

Catherine Vander Velde

List of Publications by Year in descending order

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Version: 2024-02-01

195
papers

19,518
citations

28274

55
h-index

10734

138
g-index

196
all docs

196
docs citations

196
times ranked

10299
citing authors

#	ARTICLE	IF	CITATIONS
1	Search for $W\tilde{l}^3$ resonances in proton-proton collisions at $\sqrt{s}=13$ TeV using hadronic decays of Lorentz-boosted W bosons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 2022, 1.	4.1	1
2	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of Leptons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	7.8	9
3	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. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
4	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. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
5	Search for WZ resonances decaying to WZ or WZ in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	10
6	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 153.	3.9	14
7	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s}=2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	1
8	Measurement of $W^{\pm}W^{\pm}W^{\pm}$ differential cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	4
9	and effective field. Physical Review D, 2022, 105, . A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2022, 17, P03014.	1.2	6
10	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 213.	3.9	3
11	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 290.	3.9	18
12	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. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
13	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s}=13$ TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
14	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	12
15	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. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
16	Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
17	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
18	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5

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19	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
20	Precision measurement of the W boson decay branching fractions in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	5
21	Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	2
22	Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	4
23	Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	30
24	Observation of $B \rightarrow \psi(2S) K^0_{\text{short}}$ and $B \rightarrow \psi(2S) K^0_{\text{long}}$ decays. European Physical Journal C, 2022, 82, .	3.9	1
25	Inclusive nonresonant multilepton probes of new phenomena at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	2
26	First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2022, 129, .	7.8	7
27	Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2022, 129, .	7.8	10
28	Identification of hadronic tau lepton decays using a deep neural network. Journal of Instrumentation, 2022, 17, P07023.	1.2	12
29	Search for heavy resonances decaying to Z boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.1	0
30	Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 812, 136018.	4.1	20
31	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 13.	3.9	33
32	Search for top squark pair production using dilepton final states in $\sqrt{s} = 13$ TeV collision data collected at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3.	3.9	33
33	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136036.	4.1	13
34	Measurements of $p\bar{p} \rightarrow Z\bar{Z}$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	3.9	24

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37	Development and validation of HERWIG ⁷ tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , 2021, 81, 312.	3.9	12
38	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 378.	3.9	40
39	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. <i>Journal of Instrumentation</i> , 2021, 16, P05014.	1.2	62
40	Measurement of the CP-violating phase β_s in the $B \rightarrow s \ell \ell$ decays. <i>Physical Review D</i> , 2021, 104, .	4.1	12
41	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 488.	3.9	35
42	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$. <i>Journal of Instrumentation</i> , 2021, 16, P07001.	1.2	6
43	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> , 2021, 2021, 1.	4.7	27
44	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2021, 104, .	4.7	25
45	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 629.	3.9	18
46	Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 819, 136409.	4.1	3
47	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 136446.	3.9	9
48	Measurement of the azimuthal anisotropy of and mesons in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review D</i> , 2021, 104, .	4.1	13
49	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 723.	3.9	19
50	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2021, 104, .	4.1	33
51	First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV. <i>Physical Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 820, 136535.	4.1	9
52	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state. <i>Physical Review D</i> , 2021, 104, .	4.1	5
53	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state. <i>Physical Review D</i> , 2021, 104, .	4.7	16
54	Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions. <i>European Physical Journal C</i> , 2021, 81, 852.	3.9	2

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55	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV in 2015 and 2016 at CMS. <i>European Physical Journal C</i> , 2021, 81, 800.	3.9	123
56	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>Physical Review D</i> , 2021, 104, 114017.	4.7	20
57	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>Physical Review D</i> , 2021, 104, 114017.	4.7	13
58	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s} = 13, 13.6$ TeV Using Leptonic Decays. <i>Physical Review Letters</i> , 2021, 127, 191801.	7.8	6
59	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>European Physical Journal C</i> , 2021, 81, 970.	3.9	18
60	Measurement of differential top quark production cross sections in the full kinematic range using two jets in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>Physical Review Letters</i> , Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135502.	4.7	16
61	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>Physical Review D</i> , 2021, 104, 114017.	4.1	37
62	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2020, 15, P02027-P02027.	1.2	27
63	Pileup mitigation at CMS in 13 TeV data. <i>Journal of Instrumentation</i> , 2020, 15, P09018-P09018.	1.2	47
64	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.	1.2	84
65	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> , 2020, 2020, 1.	4.7	21
66	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. <i>Journal of Instrumentation</i> , 2020, 15, P06005-P06005.	1.2	56
67	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> , 2020, 2020, 1.	4.7	20
68	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>Physical Review Letters</i> , Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135502.	4.1	40
69	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV. <i>European Physical Journal C</i> , 2020, 80, 534.	3.9	14
70	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>European Physical Journal C</i> , 2020, 80, 75.	3.9	78
71	Searches for physics beyond the standard model with the M_{T2} variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13, 13.6$ TeV. <i>European Physical Journal C</i> , 2020, 80, 3.	3.9	70
72	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. <i>European Physical Journal C</i> , 2020, 80, 4.	3.9	198

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73	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 124, 131802.	7.8	61
74	A measurement of the Higgs boson mass in the diphoton decay channel. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135425.	4.1	63
75	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
76	Observation of the $b \rightarrow s \gamma$ decay in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 802, 135203.	4.1	6
77	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. Journal of High Energy Physics, 2019, 2019, 1.	4.7	17
78	Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 99, .	4.7	20
79	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134876.	4.1	26
80	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134952.	4.1	17
81	Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134985.	4.1	36
82	Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s} = 13$ TeV using the CMS detector. Journal of Instrumentation, 2019, 14, P07004-P07004.	1.2	83
83	Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134876.	4.1	36
84	Search for Dark Matter Particles Produced in Association with a Top Quark Pair at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 122, 011803.	7.8	12
85	Search for the pair production of light top squarks in the $e^+e^- \rightarrow t\bar{t}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
86	Measurements of the Higgs boson width and anomalous $H \rightarrow VV$ couplings from on-shell and off-shell production in the four-lepton final state. Physical Review D, 2019, 99, .	4.1	69
87	Measurements of the pp $t\bar{t}$ WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
88	Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 791, 96-129.	4.1	44
89	Measurement of the $t\bar{t}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 368.	3.9	68
90	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 280.	3.9	29

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91	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particles, 2019, 769, 156-157.	4.7	14
92	Search for $\overline{\text{H}}\text{o}\overline{\text{b}}\overline{\text{b}}$ production in the $\text{H}\text{o}\overline{\text{b}}\overline{\text{b}}$ decay channel with leptonic $\overline{\text{t}}\overline{\text{t}}$ decays in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
93	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. Journal of High Energy Physics, 2019, 2019, 1.	4.7	12
94	Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	18
95	Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 100, .	4.7	14
96	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
97	Study of the $\text{B}^0 \rightarrow \text{W}^+ \text{Z} \nu_{\tau}$ decay in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	3
98	Observation of Electroweak Production of Same-Sign $\text{W}^+ \text{W}^+ \text{Z} \nu_{\tau} \nu_{\tau}$ Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 123, 091801.	7.8	86
99	Search for $\text{W}^+ \text{W}^+ \text{Z} \nu_{\tau} \nu_{\tau}$ production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	7.8	39
100	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 291.	3.9	27
101	Measurements of the $\text{p} \rightarrow \text{Z} \nu_{\tau}$ production cross section and the $\text{Z} \rightarrow \text{e}^+ \text{e}^-$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 165.	3.9	52
102	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	63
103	Search for $\overline{\text{H}}\text{o}\overline{\text{b}}\overline{\text{b}}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
104	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. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
105	Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
106	Precision measurement of the structure of the CMS inner tracking system using nuclear interactions. Journal of Instrumentation, 2018, 13, P10034-P10034.	1.2	11
107	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	57
108	Measurement of jet substructure observables in $\text{W}^+ \text{W}^+ \text{Z} \nu_{\tau} \nu_{\tau}$ events from proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	24

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109	Search for $Z\tilde{\chi}^0_3$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
110	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
111	Performance of reconstruction and identification of \tilde{l}_ν leptons decaying to hadrons and \tilde{l}_ν in pp collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P10005-P10005.	1.2	69
112	Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
113	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $\tilde{\chi}^0_3$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
114	Search for high-mass resonances in final states with a lepton and missing transverse momentum at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	25
115	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
116	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}^0_3$ or \tilde{l}_ν , \tilde{l}_ν , $\tilde{\chi}^0_1$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
117	Search for a heavy resonance decaying into a Z boson and a vector boson in the $\tilde{u}\tilde{u}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
118	Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV. Journal of Instrumentation, 2018, 13, P05011-P05011.	1.2	241
119	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying \tilde{l}_ν leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
120	Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
121	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. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
122	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
123	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	86
124	Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 778, 263-291.	4.1	19
125	Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks. Physical Review D, 2018, 97.	4.7	23
126	Measurement of differential cross sections for the production of top quark pairs and of additional jets in \tilde{l}_ν events from pp collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97.	4.7	30

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127	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2018, 97, 074011.	4.7	78
128	Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2018, 13, P06015-P06015.	1.2	180
129	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2018, 97, 074011.	4.7	36
130	Observation of $t\bar{t}$ production in association with a Z boson and transverse momentum imbalance at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2018, 120, 231801.	7.8	209
131	Measurements of the $(p\bar{p}) \rightarrow Z(\gamma) + \text{jet}$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	7.8	47
132	Measurements of the $(p\bar{p}) \rightarrow Z(\gamma) + \text{jet}$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	54
133	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.	4.7	54
134	Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV. <i>Journal of Instrumentation</i> , 2017, 12, P02014-P02014.	1.2	216
135	The CMS trigger system. <i>Journal of Instrumentation</i> , 2017, 12, P01020-P01020.	1.2	307
136	Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $\sqrt{s} = 13$ TeV using the \cancel{E}_T variable. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 767, 403-430.	4.7	19
137	Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2017, 119, 141802.	7.8	54
138	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	103
139	Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 775, 1-24.	4.1	40
140	Searches for pair production of third-generation squarks in $\sqrt{s} = 13$ TeV pp collisions. <i>European Physical Journal C</i> , 2017, 77, 327.	3.9	32
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147	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	101
148	Particle-flow reconstruction and global event description with the CMS detector. Journal of Instrumentation, 2017, 12, P10003-P10003.	1.2	348
149	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 451.	3.9	55
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151	Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	7
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157	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
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162	Constraints on the spin-parity and anomalous Higgs boson couplings in proton collisions at 7 and 8 TeV. Physical Review D, 2015, 92, .	4.7	185

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164	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. Journal of High Energy Physics, 2015, 2015, 1.	4.7	92
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172	Measurement of the properties of a Higgs boson in the four-lepton final state. Physical Review D, 2014, 89, .	4.7	299
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178	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
179	Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	4.7	320
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