

# Gueorgui Antchev

## List of Publications by Year in descending order

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Version: 2024-02-01

244  
papers

7,660  
citations

101384

36  
h-index

66788

78  
g-index

248  
all docs

248  
docs citations

248  
times ranked

7371  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for $X(3872)$ in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2022, 128, 032001.	2.9	23
2	Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
3	Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions. Journal of High Energy Physics, 2022, 2022, 1.	1.6	8
4	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of Leptons in $pp$ Collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	2.9	9
5	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.	1.6	6
6	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.	1.6	5
7	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	10
8	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.	1.4	14
9	Search for long-lived particles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	3
10	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.	1.6	1
11	Characterisation of the dip-bump structure observed in proton-proton elastic scattering at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2022, 82, 1.	1.4	6
12	Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions. Physical Review Letters, 2022, 128, 122301.	2.9	11
13	Differential cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	4
14	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.	1.4	3
15	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.	1.4	18
16	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.	1.6	13
17	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.	1.6	5
18	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.	1.6	12

#	ARTICLE	IF	CITATIONS
19	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.	1.6	2
20	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.	1.6	6
21	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.	1.6	5
22	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.	1.6	5
23	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.	1.6	2
24	Precision measurement of the $W$ boson decay branching fractions in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	1.6	5
25	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, .	1.6	2
26	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, .	1.6	4
27	Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	5
28	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, .	1.6	30
29	Measurement of the inclusive and differential $\overline{\text{t}}\text{t}$ cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	2
30	Observation of $B^0 \rightarrow \mu^+ \mu^- \gamma$ and $B^0 \rightarrow \mu^+ \mu^- \gamma$ decays. European Physical Journal C, 2022, 82, .	1.4	1
31	Inclusive nonresonant multilepton probes of new phenomena at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	1.6	2
32	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, 123, .	1.6	14
33	Identification of hadronic tau lepton decays using a deep neural network. Journal of Instrumentation, 2022, 17, P07023.	2.9	10
34	Search for heavy resonances decaying to $Z$ boson and a top quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 832, 137263.	0.5	12
35	Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 832, 137263.	1.5	0

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37	Search for the lepton flavor violating decay $\tilde{l}_i \rightarrow \tilde{l}_j \gamma$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
38	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, 813, 136018.	1.5	20
39	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.	1.4	33
40	Evidence for Higgs boson decay to a pair of muons. Journal of High Energy Physics, 2021, 2021, 1.	1.6	54
41	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3.	1.4	33
42	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.	1.5	13
43	Measurement of differential top quark production cross sections using top quarks at large transverse momenta in collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 103, .	1.6	7
44	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14
45	Measurements of $pp \rightarrow Z Z$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	1.4	24
46	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic $WW$ decay mode at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	15
47	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. Journal of High Energy Physics, 2021, 2021, 1.	1.6	26
48	Search for new physics in top quark production with additional leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV using effective field theory. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
49	Measurement of differential cross sections for $Z$ bosons produced in association with charm jets in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
50	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. Journal of High Energy Physics, 2021, 2021, 1.	1.6	28
51	Development and validation of HERWIG tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	1.4	12
52	Angular analysis of the decay $B \rightarrow K^* \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
53	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. European Physical Journal C, 2021, 81, 378.	1.4	40
54	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. Journal of Instrumentation, 2021, 16, P05014.	0.5	62

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55	Measurement of prompt D0 and $\Lambda_c^+$ meson azimuthal anisotropy and search for strong electric fields in PbPb collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.5	12
56	Measurement of b jet shapes in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
57	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
58	Study of Drell-Yan dimuon production in proton-lead collisions at $\sqrt{s_{NN}} = 8.16$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
59	Measurement of the CP-violating phase $\beta_s$ in the $B \rightarrow D^* \mu^+ \mu^-$ decay. Physical Review Letters, 2021, 126, 252002.	1.5	12
60	Measurements of the differential cross sections of the production of Z + jets and $\tilde{\chi}^0 + jets$ and of Z boson emission collinear with a jet in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
61	In-medium modification of dijets in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
62	Measurement of the Z boson differential production cross section using its invisible decay mode ( $Z \rightarrow \nu\bar{\nu}$ ). Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
63	Measurement of the $Wf^3$ Production Cross Section in Proton-Proton Collisions at $s = 13$ TeV and Constraints on Effective Field Theory Coefficients. Physical Review Letters, 2021, 126, 252002.	2.9	13
64	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 488.	1.4	35
65	Observation of a New Excited Beauty Strange Baryon Decaying to $\Lambda_c^+ \mu^+ \mu^-$ . Physical Review Letters, 2021, 126, 252003.	2.9	22
66	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ . Journal of Instrumentation, 2021, 16, P07001.	0.5	6
67	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
68	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	62
69	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, 054011.	1.6	25
70	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 629.	1.4	18
71	Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Particle and High Energy Physics, 2021, 811, 135475.	1.5	3
72	Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, 054011.	1.6	4



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73	Constraints on the Initial State of Pb-Pb Collisions via Measurements of $Z$ -Boson Yields and Azimuthal Anisotropy at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	2.9	5
74	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.	2.9	37
75	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, 723.	1.4	9
76	Measurement of the azimuthal anisotropy of mesons in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.5	13
77	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.	1.4	19
78	Search for lepton-flavor violating decays of the Higgs boson in the $Z\gamma$ final state. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.6	25
79	Search for $W\ell\ell$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.5	33
80	Search for $W\ell\ell$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.5	9
81	Using dileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.5	5
82	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, .	1.6	16
83	Search for long-lived particles decaying to jets with displaced vertices in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2021, 104, .	1.6	8
84	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.	1.4	2
85	Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	2.9	16
86	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. <i>European Physical Journal C</i> , 2021, 81, 800.	1.4	123
87	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.6	20
88	Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	1.5	18
89	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> , 2021, 2021, 1.	1.6	8
90	Measurement of the electroweak production of $Z$ boson and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2021, 104, .	1.6	13

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91	Measurements of the $pp \rightarrow W \hat{A} \pm Z \hat{A} \pm$ and $pp \rightarrow Z \hat{A} \pm Z \hat{A} \pm$ cross sections at $\sqrt{s} = 13$ TeV and limits on anomalous quartic gauge couplings. Journal of High Energy Physics, 2021, 2021, 1.	1.6	7
92	Study of Z boson plus jets events using variables sensitive to double-parton scattering in pp collisions at 13 TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	1
93	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV Using Leptonic Decays. Physical Review Letters, 2021, 127, 191801.	2.9	6
94	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 970.	1.4	18
95	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\tau\tau, \tau\tau, b\bar{b}$ final state at 13 TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
96	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	36
97	Measurement of differential $t\bar{t}$ production cross sections in the full kinematic range using $t\bar{t} \rightarrow \tau^+\tau^-$ production cross sections in the full kinematic range using $t\bar{t} \rightarrow \tau^+\tau^-$ .	1.6	16
98	Observation of $tW$ production in the single-lepton channel in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
99	Measurement of prompt open-charm production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
100	Measurement of the inclusive and differential $t\bar{t}$ cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
101	Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
102	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. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
103	Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2021, 127, 261804.	2.9	17
104	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. Journal of High Energy Physics, 2021, 2021, 1.	1.6	1
105	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2021, 127, 261804.	2.9	20
106	Measurements of production cross sections of $WZ$ and same-sign $WW$ boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135609.	1.5	37
107	The production of isolated photons in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	4
108	Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135609.	1.5	8

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109	Investigation into the event-activity dependence of $\tilde{\tau}(nS)$ relative production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
110	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	1.3	21
111	Measurement of the cross section for $W^+W^-$ boson pair production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102.	1.6	13
112	Search for electroweak production of a vector-like T quark using fully hadronic final states. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
113	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. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
114	Measurement of properties of $B_s^0 \rightarrow \tau^+ \tau^-$ decays and search for $B_0 \rightarrow \tau^+ \tau^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.8	41
115	Search for a light pseudoscalar Higgs boson in the boosted $t\bar{t}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	23
116	Measurements of $t\bar{t}H$ Production and the $CP$ Structure of the Yukawa Interaction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	2.9	38
117	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P02027-P02027.	0.5	27
118	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	10
119	Measurement of the cross section for $t\bar{t}$ production with additional jets and b jets in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	5
120	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. Journal of High Energy Physics, 2020, 2020, 1.	1.6	41
121	Measurement of the $Y(1S) \rightarrow \tau^+ \tau^-$ pair production cross section and search for resonances decaying to $Y(1S) \rightarrow \tau^+ \tau^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	1.5	27
122	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	37
123	Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P05002-P05002.	0.5	3
124	Search for supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	11
125	Observation of the $t\bar{t}H$ production and the $CP$ structure of the Yukawa interaction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	2.9	13
126	Measurement of the cross section for $t\bar{t}H$ production and the $CP$ structure of the Yukawa interaction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	2.9	14



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127	Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	10
128	Study of central exclusive "Equation missing" $\langle$ !- No EquationSource Format="TEX", only image $\rightarrow$ production in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV. European Physical Journal C, 2020, 80, 718.	1.4	7
129	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 $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 752.	1.4	23
130	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
131	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	0.5	47
132	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
133	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\rho$ or $\pi$ meson. Journal of High Energy Physics, 2020, 2020, 1.	1.6	6
134	Measurement of $B_c(2S)^+$ and $B_c^*(2S)^+$ cross section ratios in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	4
135	Measurement of the top quark Yukawa coupling from $W$ boson rapidity, helicity, double-differential cross sections, and charge asymmetry in $p\bar{p}$ collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	13
136	Measurement of the top quark Yukawa coupling from $t\bar{t}$ kinematic distributions in the dilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	10
137	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. Physical Review Letters, 2020, 125, 222001.	2.9	7
138	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	21
139	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	66
140	Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	21
141	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. Journal of Instrumentation, 2020, 15, P06005-P06005.	0.5	56
142	Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter. Journal of Instrumentation, 2020, 15, P06009-P06009.	0.5	5
143	Search for supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in events with high-momentum Z bosons and missing transverse momentum. Journal of High Energy Physics, 2020, 2020, 1.	1.6	4
144	Search for resonant pair production of Higgs bosons in the $b\bar{b}Z$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	10

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