

# Geoffrey Hall

## List of Publications by Year in Descending Order

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**Version:** 2024-04-28

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

507  
papers

10,198  
citations

45  
h-index

79  
g-index

541  
ext. papers

12,321  
ext. citations

4.3  
avg, IF

5.38  
L-index

#	Paper	IF	Citations
507	Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
506	Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
505	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
504	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
503	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
502	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	
501	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
500	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	0
499	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	0
498	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	0
497	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	0
496	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	0
495	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	0
494	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	
493	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
492	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
491	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\text{B}\bar{\text{b}}$ final state at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2

490	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	3
489	Selection of the silicon sensor thickness for the Phase-2 upgrade of the CMS Outer Tracker. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P11028	1	0
488	Observation of $tW$ production in the single-lepton channel in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	0
487	Search for chargino-neutralino production in events with Higgs and W bosons using $137 \text{ fb}^{-1}$ of proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	1
486	Measurements of the $pp \rightarrow W\mu\mu$ and $pp \rightarrow Z\mu\mu$ cross sections at $(\sqrt{\text{mathrm{s}}}) = 13$ TeV and limits on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	1
485	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2
484	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
483	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic $WW$ decay mode at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	3
482	Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
481	Search for new physics in top quark production with additional leptons in proton-proton collisions at $(\sqrt{s}) = 13$ TeV using effective field theory. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	4
480	Measurement of differential cross sections for Z bosons produced in association with charm jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	1
479	Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	6
478	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
477	Angular analysis of the decay $B^+ \rightarrow K^{*(892)+} \mu^+ \nu_\mu$ in proton-proton collisions at $(\sqrt{\text{mathrm{s}}}) = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2
476	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
475	Track reconstruction of particle interactions in long crystals with large bending. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P05017	1	
474	Measurement of b jet shapes in proton-proton collisions at $(\sqrt{s}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	0
473	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5-4	2

472	Study of Drell-Yan dimuon production in proton-lead collisions at ( $\sqrt{s_{\mathrm{NN}}}$ ) = 8.16 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
471	Measurements of the differential cross sections of the production of Z + jets and $\bar{\chi}$ jets and of Z boson emission collinear with a jet in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	
470	In-medium modification of dijets in PbPb collisions at ( $\sqrt{s_{\mathrm{NN}}}$ ) = 5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
469	Measurement of the Z boson differential production cross section using its invisible decay mode ( $Z \rightarrow (\nu \overline{\nu})$ ) in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	
468	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
467	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
466	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
465	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	5
464	Search for the lepton flavor violating decay $\bar{\chi} \rightarrow 3\bar{\nu}$ in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
463	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
462	Evidence for Higgs boson decay to a pair of muons. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	14
461	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
460	The CMS Phase-1 pixel detector upgrade. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P02027-P02027	1	2
459	The very forward CASTOR calorimeter of the CMS experiment. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P02010-P02010	1	4
458	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
457	Search for a heavy vector resonance decaying to a $\bar{\chi}$ boson and a Higgs boson in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2021</b> , 81, 688	4.2	0
456	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
455	Channeling efficiency reduction in high dose neutron irradiated silicon crystals for high energy and high intensity beam collimation and extraction. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P08015	1	0

454	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
453	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
452	Double-crystal measurements at the CERN SPS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2021</b> , 1015, 165747	1.2	1
451	Measurement of prompt open-charm production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	
450	Measurement of the inclusive and differential $t\bar{t}$ cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
449	Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
448	Probing effective field theory operators in the associated production of top quarks with a Z boson in multilepton final states at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
447	Comparative evaluation of analogue front-end designs for the CMS Inner Tracker at the High Luminosity LHC. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P12014	1	0
446	Search for a heavy resonance decaying to a top quark and a W boson at $\sqrt{s} = 13$ TeV in the fully hadronic final state. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
445	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
444	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\chi_{\pm 1}^0$ meson. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
443	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
442	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	20
441	Optimisation of a silicon microstrip telescope for UA9 crystal channeling studies. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, C05014-C05014	1	1
440	Search for supersymmetry in proton-proton collisions at $(\sqrt{s}) = 13$ TeV in events with high-momentum Z bosons and missing transverse momentum. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
439	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
438	Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
437	Search for new neutral Higgs bosons through the $(\text{H}) \rightarrow \text{ZA} \rightarrow \ell\ell^+\ell\ell^-\overline{\text{b}}\text{b}$ process in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	10

436	The UA9 setup for the double-crystal experiment in CERN-SPS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2020</b> , 975, 164175	1.2	2
435	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
434	Angular asymmetry of the nuclear interaction probability of high energy particles in short bent crystals. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	1
433	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
432	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV and constraints on anomalous quartic couplings. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	7
431	Determination of the strong coupling constant $\alpha_s(m_Z)$ from measurements of inclusive $W$ and Z boson production cross sections in proton-proton collisions at ( $\sqrt{s}$ ) = 7 and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
430	Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	3
429	Measurement of electroweak production of a boson in association with two jets in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2020</b> , 80, 43	4.2	6
428	Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
427	Channeling efficiency in a target-crystal assembly. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2020</b> , 467, 118-122	1.2	2
426	Evidence for ( $W$ )( $W$ ) production from double-parton interactions in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	4
425	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
424	Results on multiple Coulomb scattering from 12 and 20 GeV electrons on carbon targets. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P01017-P01017	1	6
423	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
422	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
421	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\bar{\nu}\nu$ and $e\nu$ in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	6
420	A search for the standard model Higgs boson decaying to charm quarks. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	9
419	Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	11



418	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	7
417	A multi-dimensional search for new heavy resonances decaying to boosted $\gamma$ , $W$ , or boson pairs in the dijet final state at $13\sqrt{s}$ . <i>European Physical Journal C</i> , <b>2020</b> , 80, 237	4-2	10
416	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s}$ with the CMS and TOTEM experiments. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1164	4-2	0
415	Measurement of differential cross sections and charge ratios for $W$ -channel single top quark production in proton-proton collisions at $\sqrt{s}$ . <i>European Physical Journal C</i> , <b>2020</b> , 80, 370	4-2	4
414	Measurement of $(\sigma_{t\bar{t}}/\sigma_{t\bar{t}}^{\text{SM}})$ normalised multi-differential cross sections in $(pp)$ collisions at $(\sqrt{s}=13, \text{TeV})$ , and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4-2	13
413	Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	16
412	Dependence of inclusive jet production on the anti- $k_T$ distance parameter in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3
411	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	1
410	Beam test performance of prototype silicon detectors for the Outer Tracker for the Phase-2 Upgrade of CMS. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P03014-P03014	1	2
409	The production of isolated photons in PbPb and pp collisions at $(\sqrt{s_{\text{NN}}}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
408	Investigation into the event-activity dependence of $\sigma_{\text{rel}}(\text{nS})$ relative production in proton-proton collisions at $(\sqrt{s}) = 7$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3
407	Bose-Einstein correlations of charged hadrons in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	2
406	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
405	Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P04017-P04017	1	2
404	Search for electroweak production of a vector-like T quark using fully hadronic final states. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	8
403	Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	5
402	Measurement of properties of $(\text{B}_{\text{c}}^0 \rightarrow \mu\mu)$ decays and search for $\text{B}^0 \rightarrow \mu\mu$ with the CMS experiment. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	10
401	Search for a light pseudoscalar Higgs boson in the boosted $\gamma$ final state in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	9

400	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
399	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	4
398	Measurement of the cross section for $(\overline{t}t)$ production with additional jets and b jets in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	1
397	Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	13
396	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	18
395	Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P05002-P05002	1	
394	Single Event Upset rates in the CBC in CMS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2020</b> , 978, 164416	1-2	
393	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
392	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	8
391	Measurement of the top quark pair production cross section in dilepton final states containing one lepton in pp collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	0
390	Observation of strong reduction of multiple scattering for channeled particles in bent crystals. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 804, 135396	4-2	1
389	Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 773	4-2	0
388	Search for charged Higgs bosons in the $H \rightarrow \tau\tau$ 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
387	Search for the chiral magnetic effect at the LHC with the CMS experiment. <i>Nuclear Physics A</i> , <b>2019</b> , 982, 527-530	1-3	1
386	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
385	Search for a low-mass $\tau$ 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
384	Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at $(\sqrt{s}) = 13$ TeV via Higgs boson decays to leptons. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	3
383	Search for the pair production of light top squarks in the $e\tau$ 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



382	Combined measurements of Higgs boson couplings in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 421	4.2	153
381	Search for supersymmetry in events with a photon, jets, $\bar{\nu}$ -jets, and missing transverse momentum in proton-proton collisions at 13. <i>European Physical Journal C</i> , <b>2019</b> , 79, 444	4.2	1
380	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
379	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
378	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	7
377	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
376	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
375	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
374	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
373	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
372	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
371	Search for rare decays of $H$ and Higgs bosons to $\gamma$ and a photon in proton-proton collisions at $\sqrt{s} = 13$ . <i>European Physical Journal C</i> , <b>2019</b> , 79, 94	4.2	7
370	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
369	Measurements of $(\overline{t}t)$ 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
368	Search for $(\overline{t}t)H$ production in the $(H) \rightarrow \overline{b}b$ decay channel with leptonic $(\overline{t}t)$ decays in proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	17
367	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
366	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
365	Search for resonant $(\overline{t}t)$ 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

364	Focusing of 180 GeV/c pions from a point-like source into a parallel beam by a bent silicon crystal. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2019</b> , 446, 15-18	1.2	6
363	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
362	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
361	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
360	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two $\bar{\nu}$ 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
359	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
358	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
357	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
356	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
355	Search for excited leptons in $\bar{\nu}$ 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
354	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
353	Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton + jets final state in pp collisions at ( $\sqrt{s} = 13, \text{TeV}$ ). <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	6
352	Measurement of exclusive $\bar{\nu}$ photoproduction in ultraperipheral pPb collisions at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 702	4.2	13
351	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at. <i>European Physical Journal C</i> , <b>2019</b> , 79, 564	4.2	20
350	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
349	Measurement of the top quark mass in the all-jets final state at and combination with the lepton+jets channel. <i>European Physical Journal C</i> , <b>2019</b> , 79, 313	4.2	13
348	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
347	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

346	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
345	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
344	Study of the ( $\mathrm{B}^+ \rightarrow \mathrm{J}/\psi \overline{\Lambda} \mathrm{p}$ ) decay in proton-proton collisions at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	1
343	Search for resonances decaying to a pair of Higgs bosons in the $\mathrm{b}(\overline{\mathrm{b}}) \mathrm{q}(\overline{\mathrm{q}})$ final state in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5-4	5
342	The DAQ and control system for the CMS Phase-1 pixel detector upgrade. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P10017-P10017	1	0
341	Reduction of multiple scattering of high-energy positively charged particles during channeling in single crystals. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	3
340	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
339	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
338	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
337	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
336	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
335	Beam steering performance of bent silicon crystals irradiated with high-intensity and high-energy protons. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	1
334	A high angular resolution silicon microstrip telescope for crystal channeling studies. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2019</b> , 924, 394-399	1-2	9
333	Results from the CBC3 readout ASIC for CMS 2S-modules. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2019</b> , 924, 175-180	1-2	3
332	Dechanneling of high energy particles in a long bent crystal. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2019</b> , 438, 38-41	1-2	4
331	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
330	Search for resonant and nonresonant Higgs boson pair production in the ( $\mathrm{b}\overline{\mathrm{b}}\ell\ell$ ) 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
329	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at = 13. <i>European Physical Journal C</i> , <b>2018</b> , 78, 291	4-2	17

328	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
327	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
326	Measurement of the inclusive ( $\overline{\text{t}}$ ) cross section in pp collisions at ( $\sqrt{s}=5.02$ ) TeV using final states with at least one charged lepton. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
325	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	
324	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
323	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
322	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
321	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
320	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
319	Measurement of normalized differential ( $\overline{\text{t}}$ ) 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
318	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
317	Search for ZZ resonances in the $2\ell$ final state in proton-proton collisions at 13 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	3
316	Jet properties in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}=5.02$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	7
315	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
314	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
313	Measurements of the ( $\text{p}\text{p}\rightarrow\text{Z}\text{Z}$ ) production cross section and the ( $\text{Z}\rightarrow 4\ell$ ) branching fraction, and constraints on anomalous triple gauge couplings at ( $\sqrt{s}=13,\text{TeV}$ ) <b>2018</b> , 78, 1		3
312	Comprehensive study of beam focusing by crystal devices. <i>Physical Review Accelerators and Beams</i> , <b>2018</b> , 21,	1.8	13
311	Focusing of a particle beam by a crystal device with a short focal length. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2018</b> , 414, 104-106	1.2	3

310	Search for $(\overline{\mathit{t}}\mathit{H})$ 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
309	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
308	Measurement of the groomed jet mass in PbPb and pp collisions at $(\sqrt{s_{\mathit{NN}}}=5.02)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	5
307	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
306	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
305	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
304	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
303	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
302	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
301	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
300	Charged-particle nuclear modification factors in XeXe collisions at $(\sqrt{s_{\mathit{NN}}}=5.44)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	11
299	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
298	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
297	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
296	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
295	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
294	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
293	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



292	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
291	Search for supersymmetry in events with a 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
290	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
289	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
288	Measurement of differential cross sections for boson production in association with jets in proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 965	4.2	19
287	Search for 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
286	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
285	Search for lepton-flavor violating decays of heavy resonances and quantum black holes to $e\tau$ 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
284	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
283	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
282	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
281	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
280	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
279	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
278	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
277	Search for dark matter produced in association with a Higgs boson decaying to $\tau\tau$ in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	7
276	Search for additional neutral MSSM Higgs bosons in the $\tau\tau$ final state in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	42
275	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



274	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
273	Search for a heavy resonance decaying into a Z boson and a vector boson in the ( $\nu\overline{\nu}\mathit{q}\overline{\mathit{q}}$ ) final state. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
272	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
271	Search for beyond the standard model Higgs bosons decaying into a ( $\mathit{b}\overline{\mathit{b}}$ ) pair in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	11
270	Study of inelastic nuclear interactions of 400 GeV/c protons in bent silicon crystals for beam steering purposes. <i>European Physical Journal C</i> , <b>2018</b> , 78, 505	4.2	6
269	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
268	Search for lepton flavour violating decays of the Higgs boson to $\mu$ and $e$ in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	19
267	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
266	Test beam demonstration of silicon microstrip modules with transverse momentum discrimination for the future CMS tracking detector. <i>Journal of Instrumentation</i> , <b>2018</b> , 13, P03003-P03003	1	2
265	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
264	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
263	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
262	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
261	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
260	Search for a singly produced third-generation scalar leptoquark decaying to a $\tau$ lepton and a bottom quark in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	9
259	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
258	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
257	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

256	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
255	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
254	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
253	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
252	Search for electroweak production of charginos in final states with two $\ell$ leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
251	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
250	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
249	Measurements of multiple scattering of high energy protons in bent silicon crystals. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2017</b> , 402, 291-295	1.2	5
248	P-Type Silicon Strip Sensors for the new CMS Tracker at HL-LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P06018-P06018	1	16
247	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
246	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
245	Measurement of the jet mass in highly boosted [Formula: see text] events from pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2017</b> , 77, 467	4.2	14
244	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
243	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
242	Search for ( $\overline{\mathrm{t}}\mathrm{t}$ ) resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	17
241	Search for associated production of dark matter with a Higgs boson decaying to ( $\overline{\mathrm{b}}\mathrm{b}$ ) or $\bar{\mathrm{t}}\mathrm{t}$ ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
240	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
239	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

238	Measurement of the semileptonic $(\overline{\text{t}} + \text{t})$ 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
237	Measurements of the $\text{pp} \rightarrow \text{W}\ell$ and $\text{pp} \rightarrow \text{Z}\ell\ell$ cross sections and limits on anomalous quartic gauge couplings at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	2
236	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
235	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
234	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
233	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
232	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
231	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
230	Design and implementation of a crystal collimation test stand at the Large Hadron Collider. <i>European Physical Journal C</i> , <b>2017</b> , 77, 1	4-2	5
229	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
228	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
227	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
226	The CMS Level-1 electron and photon trigger: for Run II of LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, C02014-C02014	1	2
225	Measurement of electroweak-induced production of $\text{W}\ell$ 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
224	Searches for $\text{W}^? \text{t}$ 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
223	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
222	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
221	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

220	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
219	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
218	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
217	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
216	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
215	Test beam performance measurements for the Phase I upgrade of the CMS pixel detector. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P05022-P05022	1	3
214	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
213	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
212	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
211	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
210	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
209	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
208	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
207	Characterisation of irradiated thin silicon sensors for the CMS phase II pixel upgrade. <i>European Physical Journal C</i> , <b>2017</b> , 77, 1	4.2	2
206	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
205	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
204	The CMS Level-1 Calorimeter Trigger for the LHC Run II. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, C01065-C01065		4
203	Search for high-mass Z resonances in $e^+e^-$ and $\mu^+\mu^-$ 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

202	Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying $\tau$ 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	18
201	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
200	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
199	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
198	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
197	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
196	An FPGA based track finder for the L1 trigger of the CMS experiment at the High Luminosity LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P12019-P12019	1	20
195	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
194	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
193	Run 2 upgrades to the CMS Level-1 calorimeter trigger. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, C01051-C01051	1	1
192	An FPGA-based track finder for the L1 trigger of the CMS experiment at the high luminosity LHC <b>2016</b> ,		4
191	Measurement of dijet azimuthal decorrelation in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 536	4.2	6
190	Search for dark matter particles in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV using the razor variables. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	2
189	Search for s channel single top quark production in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	8
188	Measurement of inclusive jet production and nuclear modifications in pPb collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 372	4.2	24
187	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	15
186	Measurement of the ( $\overline{t}$ ) production cross section in the $e\tau$ 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
185	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



184	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
183	Evidence for exclusive $B \rightarrow W + W$ production and constraints on anomalous quartic gauge couplings in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	27
182	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
181	Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 460	4-2	14
180	Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	9
179	Phenomenological MSSM interpretation of CMS searches in pp collisions at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	11
178	Measurement of the mass of the top quark in decays with a $J/\psi$ meson in pp collisions at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	5
177	Measurement of the inclusive jet cross section in pp collisions at ( $\sqrt{s} = 2.76, \text{text {TeV}}$ ). <i>European Physical Journal C</i> , <b>2016</b> , 76, 1	4-2	17
176	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
175	Observation of top quark pairs produced in association with a vector boson in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	18
174	Search for $W \rightarrow tb$ in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	2
173	Correlations between jets and charged particles in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	21
172	Search for the production of an excited bottom quark decaying to $tW$ in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	2
171	Search for excited leptons in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	10
170	Measurement of the [Formula: see text] production cross section in the all-jets final state in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 128	4-2	21
169	Event generator tunes obtained from underlying event and multiparton scattering measurements. <i>European Physical Journal C</i> , <b>2016</b> , 76, 155	4-2	250
168	Search for massive WH resonances decaying into the [Formula: see text] final state at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 237	4-2	19
167	Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5-4	14



166	Measurement of top quark polarisation in t-channel single top quark production. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	7
165	Search for heavy Majorana neutrinos in $e\bar{e}\mu^+\mu^+$ jets and $e\bar{e}\tau^+\tau^+$ jets events in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	28
164	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tau$ leptons in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
163	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2016</b> , 76, 13	4.2	35
162	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
161	Triggering on electrons, jets and tau leptons with the CMS upgraded calorimeter trigger for the LHC RUN II. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, C02008-C02008	1	6
160	Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
159	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
158	Trapping in proton irradiated p+n-n+silicon sensors at fluences anticipated at the HL-LHC outer tracker. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P04023-P04023	1	8
157	Reconstruction and identification of $\tau$ lepton decays to hadrons and $\mu$ at CMS. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P01019-P01019	1	75
156	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
155	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
154	Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	4
153	A time-multiplexed track-trigger for the CMS HL-LHC upgrade. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2016</b> , 824, 292-295	1.2	13
152	L1 track finding for a time multiplexed trigger. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2016</b> , 824, 268-269	1.2	2
151	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at ( $\sqrt{s_{\mathrm{NN}}}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	21
150	Search for anomalous single top quark production in association with a photon in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	20
149	Observation of channeling for 6500 GeV/c protons in the crystal assisted collimation setup for LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 758, 129-133	4.2	70

148	Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	6
147	High-efficiency deflection of high energy protons due to channeling along the <110> axis of a bent silicon crystal. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 760, 826-831	4.2	16
146	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	10
145	A crystal routine for collimation studies in circular proton accelerators. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 355, 378-382	1.2	6
144	Observation of nuclear dechanneling length reduction for high energy protons in a short bent crystal. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 743, 440-443	4.2	3
143	Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 66	4.2	21
142	Search for decays of stopped long-lived particles produced in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 151	4.2	33
141	Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	19
140	Measurement of the ratio of the production cross sections times branching fractions of $B \rightarrow J/\psi \pi^+ \pi^-$ and $B \rightarrow J/\psi \pi^+ \pi^-$ and $(\mathcal{B}(\mathcal{B} \rightarrow \mathcal{C})^{\text{pm}} / \mathcal{B}(\mathcal{B} \rightarrow \mathcal{C})^{\text{mp}}) / (\mathcal{B}(\mathcal{J}/\psi \rightarrow \pi^+ \pi^-) / \mathcal{B}(\mathcal{J}/\psi \rightarrow \pi^+ \pi^-))$ in pp collisions at ( $\sqrt{s}=7$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	13
139	Search for disappearing tracks in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	35
138	Study of Z production in PbPb and pp collisions at ( $\sqrt{s_{\text{NN}}}=2.76$ ) TeV in the dimuon and dielectron decay channels. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	18
137	Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	69
136	Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at ( $\sqrt{s}=2.76$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	6
135	Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 288	4.2	37
134	Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 325	4.2	24
133	Observation of strong leakage reduction in crystal assisted collimation of the SPS beam. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 748, 451-454	4.2	13
132	The FC7 AMC for generic DAQ & control applications in CMS. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, C03036-C03036	1	136
131	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

130	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
129	Comparative results on the deflection of positively and negatively charged particles by multiple volume reflections in a multi-strip silicon deflector. <i>JETP Letters</i> , <b>2015</b> , 101, 679-684	1.2	4
128	Search for physics beyond the standard model in events with two leptons, jets, and missing transverse momentum in pp collisions at $(\sqrt{s}) = 8$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	22
127	Search for third-generation scalar leptoquarks in the $t\bar{t}$ channel in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	19
126	Searches for supersymmetry using the $M_{T2}$ variable in hadronic events produced in pp collisions at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	26
125	Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	33
124	Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	17
123	Search for a charged Higgs boson in pp collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	61
122	Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	11
121	Search for a light charged Higgs boson decaying to $(\overline{\text{charm}})$ in pp collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-37	5.4	33
120	Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	16
119	Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	
118	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	73
117	Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 [Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 212	4.2	399
116	Measurement of the $Z\gamma$ production cross section in pp collisions at 8 TeV and search for anomalous triple gauge boson couplings. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	7
115	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
114	Measurements of the [Formula: see text][Formula: see text] production cross sections in the [Formula: see text] channel in proton-proton collisions at [Formula: see text] and [Formula: see text] and combined constraints on triple gauge couplings. <i>European Physical Journal C</i> , <b>2015</b> , 75, 511	4.2	25
113	Comparison of the $Z/\gamma + \text{jets}$ to $\gamma + \text{jets}$ cross sections in pp collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	5

112	Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	18
111	Study of double parton scattering using W + 2-jet events in proton-proton collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	61
110	Probing color coherence effects in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2901	4.2	13
109	A time-multiplexed track-trigger architecture for CMS. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, C10034-C10034	3.4	8
108	Development and testing of an upgrade to the CMS level-1 calorimeter trigger. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, C01006-C01006	1	6
107	Deflection of high energy protons by multiple volume reflections in a modified multi-strip silicon deflector. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2014</b> , 338, 108-111	1.2	8
106	Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	70
105	Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at ( $\sqrt{s}$ ) = 8 TeV by the CMS and TOTEM experiments. <i>European Physical Journal C</i> , <b>2014</b> , 74, 1	4.2	37
104	Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3036	4.2	183
103	Observation of the diphoton decay of the Higgs boson and measurement of its properties. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3076	4.2	239
102	Search for the associated production of the Higgs boson with a top-quark pair. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	45
101	Study of hadronic event-shape variables in multijet final states in pp collisions at ( $\sqrt{s}$ ) = 7 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	3
100	Search for standard model production of four top quarks in the lepton + jets channel in pp collisions at ( $\sqrt{s}$ )=8 TeV. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	15
99	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
98	Identification techniques for highly boosted W bosons that decay into hadrons. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	32
97	Observation of focusing of 400 GeV/c proton beam with the help of bent crystals. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2014</b> , 733, 366-372	4.2	26
96	CBC2: A CMS microstrip readout ASIC with logic for track-trigger modules at HL-LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2014</b> , 765, 214-218	1.2	12
95	Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	144

94	Search for the associated production of the Higgs boson with a top-quark pair <b>2014</b> , 2014, 1		6
93	Searches for long-lived charged particles in pp collisions at ( $\sqrt{s}$ ) =7 and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	96
92	Study of exclusive two-photon production of $W+W$ in pp collisions at ( $\sqrt{s}$ =7 ) TeV and constraints on anomalous quartic gauge couplings. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	56
91	Observation of a new boson with mass near 125 GeV in pp collisions at ( $\sqrt{s}$ =7 ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	261
90	Search for supersymmetry in pp collisions at [Formula: see text] TeV in events with a single lepton, jets, and missing transverse momentum. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2404	4-2	15
89	Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	10
88	Search for top-squark pair production in the single-lepton final state in pp collisions at ( $\sqrt{s}$ =8 $\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4-2	162
87	Measurement of the ZZ production cross section and search for anomalous couplings in $2\gamma\gamma$ final states in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	39
86	Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5-4	12
85	Optimization of the crystal assisted collimation of the SPS beam. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 726, 182-186	4-2	15
84	Measurement of differential top-quark-pair production cross sections in pp collisions at ( $\sqrt{s}$ = 7 $\mathrm{TeV}$ ). <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4-2	102
83	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
82	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at ( $\sqrt{s}$ =7;TeV). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	27
81	Search for stopped long-lived particles produced in pp collisions at ( $\sqrt{s} = \{7\mathrm{TeV}\}$ ). <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	17
80	Search for anomalous ( $\overline{t}t$ ) production in the highly-boosted all-hadronic final state. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	57
79	Search for exclusive or semi-exclusive $\bar{t}t$ production and observation of exclusive and semi-exclusive $e+e$ production in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	45
78	Search for resonant ( $\overline{t}t$ ) production in lepton+jets events in pp collisions at ( $\sqrt{s}$ =7 ) TeV. <i>Journal of High Energy Physics</i> , <b>2012</b> , 2012, 1	5-4	25
77	Strong reduction of the off-momentum halo in crystal assisted collimation of the SPS beam. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 714, 231-236	4-2	41



76	The CMS binary chip for microstrip tracker readout at the SLHC. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, C01033-C01033		
75	The MP7 and CTP-6: multi-hundred Gbps processing boards for calorimeter trigger upgrades at CMS. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, C12024-C12024	1	22
74	A demonstration of a Time Multiplexed Trigger for the CMS experiment. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, C01060-C01060	1	6
73	The UA9 experimental layout. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, T10002-T10002	1	17
72	Comparative results on collimation of the SPS beam of protons and Pb ions with bent crystals. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2011</b> , 703, 547-551	4.2	52
71	Conceptual study of a trigger module for the CMS Tracker at SLHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2011</b> , 636, S201-S207	1.2	3
70	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
69	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
68	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
67	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
66	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
65	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
64	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
63	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
62	Design and performance of a high rate, high angular resolution beam telescope used for crystal channeling studies. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P04006-P04006	1	35
61	Observation of parametric X-rays produced by 400 GeV/c protons in bent crystals. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2011</b> , 701, 180-185	4.2	18
60	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV <b>2011</b> , 2011, 1		5
59	INNOVATIONS IN THE CMS TRACKER ELECTRONICS. <i>International Journal of Modern Physics A</i> , <b>2010</b> , 25, 1957-1980	1.2	1



58	Simulating the performance of a pTtracking trigger for CMS. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, C08003-C08003		
57	2-D PT module concept for the SLHC CMS tracker. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, C07012-C07012	1	10
56	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
55	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at ( $\sqrt{s} = 0.9$ ) and 2.36 TeV. <i>Journal of High Energy Physics</i> , <b>2010</b> , 2010, 1	5.4	201
54	The upgrade of the CMS tracker for Super-LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2010</b> , 623, 168-170 <sup>1.2</sup>		1
53	CMOS Monolithic Active Pixel Sensors (MAPS): Developments and future outlook. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2007</b> , 582, 866-870	1.2	6
52	IHMAS: A 1.5D sensor for high-resolution scanning. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2007</b> , 573, 27-29	1.2	5
51	The CMS tracker readout front end driver. <i>IEEE Transactions on Nuclear Science</i> , <b>2005</b> , 52, 2836-2840	1.7	12
50	Production testing and quality assurance of CMS silicon microstrip tracker readout chips. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2005</b> , 543, 619-644	1.2	4
49	Recent progress in front end ASICs for high-energy physics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2005</b> , 541, 248-258	1.2	8
48	The MGPA electromagnetic calorimeter readout chip for CMS. <i>IEEE Transactions on Nuclear Science</i> , <b>2005</b> , 52, 756-763	1.7	2
47	Device simulation of irradiated silicon detectors at cryogenic temperatures. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2004</b> , 518, 352-353	1.2	1
46	Comprehensive device Simulation modeling of heavily irradiated silicon detectors at cryogenic temperatures. <i>IEEE Transactions on Nuclear Science</i> , <b>2004</b> , 51, 1759-1765	1.7	7
45	A comprehensive analysis of irradiated silicon detectors at cryogenic temperatures. <i>IEEE Transactions on Nuclear Science</i> , <b>2003</b> , 50, 1111-1120	1.7	3
44	An enhanced approach to numerical modeling of heavily irradiated silicon devices. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2002</b> , 186, 171-175	1.2	18
43	Cryogenic investigations and modelling of inter-defect charge exchange in silicon particle detectors. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2002</b> , 186, 138-143	1.2	2
42	Interdefect charge exchange in silicon particle detectors at cryogenic temperatures. <i>IEEE Transactions on Nuclear Science</i> , <b>2002</b> , 49, 1750-1755	1.7	6
41	High-energy ion irradiation effects on thin oxide p-channel MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , <b>2002</b> , 49, 1364-1371	1.7	6

40	Radiation hard silicon detectors—developments by the RD48 (ROSE) collaboration. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2001</b> , 466, 308-326	1.2	299
39	Design and results from the APV25, a deep sub-micron CMOS front-end chip for the CMS tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2001</b> , 466, 359-365	1.2	227
38	Photon counting silicon X-ray pixel detector modules. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2001</b> , 466, 174-177 <sup>1,2</sup>		
37	A novel application of silicon microstrip technology for energy-dispersive EXAFS studies. <i>Journal of Synchrotron Radiation</i> , <b>2000</b> , 7, 221-8	2.4	10
36	Defect kinetics in novel detector materials. <i>Materials Science in Semiconductor Processing</i> , <b>2000</b> , 3, 243-249		14
35	Performance of CMS silicon microstrip detectors with the APV6 readout chip. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 447, 133-141	1.2	5
34	New results on silicon microstrip detectors of CMS tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 447, 142-150	1.2	20
33	Photon counting hybrid pixel detector for X-ray imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 455, 715-720 <sup>1,2</sup>		11
32	The CMS silicon tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 453, 121-125	1.2	1
31	LHC front-end electronics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 453, 353-364	1.2	3
30	Defect-engineering rad-hard particle detectors: the role of impurities and inter-defect charge exchange. <i>Physica B: Condensed Matter</i> , <b>1999</b> , 273-274, 1045-1049	2.8	21
29	Test results of heavily irradiated Si detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 422, 238-241	1.2	
28	The R&D program for silicon detectors in CMS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 435, 109-117	1.2	6
27	The CMS silicon strip tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 435, 102-108	1.2	3
26	Two approaches to hybrid x-ray pixel array readout <b>1999</b> , 3774, 30		6
25	The CMS silicon tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1998</b> , 419, 538-543	1.2	
24	Bulk damage effects in irradiated silicon detectors due to clustered divacancies. <i>Journal of Applied Physics</i> , <b>1997</b> , 82, 126-136	2.5	92
23	Defect-Engineering Rad-Hard Detectors for the CERN LHC. <i>Materials Science Forum</i> , <b>1997</b> , 258-263, 671-676		1

22	Issues for deep level models of bulk damage to silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1997</b> , 388, 283-288	1.2	2
21	Further experimental tests of the deep-acceptor model <b>1996</b> , 109, 1371-1377		
20	A microscopic explanation for type inversion and the annealing behaviour of radiation damaged silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1996</b> , 371, 575-577	1.2	6
19	Beam test of a prototype readout system for precision tracking detectors at LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1996</b> , 369, 79-91	1.2	4
18	Defect evolution in irradiated silicon detector material. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1996</b> , 374, 12-26	1.2	51
17	Radiation damage studies of field plate and p-stop n-side silicon microstrip detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1995</b> , 362, 297-314	1.2	18
16	. <i>IEEE Transactions on Nuclear Science</i> , <b>1995</b> , 42, 873-881	1.7	2
15	Silicon pixel detectors for X-ray diffraction studies at synchrotron sources. <i>Quarterly Reviews of Biophysics</i> , <b>1995</b> , 28, 1-32	7	19
14	Semiconductor particle tracking detectors. <i>Reports on Progress in Physics</i> , <b>1994</b> , 57, 481-531	14.4	20
13	Radiation tolerance of single-sided silicon microstrips. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1994</b> , 339, 511-523 <sup>1.2</sup>		33
12	. <i>IEEE Transactions on Nuclear Science</i> , <b>1994</b> , 41, 767-771	1.7	9
11	A novel technique for fast pulse-shaping using a slow amplifier at LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1993</b> , 326, 112-119	1.2	39
10	Calculation of the geometrical capacitance of silicon microstrip structures using a variational approach. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1993</b> , 326, 228-233	1.2	15
9	Radiation damage by neutrons and protons to silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1992</b> , 322, 177-188	1.2	52
8	The deconvolution method of fast pulse shaping at hadron colliders. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1992</b> , 320, 217-227	1.2	70
7	Practical limitations to the performance of silicon drift chambers imposed by material quality. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1991</b> , 310, 203-207	1.2	4
6	Neutron radiation damage studies of silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1991</b> , 310, 283-286 <sup>1.2</sup>		19
5	Digital beta autoradiography using silicon microstrip detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1991</b> , 310, 455-459	1.2	3

4	A prototype pixel readout chip for asynchronous detection applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1991</b> , 310, 552-556	1.2	8
3	. <i>IEEE Transactions on Nuclear Science</i> , <b>1989</b> , 36, 267-271	1.7	33
2	Operation of a silicon vertex detector in the NA14 photoproduction experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1987</b> , 253, 530-536	1.2	17
1	Ionisation energy losses of highly relativistic charged particles in thin silicon layers. <i>Nuclear Instruments &amp; Methods in Physics Research</i> , <b>1984</b> , 220, 356-362		26