

Amilien Chapon

List of Publications by Year in descending order

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Version: 2024-02-01

165
papers

4,674
citations

126708

33
h-index

118652

62
g-index

170
all docs

170
docs citations

170
times ranked

6419
citing authors

#	ARTICLE	IF	CITATIONS
1	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 TeV. European Physical Journal C, 2015, 75, 212.	1.4	541
2	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	1.4	499
3	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	1.4	198
4	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 8 \text{ TeV}$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	1.4	123
5	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	1.6	103
6	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	1.6	101
7	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.	1.6	92
8	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	1.6	86
9	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
10	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 75.	1.4	78
11	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 $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 3.	1.4	70
12	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 $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2019, 79, 368.	1.4	68
13	Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2016, 76, 439.	1.4	64
14	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	1.6	63
15	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. European Physical Journal C, 2016, 76, 13.	1.4	62
16	Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	1.6	62
17	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. Journal of Instrumentation, 2021, 16, P05014.	0.5	62
18	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2021, 2021, 1.	1.6	62

#	ARTICLE	IF	CITATIONS
19	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.	1.6	57
20	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.	1.4	55
21	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $s = 8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	54
22	Evidence for Higgs boson decay to a pair of muons. Journal of High Energy Physics, 2021, 2021, 1.	1.6	54
23	Measurements of the $\mathcal{P}(\text{pp} \rightarrow \text{ZZ})$ production cross section and the $\mathcal{B}(\text{ZZ} \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 165.	1.4	52
24	Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ production cross section in the e^+e^- channel in proton-proton collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	41
25	Measurement of the Higgs boson production cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 367, 136446.	1.5	40
26	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
27	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.	1.4	39
28	Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 636.	1.4	38
29	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying ℓ , leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38
30	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, 2021, 819, 136446.	1.5	37
31	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
32	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
33	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
34	Search for top squark pair production using dilepton final states in $\text{pp} \rightarrow \text{pp} + \text{ZZ}$ collision data collected at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3.	1.4	33
35	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136446.	1.5	33
36	Searches for pair production of third-generation squarks in $\sqrt{s} = 13$ TeV pp collisions. European Physical Journal C, 2017, 77, 327.	1.4	32

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37	Search for top squark pair production in pp collisions at $\sqrt{s}=13$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
38	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
39	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	29
40	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.	1.4	29
41	Search for $\overline{t}t\overline{H}o$ production in the $\overline{b}b$ decay channel with leptonic $\overline{t}t$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
42	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
43	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.	1.6	28
44	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.	1.4	27
45	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
46	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
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 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.	1.6	25
49	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2021, 104, .	1.6	25
50	Measurements of $\sigma(\overline{p}p \rightarrow Z\overline{Z})$ 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
51	Search for a light pseudoscalar Higgs boson in the boosted $\overline{t}t$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	23
52	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. Journal of High Energy Physics, 2017, 2017, 1.	1.6	22
53	Observation of a New Excited Beauty Strange Baryon Decaying to $\overline{t}b\overline{c}$. Physical Review Letters, 2021, 126, 252003.	2.9	22
54	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

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55	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
56	Search for $\overline{t}tH$ production in the all-jet final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	20
57	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.	1.6	20
58	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s}=13$ TeV. Physical Review Letters, 2020, 125, 151802.	2.9	20
59	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
60	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.	1.5	20
61	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2021, 104, .	1.6	20
62	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
63	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into l, ν leptons in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
64	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. European Physical Journal C, 2021, 81, 723.	1.4	19
65	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.	1.6	18
66	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
67	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
68	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
69	Search for $Z^{\prime 3}$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
70	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 697.	1.4	17
71	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.	1.6	17
72	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

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73	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
74	Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at $\sqrt{s} = 2.76$ and 5.02 TeV. <i>Physical Review Letters</i> , 2021, 127, 122001.	2.9	16
75	Measurement of the $t\bar{t}\hat{A}$ production cross sections in the full kinematic range using $t\bar{t}\hat{A}$ events with one lepton and at least one jet in pp collisions at $s = 13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	16
76	Measurement of the $t\bar{t}\hat{A}$ production cross section using events with one lepton and at least one jet in pp collisions at $s = 13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	15
77	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	14
78	Measurements of the pp \hat{A} ' 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.	1.6	14
79	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	2.9	14
80	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s} = 2.76$ and 5.02 TeV PbPb collisions at $\sqrt{s} = 2.76$ and 5.02 TeV. <i>European Physical Journal C</i> , 2020, 80, 534.	1.4	14
81	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	14
82	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	14
83	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2022, 82, 153.	1.4	14
84	Inclusive nonresonant multilepton probes of new phenomena at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2022, 105, .	1.6	14
85	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $s = 8$ TeV. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	1.6	13
86	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	13
87	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.	1.6	13
88	Measurement of the $W\hat{A}^3$ Production Cross Section in Proton-Proton Collisions at $s = 13$ TeV and Constraints on Effective Field Theory Coefficients. <i>Physical Review Letters</i> , 2021, 126, 252002.	2.9	13
89	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	13
90	Measurement of the electroweak production of $Z\hat{A}$ 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	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
92	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.	1.6	12
93	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}_1^0$ or $\tilde{\chi}_1^\pm$, $\tilde{\nu}_\tau$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	12
94	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.	1.6	12
95	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
96	Development and validation of HERWIG7 tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	1.4	12
97	Measurement of the CP-violating phase β_s in the $B \rightarrow D_s^* \mu^+ \mu^-$ decay. Physical Review Letters, 2022, 128, 122301.	1.5	12
98	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
99	Identification of hadronic tau lepton decays using a deep neural network. Journal of Instrumentation, 2022, 17, P07023.	0.5	12
100	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.	1.6	11
101	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\tilde{\chi}_1^0, \tilde{\chi}_1^\pm, b\bar{b}$ final state at 13 TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
102	Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions. Physical Review Letters, 2022, 128, 122301.	2.9	11
103	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
104	Search for heavy resonances decaying to WZ or $W\gamma$ in the $u\bar{u}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
105	Search for flavor-changing neutral current interactions in 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, 128, 122301.	2.9	10
106	Angular analysis of the decay $B^+ \rightarrow \bar{K}^0 \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
107	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	1.4	9
108	Search for $W\mu\tau$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV in the hadronic final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136535.	1.5	9

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109	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of Leptons in Collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	2.9	9
110	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2q$ final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	8
111	Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb^{-1} of proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
112	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
113	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
114	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.	1.6	7
115	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. Physical Review Letters, 2020, 125, 222001.	2.9	7
116	Measurements of the $pp \rightarrow W \Delta$ and $pp \rightarrow Z \Delta$ 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
117	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, .	2.9	7
118	Search for decays of the 125 GeV Higgs boson into a Z boson and a ρ meson. Journal of High Energy Physics, 2020, 2020, 1.	1.6	6
119	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$. Journal of Instrumentation, 2021, 16, P07001.	0.5	6
120	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
121	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
122	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
123	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.	0.5	6
124	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
125	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.	1.6	5
126	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

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127	In-medium modification of dijets in PbPb collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
128	Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z -Boson Yields and Azimuthal Anisotropy at $\sqrt{s_{\mathrm{NN}}} = 2.76$ TeV. Physical Review Letters, 2021, 127, 102102.	2.9	5
129	Search for single production of a top quark and a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Particle and Elementary Particle Physics, 2022, 850, 298-302.	1.5	5
130	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s} = 8$, $\sqrt{s} = 13$ TeV with the CMS and TOTEM experiments. European Physical Journal C, 2020, 80, 1164.	1.4	5
131	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
132	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
133	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
134	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
135	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
136	Precision measurement of the W boson decay branching fractions in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, 112001.	1.6	5
137	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.	1.6	5
138	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
139	Measurement of W boson differential cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, 112001.	1.6	4
140	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.	1.6	4
141	Search for the lepton flavor violating decay $\tilde{l}_i \rightarrow l_j \gamma$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
142	Study of Drell-Yan dimuon production in proton-lead collisions at $\sqrt{s_{\mathrm{NN}}} = 8.16$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
143	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 Elementary Particle Physics, 2021, 803, 298-302.	1.5	3
144	Hard color-singlet exchange in dijet events in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, 114011.	1.6	3

#	ARTICLE	IF	CITATIONS
145	Study of the $\mathcal{B}(\mathcal{B}^+ \rightarrow \mathcal{B}^0 \gamma) / \mathcal{B}(\mathcal{B}^+ \rightarrow \mathcal{B}^0 \ell^+ \ell^-)$ decay in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	3
146	Measurements of the $(\mathcal{B}^0 \rightarrow \mathcal{B}^+ \mathcal{B}^-)$ production cross section and the $(\mathcal{B}^0 \rightarrow \mathcal{B}^+ \mathcal{B}^-)$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. , 2018, 78, 1.		3
147	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
148	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
149	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
150	Measurements of the differential cross sections of the production of Z + jets and \mathcal{B}^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
151	Measurement of the Z boson differential production cross section using its invisible decay mode ($Z \rightarrow \nu\bar{\nu}$) in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
152	Measurements of angular distance and momentum ratio distributions in three-jet and $Z + 2$ -jet final states in pp collisions. European Physical Journal C, 2021, 81, 852.	1.4	2
153	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
154	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
155	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
156	Measurement of the inclusive $t\bar{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
157	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
158	Measurement of the inclusive and differential $t\bar{t}$ 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
159	Measurement of the differential cross sections of the production of Z + jets and \mathcal{B}^0 + jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	2
160	Search for $W\mathcal{B}^0$ 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, 826, 136888.	1.5	1
161	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
162	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

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163	Observation of $B^0 \rightarrow \psi(2S)K^0_{\text{S}} \psi(2S)K^0_{\text{S}}$ and $B^0_{\text{S}} \rightarrow \psi(2S)K^0_{\text{S}} \psi(2S)K^0_{\text{S}}$ decays. European Search for heavy resonances decaying to Z	1.4	1
164	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