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 767, 403-430	4.2	15
327	Measurement of the differential cross sections for the associated production of a W boson and jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	15
326	Search for a $W\tau$ boson decaying to a $\tau$ lepton and a neutrino in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 792, 107-131	4.2	15
325	Measurements of $(\overline{\text{t}})$ 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
324	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
323	Bose-Einstein correlations in pp, pPb, and PbPb collisions at $\sqrt{s_{NN}}=0.9$ TeV. <i>Physical Review C</i> , <b>2018</b> , 97,	2.7	15
322	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
321	Search for pair production of first-generation scalar leptoquarks at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	15
320	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 797, 134876	4.2	15
319	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
318	Measurement of the differential inclusive B+ hadron cross sections in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 771, 435-456	4.2	15



317	Commissioning of the CMS experiment and the cosmic run at four tesla. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03001-T03001	1	15
316	Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 800, 135087	4.2	15
315	Measurements of $t\bar{t}\gamma\gamma$ Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel. <i>Physical Review Letters</i> , <b>2020</b> , 125, 061801	7.4	15
314	Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02\text{ TeV}$ Using Isolated Photon-Tagged Jets. <i>Physical Review Letters</i> , <b>2018</b> , 121, 242301	7.4	15
313	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
312	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
311	Observation of prompt J/ψ meson elliptic flow in high-multiplicity pPb collisions at $\sqrt{s_{NN}}=8.16\text{ TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 791, 172-194	4.2	14
310	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
309	Pileup mitigation at CMS in 13 TeV data. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P09018-P09018	1	14
308	Search for disappearing tracks in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 806, 135502	4.2	14
307	Search for heavy resonances decaying to a top quark and a bottom quark in the lepton+jets final state in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 777, 39-63	4.2	14
306	Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{NN}}=5.44\text{ TeV}$ . <i>Physical Review C</i> , <b>2019</b> , 100,	2.7	14
305	Measurements of the charm jet cross section and nuclear modification factor in pPb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 306-329	4.2	14
304	Search for Higgs boson pair production in the $b\bar{b}$ final state in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	14
303	Measurement of the ( $\overline{\text{t}}\text{t}$ ) production cross section using events with one lepton and at least one jet in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	14
302	Measurements of production cross sections of WZ and same-sign WW boson pairs in association with two jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 809, 135710	4.2	14
301	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
300	Search for vectorlike leptons in multilepton final states in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	14

299	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
298	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two $\tau$ leptons in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	14
297	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
296	Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	14
295	Search for supersymmetry in events with a $\tau$ lepton pair and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	14
294	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
293	Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos, and b quarks. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 768, 137-162	4.2	13
292	Search for resonant ( $\overline{\text{t}}\text{t}$ ) production in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	13
291	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
290	Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	13
289	Measurement of exclusive $\tau$ photoproduction in ultraperipheral pPb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 702	4.2	13
288	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
287	Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at ( $\sqrt{s_{\text{N};\text{N}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
286	Measurement of the top quark polarization and $t\bar{t}$ spin correlations using dilepton final states in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	13
285	Search for ( $\overline{\text{t}}\text{t}\text{H}$ ) production in the all-jet final state in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	13
284	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
283	Search for Narrow Resonances in the b-Tagged Dijet Mass Spectrum in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 201801	7.4	13
282	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

281	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
280	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 124, 131802	7.4	12
279	Suppression of Excited $\chi$ States Relative to the Ground State in Pb-Pb Collisions at $\sqrt{s}_{NN}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 120, 142301	7.4	12
278	Measurements of $t\bar{t}$ cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 776, 355-378	4.2	12
277	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
276	Principal-component analysis of two-particle azimuthal correlations in PbPb and pPb collisions at CMS. <i>Physical Review C</i> , <b>2017</b> , 96,	2.7	12
275	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
274	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
273	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
272	Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	12
271	Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	12
270	Measurement of jet substructure observables in $t\bar{t}$ events from proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	12
269	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
268	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
267	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
266	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
265	Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 778, 263-291	4.2	12
264	Search for R-parity violating supersymmetry with displaced vertices in proton-proton collisions at $s=8$ TeV. <i>Physical Review D</i> , <b>2017</b> , 95,	4.9	11

263	Search for single production of a heavy vector-like T quark decaying to a Higgs boson and a top quark with a lepton and jets in the final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 771, 80-105	4.2	11
262	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
261	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
260	Measurement of the associated production of a single top quark and a Z boson in pp collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 358-384	4.2	11
259	Search for MSSM Higgs bosons decaying to $\mu\mu$ in proton-proton collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 798, 134992	4.2	11
258	Search for single production of vector-like quarks decaying into a b quark and a W boson in proton-proton collisions at $s=13\text{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 634-656	4.2	11
257	Observation of Top Quark Production in Proton-Nucleus Collisions. <i>Physical Review Letters</i> , <b>2017</b> , 119, 242001	7.4	11
256	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
255	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
254	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
253	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
252	Search for the standard model Higgs boson in the $H \rightarrow Z \gamma \gamma$ 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
251	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
250	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
249	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P05014	1	11
248	Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to lepton pairs. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	11
247	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
246	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

245	Search for the decay of a Higgs boson in the $\tau\tau$ 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
244	Search for beyond the standard model Higgs bosons decaying into a $(\overline{b}b)$ pair in pp collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
243	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
242	A multi-dimensional search for new heavy resonances decaying to boosted $\tau\tau$ , $bb$ , 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
241	Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at $(\sqrt{s}=8)$ TeV using H $\rightarrow$ WW decays. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	10
240	Measurement of the top quark mass using charged particles in pp collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2016</b> , 93,	4.9	10
239	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 798, 134952	4.2	10
238	Search for standard model production of four top quarks in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 336-358	4.2	10
237	Search for high-mass Z resonances in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV using jet substructure techniques. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 772, 363-387	4.2	10
236	Search for black holes and other new phenomena in high-multiplicity final states in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 774, 279-307	4.2	10
235	Measurements of differential cross sections for associated production of a W boson and jets in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2017</b> , 95,	4.9	10
234	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
233	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
232	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
231	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
230	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	10
229	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
228	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	10

227	Inclusive search for supersymmetry using razor variables in pp collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 95,	4.9	9
226	Measurement of associated production of a boson and a charm quark in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 269	4.2	9
225	Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	9
224	Search for gauge-mediated supersymmetry in events with at least one photon and missing transverse momentum in pp collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 118-143	4.2	9
223	Measurements of $t\bar{t}$ charge asymmetry using dilepton final states in pp collisions at $s=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 760, 365-386	4.2	9
222	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
221	Measurement of b hadron lifetimes in pp collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 457	4.2	9
220	Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at $13\sqrt{\text{TeV}}$ . <i>Physical Review Letters</i> , <b>2018</b> , 120, 241801	7.4	9
219	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
218	Search for associated production of dark matter with a Higgs boson decaying to ( $\overline{\text{b}}\text{b}$ ) or $\text{b}\bar{\text{t}}$ ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
217	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
216	Measurement of electroweak-induced production of $W\gamma$ with two jets in pp collisions at ( $\sqrt{s}=8$ ) TeV and constraints on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
215	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
214	Observation of nuclear modifications in $W\gamma$ boson production in pPb collisions at $s_{NN}=8.16$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 800, 135048	4.2	9
213	Search for lepton flavour violating decays of heavy resonances and quantum black holes to an [Formula: see text] pair in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 317	4.2	9
212	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
211	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
210	Search for a singly produced third-generation scalar leptoquark decaying to a $\mu$ 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

209	Measurement of the top quark mass in the dileptonic $t\bar{t}$ decay channel using the mass observables $M_{b\bar{b}T2}$ , and $M_{b\bar{b}n}$ in pp collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	8
208	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
207	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
206	Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 152001	7.4	8
205	Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
204	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
203	Search for Higgsino pair production in pp collisions at $\sqrt{s}=13$ TeV in final states with large missing transverse momentum and two Higgs bosons decaying via $H\rightarrow b\bar{b}$ . <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	8
202	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
201	Constraining Gluon Distributions in Nuclei Using Dijets in Proton-Proton and Proton-Lead Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 062002	7.4	8
200	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
199	Search for single production of vector-like quarks decaying to a Z boson and a top or a bottom quark in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	8
198	Measurement of the top quark mass using single top quark events in proton-proton collisions at [Formula: see text]TeV. <i>European Physical Journal C</i> , <b>2017</b> , 77, 354	4.2	8
197	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
196	Performance study of the CMS barrel resistive plate chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03017-T03017	1	8
195	Alignment of the CMS muon system with cosmic-ray and beam-halo muons. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03020-T03020	1	8
194	Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 800, 135042	4.2	8
193	Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	8
192	Angular analysis of the decay $B^+\rightarrow K^+\mu^+\mu^-$ in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	8

191	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
190	Search for R-parity violating supersymmetry in pp collisions at $s=13$ TeV using b jets in a final state with a single lepton, many jets, and high sum of large-radius jet masses. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 783, 114-139	4-2	8
189	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 819, 136446	4-2	8
188	Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 95,	4-9	7
187	Search for electroweak production of charginos in final states with two leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	7
186	Measurement of the production cross section of a W 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
185	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>Physical Review Letters</i> , <b>2017</b> , 119, 151802	7-4	7
184	Search for supersymmetry in the all-hadronic final state using top quark tagging in pp collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2017</b> , 96,	4-9	7
183	Studies of Beauty Suppression via Nonprompt $D^0$ Mesons in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 123, 022001	7-4	7
182	Search for Dark Matter Particles Produced in Association with a Top Quark Pair at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 011803	7-4	7
181	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
180	Search for rare decays of and Higgs bosons to and a photon in proton-proton collisions at $= 13$ . <i>European Physical Journal C</i> , <b>2019</b> , 79, 94	4-2	7
179	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
178	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
177	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at ( $\sqrt{\mathrm{s}}=13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	7
176	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
175	Jet properties in PbPb and pp collisions at ( $\sqrt{s_{\mathrm{N}};\mathrm{N}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
174	Measurement of the semileptonic ( $\mathrm{t}\overline{\mathrm{t}}$ ) + $\bar{\nu}$ 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



173	Searches for $W$ 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
172	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
171	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
170	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
169	Searches for R-parity-violating supersymmetry in pp collisions at $s=8$ TeV in final states with $0\ell$ leptons. <i>Physical Review D</i> , <b>2016</b> , 94,	4-9	7
168	Search for long-lived particles using delayed photons in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4-9	7
167	Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 123, 231803	7-4	7
166	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
165	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
164	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
163	Precision measurement of the structure of the CMS inner tracking system using nuclear interactions. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P10034-P10034	1	7
162	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
161	Search for dark matter produced in association with a Higgs boson decaying to $\ell\bar{\ell}$ ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	7
160	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
159	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
158	Search for a Light Charged Higgs Boson Decaying to a W Boson and a CP-Odd Higgs Boson in Final States with $e\ell\bar{\nu}$ In Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 123, 131802	7-4	6
157	Measurement of prompt $\tau$ production cross sections in proton-lead and proton-proton collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 790, 509-532	4-2	6
156	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

155	Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 132003	7.4	6
154	Search for a light charged Higgs boson in the $H\bar{H}$ -bs channel in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	6
153	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
152	Measurement of the $\bar{B}$ polarization and angular parameters in $\bar{B}\rightarrow b/\bar{d}$ decays from pp collisions at $s=7$ and 8 TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	6
151	Search for vectorlike light-flavor quark partners in proton-proton collisions at $s=8$ TeV. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	6
150	Search for leptophobic $Z'$ bosons decaying into four-lepton final states in proton-proton collisions at $s=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 773, 563-584	4.2	6
149	Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 775, 315-337	4.2	6
148	Performance of the CMS drift tube chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03015-T03015		
147	Search for supersymmetry in pp collisions at $s=13$ TeV with $137$ fb $^{-1}$ in final states with a single lepton using the sum of masses of large-radius jets. <i>Physical Review D</i> , <b>2020</b> , 101,	4.9	6
146	Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	6
145	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
144	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
143	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
142	Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 812, 136018	4.2	6
141	Pseudorapidity and transverse momentum dependence of flow harmonics in pPb and PbPb collisions. <i>Physical Review C</i> , <b>2018</b> , 98,	2.7	6
140	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
139	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
138	Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 221802	7.4	6

137	Search for a heavy resonance decaying into a Z boson and a vector boson in the $(\nu_{\overline{\mathbf{q}}}\overline{\mathbf{q}})$ final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
136	Search for pair production of excited top quarks in the lepton + jets final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 778, 349-370	4.2	6
135	Measurement of Bs0 meson production in pp and PbPb collisions at sNN=5.02 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 796, 168-190	4.2	5
134	Measurement of the mass of the top quark in decays with a J/ψ meson in pp collisions at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	5
133	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
132	An embedding technique to determine backgrounds in proton-proton collision data. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P06032-P06032	1	5
131	Measurement of the top quark Yukawa coupling from tt kinematic distributions in the lepton+jets final state in proton-proton collisions at s=13 TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	5
130	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
129	Performance of CMS hadron calorimeter timing and synchronization using test beam, cosmic ray, and LHC beam data. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03013-T03013	1	5
128	Measurement of energy flow at large pseudorapidities in pp collisions at $(\sqrt{s} = 0.9)$ and 7 TeV <b>2011</b> , 2011, 1		5
127	Observation of the B0-B̄0 decay in proton-proton collisions at s=13TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 802, 135203	4.2	5
126	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
125	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
124	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
123	Search for resonances decaying to a pair of Higgs bosons in the b( $\overline{\mathbf{b}}$ )q( $\overline{\mathbf{q}}$ ) 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
122	Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at sNN=5.44 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 799, 135049	4.2	5
121	Probing the chiral magnetic wave in pPb and PbPb collisions at sNN=5.02TeV using charge-dependent azimuthal anisotropies. <i>Physical Review C</i> , <b>2019</b> , 100,	2.7	5
120	Measurement of the tt̄ production cross section in the all-jet final state in pp collisions at s=13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 803, 135285	4.2	5

119	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
118	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
117	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
116	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
115	Search for excited quarks of light and heavy flavor in $b$ -jet final states in proton-proton collisions at $s=13\mathrm{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 781, 390-411	4.2	5
114	Search for Higgs and Z boson decays to $J/\psi$ pairs in the four-muon final state in proton-proton collisions at $s=13\mathrm{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 797, 134811	4.2	4
113	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
112	Search for the pair production of light top squarks in the $e\mu$ final state in proton-proton collisions at ( $\sqrt{s}$ )=13) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	4
111	Search for nonresonant Higgs boson pair production in the ( $\overline{b}b$ ) final state at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	4
110	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
109	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
108	Measurements of the W boson rapidity, helicity, double-differential cross sections, and charge asymmetry in pp collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	4
107	Measurement of the top quark Yukawa coupling from $t\bar{t}$ kinematic distributions in the dilepton final state in proton-proton collisions at $s=13$ TeV. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	4
106	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
105	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
104	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
103	Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at $s=13\mathrm{TeV}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 779, 166-190	4.2	4
102	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

101	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
100	Search for high-mass $Z\tau$ resonances in $e^+e^-$ and $\tau^+\tau^-$ 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
99	Search for CP violation in ( $\overline{t}$ ) production and decay in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	4
98	Performance of the CMS cathode strip chambers with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03018-T03018	1	4
97	Aligning the CMS muon chambers with the muon alignment system during an extended cosmic ray run. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03019-T03019	1	4
96	Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P10002-P10002	1	4
95	Observation of the $B_{s^0} \rightarrow K(3872)^0$ Decay. <i>Physical Review Letters</i> , <b>2020</b> , 125, 152001	7.4	4
94	Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at ( $\sqrt{s}=13$ TeV). <i>European Physical Journal C</i> , <b>2018</b> , 78, 1	4.2	4
93	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	4
92	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
91	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	4
90	Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 812, 135992	4.2	4
89	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 $\tau$ leptons. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	3
88	Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	3
87	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
86	Search for Supersymmetry with a Compressed Mass Spectrum in Events with a Soft $\tau$ Lepton, a Highly Energetic Jet, and Large Missing Transverse Momentum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 124, 041803	7.4	3
85	Measurement of the inclusive ( $\overline{t}$ ) 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
84	Search for ZZ resonances in the $2\tau$ final state in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3

83	Search for the production of $W\bar{W}W$ events at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 100,	4.9	3
82	Search for supersymmetry in events with photons and missing transverse energy in pp collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 769, 391-412	4.2	3
81	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
80	Measurement of the cross section for production of ( $\bar{b}X$ ) 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
79	Measurements of the ( $\text{pp} \rightarrow \text{ZZ}$ ) production cross section and the ( $\text{Z} \rightarrow 4\ell$ ) branching fraction, and constraints on anomalous triple gauge couplings at ( $\sqrt{s}=13, \text{TeV}$ ) <b>2018</b> , 78, 1		3
78	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
77	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
76	Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 125, 102001	7.4	3
75	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	3
74	Studies of inclusive four-jet production with two b-tagged jets in proton-proton collisions at 7 TeV. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	3
73	Measurement of differential cross sections for Z boson pair production in association with jets at $\sqrt{s}=8$ and 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 789, 19-44	4.2	3
72	Event shape variables measured using multijet final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
71	Search for lepton-flavor violating decays of heavy resonances and quantum black holes to $e\bar{e}$ final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
70	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 723	4.2	3
69	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	3
68	Observation of the decay $B \rightarrow \bar{D}^* K^+$ in pp collisions at $\sqrt{s}=8$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 764, 66-86	4.2	2
67	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
66	. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2

65	Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at ( $\sqrt{s} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
64	Measurement of differential cross sections in the kinematic angular variable $\phi^*$ for inclusive Z boson production in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	2
63	Search for supersymmetry in events with one lepton and multiple jets exploiting the angular correlation between the lepton and the missing transverse momentum in proton-proton collisions at $s=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 384-409	4.2	2
62	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
61	Search for excited leptons in final states in proton-proton collisions at ( $\sqrt{\text{mathrm}\{s\}}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
60	Centrality and pseudorapidity dependence of the transverse energy density in pPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review C</i> , <b>2019</b> , 100,	2.7	2
59	Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 795, 76-99	4.2	2
58	Measurements of the pp $\rightarrow W\gamma$ and pp $\rightarrow Z\gamma$ cross sections and limits on anomalous quartic gauge couplings at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	2
57	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
56	Calibration of the CMS drift tube chambers and measurement of the drift velocity with cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03016-T03016	1	2
55	Fine synchronization of the CMS muon drift-tube local trigger using cosmic rays. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03004-T03004	1	2
54	CMS data processing workflows during an extended cosmic ray run. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, T03006-T03006	1	2
53	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
52	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 125, 151802	7.4	2
51	Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 124, 202001	7.4	2
50	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
49	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
48	Measurement of prompt D0 and D*0 meson azimuthal anisotropy and search for strong electric fields in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 816, 136253	4.2	2

47	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ . <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P07001	1	2
46	Search for pair-produced three-jet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	2
45	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
44	Search for lepton-flavor violating decays of the Higgs boson in the $\mu\mu$ and $e\mu$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	2
43	Search for $W\tau$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV in the hadronic final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 820, 136535	4.2	2
42	Search for W Boson Decays to Three Charged Pions. <i>Physical Review Letters</i> , <b>2019</b> , 122, 151802	7.4	1
41	Search for Narrow H Resonances in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 081804	7.4	1
40	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. <i>Physical Review Letters</i> , <b>2020</b> , 125, 222001	7.4	1
39	Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}} = 5.02$ TeV. <i>Physical Review Letters</i> , <b>2022</b> , 128, 032001	7.4	1
38	Fragmentation of jets containing a prompt $J/\psi$ meson in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2022</b> , 825, 136842	4.2	1
37	Measurement of differential $t\bar{t}$ production cross sections in the full kinematic range using lepton+jets events from proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	1
36	Measurement of the electroweak production of Z and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on anomalous quartic gauge couplings. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	1
35	Study of the $(\mathbf{B}^+ \rightarrow \mathbf{J}/\psi \overline{\Lambda} \mathbf{p})$ decay in proton-proton collisions at $\sqrt{s} = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	1
34	Development and validation of HERWIG tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , <b>2021</b> , 81, 312	4.2	1
33	Measurement of the CP-violating phase $\phi_s$ in the $B_s^0 \rightarrow \mu^+ \mu^- (1020)^- K^+ K^-$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 816, 136188	4.2	1
32	Observation of a New Excited Beauty Strange Baryon Decaying to $\Lambda_b^+ \mu^+ \mu^-$ . <i>Physical Review Letters</i> , <b>2021</b> , 126, 252003	7.4	1
31	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 813, 136036	4.2	1
30	Observation of the $Z \rightarrow \mu^+ \mu^-$ Decay in pp Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 141801	7.4	1



29	Search for Pair-Produced Resonances Each Decaying into at Least Four Quarks in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 141802	7.4	1
28	Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z-Boson Yields and Azimuthal Anisotropy at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physical Review Letters</i> , <b>2021</b> , 127, 102002	7.4	1
27	Measurement of the azimuthal anisotropy of $\Lambda$ and mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 819, 136385	4.2	1
26	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
25	Search for $W$ resonances in proton-proton collisions at $\sqrt{s}=13$ TeV using hadronic decays of Lorentz-boosted $W$ bosons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2022</b> , 826, 136888	4.2	0
24	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s}=5.02$ TeV Using Leptonic Decays. <i>Physical Review Letters</i> , <b>2021</b> , 127, 191801	7.4	0
23	Measurement of the $W$ Production Cross Section in Proton-Proton Collisions at $\sqrt{s}=13$ TeV and Constraints on Effective Field Theory Coefficients. <i>Physical Review Letters</i> , <b>2021</b> , 126, 252002	7.4	0
22	Search for the rare decay of the $W$ boson into a pion and a photon in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 819, 136409	4.2	0
21	Search for a heavy vector resonance decaying to a $W$ boson and a Higgs boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 688	4.2	0
20	First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 820, 136565	4.2	0
19	Measurements of angular distance and momentum ratio distributions in three-jet and + two-jet final states in collisions. <i>European Physical Journal C</i> , <b>2021</b> , 81, 852	4.2	0
18	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of $\tau$ Leptons in pp Collisions at $\sqrt{s}=13$ TeV.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 081805	7.4	0
17	Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
16	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 153	4.2	0
15	Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 122301	7.4	0
14	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 213	4.2	0
13	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at .. <i>European Physical Journal C</i> , <b>2022</b> , 82, 290	4.2	0
12	Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at $\sqrt{s}=13$ TeV.. <i>Physical Review Letters</i> , <b>2021</b> , 127, 261804	7.4	0

11	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	○
10	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	○
9	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	○
8	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	○
7	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	○
6	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	○
5	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	
4	Mechanical stability of the CMS strip tracker measured with a laser alignment system. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P04023-P04023	1	
3	Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets. <i>Physical Review Letters</i> , <b>2019</b> , 123, 241801	7-4	
2	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5-4	
1	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5-4	