

Geoffrey Hall

List of Publications by Citations

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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	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> , 2015 , 75, 212	4.2	399
506	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> , 2001 , 466, 308-326	1.2	299
505	Description and performance of track and primary-vertex reconstruction with the CMS tracker. <i>Journal of Instrumentation</i> , 2014 , 9, P10009-P10009	1	279
504	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> , 2013 , 2013, 1	5.4	261
503	Event generator tunes obtained from underlying event and multiparton scattering measurements. <i>European Physical Journal C</i> , 2016 , 76, 155	4.2	250
502	Observation of the diphoton decay of the Higgs boson and measurement of its properties. <i>European Physical Journal C</i> , 2014 , 74, 3076	4.2	239
501	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> , 2001 , 466, 359-365	1.2	227
500	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> , 2010 , 2010, 1	5.4	201
499	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> , 2014 , 74, 3036	4.2	183
498	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> , 2013 , 73, 1	4.2	162
497	Combined measurements of Higgs boson couplings in proton-proton collisions at. <i>European Physical Journal C</i> , 2019 , 79, 421	4.2	153
496	Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5.4	144
495	Performance of photon reconstruction and identification with the CMS detector in proton-proton collisions at $\sqrt{s}=8$ TeV. <i>Journal of Instrumentation</i> , 2015 , 10, P08010-P08010	1	141
494	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> , 2011 , 2011, 1	5.4	121
493	Measurements of inclusive W and Z cross sections in pp collisions at ($\sqrt{s} = 7$) TeV. <i>Journal of High Energy Physics</i> , 2011 , 2011, 1	5.4	104
492	Measurement of differential top-quark-pair production cross sections in pp collisions at ($\sqrt{s} = 7$ mathrm{TeV}). <i>European Physical Journal C</i> , 2013 , 73, 1	4.2	102
491	Measurement of the differential cross section for top quark pair production in pp collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2015 , 75, 542	4.2	98

490	Searches for long-lived charged particles in pp collisions at (\sqrt{s}) = 7 and 8 TeV. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5-4	96
489	Bulk damage effects in irradiated silicon detectors due to clustered divacancies. <i>Journal of Applied Physics</i> , 1997 , 82, 126-136	2-5	92
488	Performance of the CMS missing transverse momentum reconstruction in pp data at \sqrt{s} = 8 TeV. <i>Journal of Instrumentation</i> , 2015 , 10, P02006-P02006	1	84
487	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> , 2017 , 2017, 1	5-4	77
486	Reconstruction and identification of τ lepton decays to hadrons and τ at CMS. <i>Journal of Instrumentation</i> , 2016 , 11, P01019-P01019	1	75
485	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> , 2017 , 2017, 1	5-4	74
484	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> , 2015 , 2015, 1	5-4	73
483	Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5-4	70
482	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> , 2011 , 2011, 1	5-4	70
481	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> , 1992 , 320, 217-227	1-2	70
480	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> , 2016 , 758, 129-133	4-2	70
479	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> , 2015 , 2015, 1	5-4	69
478	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> , 2017 , 2017, 1	5-4	64
477	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> , 2018 , 2018, 1	5-4	63
476	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. <i>European Physical Journal C</i> , 2020 , 80, 4	4-2	61
475	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> , 2014 , 2014, 1	5-4	61
474	Search for a charged Higgs boson in pp collisions at (\sqrt{s})=8 TeV. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1	5-4	61
473	Search for anomalous ($\overline{t}t$) production in the highly-boosted all-hadronic final state. <i>Journal of High Energy Physics</i> , 2012 , 2012, 1	5-4	57

472	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> , 2013 , 2013, 1	5-4	56
471	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> , 2017 , 77, 710	4-2	54
470	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> , 2011 , 703, 547-551	4-2	52
469	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> , 1992 , 322, 177-188	1-2	52
468	Defect evolution in irradiated silicon detector material. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1996 , 374, 12-26	1-2	51
467	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> , 2018 , 2018, 1	5-4	50
466	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> , 2017 , 2017, 1	5-4	46
465	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> , 2011 , 2011, 1	5-4	46
464	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> , 2018 , 2018, 1	5-4	45
463	Exclusive $\tau^+\tau^-$ production in proton-proton collisions at ($\sqrt{s}=7$) TeV. <i>Journal of High Energy Physics</i> , 2012 , 2012, 1	5-4	45
462	Search for the associated production of the Higgs boson with a top-quark pair. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5-4	45
461	Search for exclusive or semi-exclusive τ 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> , 2012 , 2012, 1	5-4	45
460	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> , 2018 , 2018, 1	5-4	42
459	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> , 2012 , 714, 231-236	4-2	41
458	Measurement of the inelastic proton-proton cross section at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5-4	41
457	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> , 2018 , 2018, 1	5-4	40
456	Measurement of the ZZ production cross section and search for anomalous couplings in $2\tau\tau$ final states in pp collisions at ($\sqrt{s}=7$) TeV. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5-4	39
455	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> , 1993 , 326, 112-119	1-2	39

454	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> , 2018 , 2018, 1	5.4	39
453	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> , 2015 , 75, 288	4.2	37
452	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> , 2014 , 74, 1	4.2	37
451	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> , 2018 , 2018, 1	5.4	37
450	Measurement of prompt and nonprompt charmonium suppression in collisions at 5.02. <i>European Physical Journal C</i> , 2018 , 78, 509	4.2	37
449	First measurement of the underlying event activity at the LHC with ($\sqrt{s} = 0.9$) TeV. <i>European Physical Journal C</i> , 2010 , 70, 555-572	4.2	36
448	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2016 , 76, 451	4.2	36
447	Search for disappearing tracks in proton-proton collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1	5.4	35
446	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> , 2016 , 76, 13	4.2	35
445	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> , 2017 , 2017, 1	5.4	35
444	Design and performance of a high rate, high angular resolution beam telescope used for crystal channeling studies. <i>Journal of Instrumentation</i> , 2011 , 6, P04006-P04006	1	35
443	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> , 2017 , 2017, 1	5.4	34
442	Search for new physics in same-sign dilepton events in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2016 , 76, 439	4.2	34
441	Search for decays of stopped long-lived particles produced in proton-proton collisions at [Formula: see text]. <i>European Physical Journal C</i> , 2015 , 75, 151	4.2	33
440	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> , 2015 , 2015, 1	5.4	33
439	Search for a light charged Higgs boson decaying to ($\overline{\text{c}}\text{s}$) in pp collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1-37	5.4	33
438	Radiation tolerance of single-sided silicon microstrips. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994 , 339, 511-523 ^{1.2}		33
437	. <i>IEEE Transactions on Nuclear Science</i> , 1989 , 36, 267-271	1.7	33

436	Identification techniques for highly boosted W bosons that decay into hadrons. <i>Journal of High Energy Physics</i> , 2014 , 2014, 1	5.4	32
435	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> , 2011 , 2011, 1	5.4	32
434	Measurement of the Drell-Yan cross section in pp collisions at ($\sqrt{s} = 7$) TeV. <i>Journal of High Energy Physics</i> , 2011 , 2011, 1	5.4	32
433	Measurement of the ($\overline{t}t$) production cross section in the $e\bar{e}$ channel in proton-proton collisions at ($\sqrt{s}=7$) and 8 TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	30
432	Measurements of the production cross section and the branching fraction, and constraints on anomalous triple gauge couplings at. <i>European Physical Journal C</i> , 2018 , 78, 165	4.2	29
431	Observation of Y(1S) pair production in proton-proton collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	29
430	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> , 2018 , 2018, 1	5.4	29
429	Search for heavy Majorana neutrinos in $e\bar{e}\mu\mu$ jets and $e\mu\mu\mu$ jets events in proton-proton collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	28
428	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> , 2018 , 2018, 1	5.4	28
427	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> , 2019 , 79, 368	4.2	27
426	Evidence for exclusive $\mu\bar{\mu} \rightarrow W + W \bar{\nu}$ 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> , 2016 , 2016, 1	5.4	27
425	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at ($\sqrt{s}=7$;TeV). <i>Journal of High Energy Physics</i> , 2012 , 2012, 1	5.4	27
424	Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at ($\sqrt{s}=7$) and 8 TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	26
423	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> , 2015 , 2015, 1	5.4	26
422	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> , 2014 , 733, 366-372	4.2	26
421	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> , 2011 , 2011, 1	5.4	26
420	Ionisation energy losses of highly relativistic charged particles in thin silicon layers. <i>Nuclear Instruments & Methods in Physics Research</i> , 1984 , 220, 356-362		26
419	Search for top squark pair production in pp collisions at ($\sqrt{s}=13$) TeV using single lepton events. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	25

418	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> , 2015 , 75, 511	4.2	25
417	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> , 2012 , 2012, 1	5.4	25
416	Search for charged Higgs bosons in the $H\overline{B} \rightarrow B\overline{B}$ decay channel in proton-proton collisions at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	24
415	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> , 2015 , 75, 325	4.2	24
414	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at. <i>European Physical Journal C</i> , 2020 , 80, 75	4.2	24
413	Measurement of inclusive jet production and nuclear modifications in pPb collisions at $[Formula: see text]$. <i>European Physical Journal C</i> , 2016 , 76, 372	4.2	24
412	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> , 2018 , 2018, 1	5.4	24
411	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2020 , 15, P10017-P10017	1	23
410	Search for third-generation scalar leptoquarks decaying to a top quark and a lepton at. <i>European Physical Journal C</i> , 2018 , 78, 707	4.2	23
409	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying τ leptons at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	23
408	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> , 2017 , 77, 172	4.2	22
407	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> , 2018 , 2018, 1	5.4	22
406	Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at. <i>European Physical Journal C</i> , 2017 , 77, 845	4.2	22
405	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> , 2015 , 2015, 1	5.4	22
404	The MP7 and CTP-6: multi-hundred Gbps processing boards for calorimeter trigger upgrades at CMS. <i>Journal of Instrumentation</i> , 2012 , 7, C12024-C12024	1	22
403	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> , 2017 , 77, 236	4.2	21
402	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> , 2017 , 77, 294	4.2	21
401	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> , 2015 , 75, 66	4.2	21

400	Correlations between jets and charged particles in PbPb and pp collisions at ($\sqrt{s_{\mathrm{NN}}}=2.76$) TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	21
399	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> , 2016 , 76, 128	4.2	21
398	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> , 2017 , 2017, 1	5.4	21
397	Defect-engineering rad-hard particle detectors: the role of impurities and inter-defect charge exchange. <i>Physica B: Condensed Matter</i> , 1999 , 273-274, 1045-1049	2.8	21
396	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> , 2016 , 2016, 1	5.4	21
395	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> , 2019 , 2019, 1	5.4	21
394	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> , 2020 , 2020, 1	5.4	20
393	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> , 2016 , 76, 379	4.2	20
392	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> , 2018 , 78, 140	4.2	20
391	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at. <i>European Physical Journal C</i> , 2019 , 79, 564	4.2	20
390	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> , 2017 , 2017, 1	5.4	20
389	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> , 2017 , 77, 636	4.2	20
388	An FPGA based track finder for the L1 trigger of the CMS experiment at the High Luminosity LHC. <i>Journal of Instrumentation</i> , 2017 , 12, P12019-P12019	1	20
387	The FC7 AMC for generic DAQ & control applications in CMS. <i>Journal of Instrumentation</i> , 2015 , 10, C03036-C03036	1	20
386	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> , 2000 , 447, 142-150	1.2	20
385	Semiconductor particle tracking detectors. <i>Reports on Progress in Physics</i> , 1994 , 57, 481-531	14.4	20
384	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> , 2016 , 2016, 1	5.4	20
383	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> , 2018 , 2018, 1	5.4	20

382	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> , 2018 , 2018, 1	5.4	20
381	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> , 2015 , 2015, 1	5.4	19
380	Search for resonant and nonresonant Higgs boson pair production in the ($\overline{b}b$) final state in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	19
379	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> , 2016 , 76, 237	4.2	19
378	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> , 2017 , 2017, 1	5.4	19
377	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> , 2017 , 2017, 1	5.4	19
376	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> , 2015 , 2015, 1	5.4	19
375	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> , 2011 , 2011, 1	5.4	19
374	Silicon pixel detectors for X-ray diffraction studies at synchrotron sources. <i>Quarterly Reviews of Biophysics</i> , 1995 , 28, 1-32	7	19
373	Neutron radiation damage studies of silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1991 , 310, 283-286 ^{1,2}		19
372	Measurement of differential cross sections for boson production in association with jets in proton-proton collisions at. <i>European Physical Journal C</i> , 2018 , 78, 965	4.2	19
371	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> , 2018 , 78, 789	4.2	19
370	Search for lepton flavour violating decays of the Higgs boson to $\mu\bar{\nu}_\tau$ and $e\nu_\tau$ in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	19
369	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> , 2019 , 79, 364	4.2	18
368	Study of Z production in PbPb and pp collisions at ($\sqrt{s_{\mathrm{NN}}}=2.76$) TeV in the dimuon and dielectron decay channels. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1	5.4	18
367	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> , 2016 , 2016, 1	5.4	18
366	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two μ leptons and two jets in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	18
365	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> , 2017 , 2017, 1	5.4	18

364	Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying leptons and two jets in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	18
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359	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> , 1995 , 362, 297-314	1.2	18
358	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> , 2020 , 2020, 1	5.4	18
357	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> , 2018 , 2018, 1	5.4	18
356	Search for ($\overline{\text{t}}\text{H}$) production in the ($\text{H}\rightarrow\text{b}\overline{\text{b}}$) decay channel with leptonic ($\overline{\text{t}}\text{t}$) decays in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	17
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354	Measurement of the inclusive jet cross section in pp collisions at ($\sqrt{s}=2.76$,text {TeV}). <i>European Physical Journal C</i> , 2016 , 76, 1	4.2	17
353	Search for ($\overline{\text{t}}\text{t}$) resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	17
352	Searches for pair production of third-generation squarks in [Formula: see text][Formula: see text] pp collisions. <i>European Physical Journal C</i> , 2017 , 77, 327	4.2	17
351	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> , 2015 , 2015, 1	5.4	17
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340	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> , 2017 , 2017, 1	5.4	16
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338	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> , 2018 , 2018, 1	5.4	16
337	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> , 2018 , 2018, 1	5.4	16
336	Measurements of ($\overline{\text{t}}$) differential cross sections in proton-proton collisions at ($\sqrt{s}=13$) TeV using events containing two leptons. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	15
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334	Search for new particles decaying to a jet and an emerging jet. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	15
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332	Optimization of the crystal assisted collimation of the SPS beam. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013 , 726, 182-186	4.2	15
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329	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> , 1993 , 326, 228-233	1.2	15

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326	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> , 2019 , 2019, 1	5-4	14
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321	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> , 2016 , 2016, 1	5-4	14
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318	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two τ leptons in proton-proton collisions at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5-4	14
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298	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> , 2013 , 2013, 1	5.4	12
297	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> , 2017 , 2017, 1	5.4	12
296	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> , 2014 , 765, 214-218	1.2	12
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282	Measurements of differential Z boson production cross sections in proton-proton collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	11
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279	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> , 2018 , 2018, 1	5.4	11
278	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> , 2018 , 2018, 1	5.4	11
277	Search for beyond the standard model Higgs bosons decaying into a ($\overline{\mathrm{b}}\mathrm{b}$) pair in pp collisions at (\sqrt{s})=13) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	11
276	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> , 2019 , 2019, 1	5.4	10
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272	Search for excited leptons in proton-proton collisions at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , 2016 , 2016, 1	5.4	10
271	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> , 2013 , 2013, 1	5.4	10
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268	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> , 2017 , 2017, 1	5.4	10
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263	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> , 2016 , 2016, 1	5.4	10
262	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> , 2018 , 2018, 1	5.4	10
261	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> , 2018 , 2018, 1	5.4	10
260	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> , 2019 , 2019, 1	5.4	9
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255	Search for associated production of dark matter with a Higgs boson decaying to $(\overline{b}b)$ or $\tau\tau$ ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	9
254	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> , 2017 , 2017, 1	5.4	9
253	Measurement of electroweak-induced production of $W\tau$ 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> , 2017 , 2017, 1	5.4	9
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251	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> , 2019 , 2019, 1	5.4	9
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246	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at. <i>European Physical Journal C</i> , 2018 , 78, 697	4.2	9
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239	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> , 2016 , 2016, 1	5.4	8

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35	Measurement of b jet shapes in proton-proton collisions at $(\sqrt{s}) = 5.02$ TeV. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	○
34	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> , 2021 , 2021, 1	5.4	○
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26	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at .. <i>European Physical Journal C</i> , 2022 , 82, 153	4.2	○
25	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> , 2022 , 82, 290	4.2	○
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18	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> , 2022 , 2022, 1	5.4	○
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