

# Shirin Chenarani

## List of Publications by Year in descending order

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Version: 2024-02-01

196  
papers

4,923  
citations

134610

34  
h-index

169272

56  
g-index

200  
all docs

200  
docs citations

200  
times ranked

7016  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s}=13$ , $\sqrt{s}=8$ TeV. European Physical Journal C, 2019, 79, 421.	1.4	355
2	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
3	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 Particle and High-Energy Physics, 2019, 792, 530-551.	1.4	146
4	Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 122, 121803.	2.9	102
5	Search for production of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 530-551.	1.5	87
6	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
7	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 75.	1.4	78
8	Measurement of nuclear modification factors of $\rho(1S)$ , $\rho(2S)$ , and $\rho(3S)$ mesons in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 270-293.	1.4	77
9	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 $\sqrt{s}=13$ , $\sqrt{s}=8$ TeV. European Physical Journal C, 2020, 80, 3.	1.4	70
10	Measurements of the Higgs boson width and anomalous $H\gamma\gamma$ couplings from on-shell and off-shell production in the four-lepton final state. Physical Review D, 2019, 99, .	1.4	69
11	Measurement of the $t\bar{t}\gamma$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at. European Physical Journal C, 2019, 79, 368.	1.4	68
12	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
13	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.	1.5	63
14	Observation of Two Excited $B_c$ States and Measurement of the $B_c$ Decay Constant. Physical Review Letters, 2020, 124, 131802.	2.9	62
15	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.	2.9	61
16	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. Journal of Instrumentation, 2020, 15, P06005-P06005.	0.5	56
17	Search for charged Higgs bosons in the $H\rightarrow\tau\nu$ decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	54
18	Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	1.6	54

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19	Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 320-347.	1.5	53
20	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 564.	1.4	50
21	Search for an $\tilde{L}^{\pm}\tilde{L}^{\mp}$ gauge boson using $Z\tilde{\chi}^{\pm}\tilde{\chi}^{\mp}$ events in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 345-368.	1.5	49
22	Search for supersymmetric partners of electrons and muons in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 140-166.	1.5	47
23	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	0.5	47
24	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.	1.5	44
25	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two muons and two b quarks in pp collisions at 13 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 398-423.	1.5	41
26	Measurement of properties of $B_{s1}$ decays and search for $B_0 \rightarrow \mu^+ \mu^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	41
27	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
28	Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV and combination with the lepton+jets channel. European Physical Journal C, 2019, 79, 313.	1.4	40
29	Search for disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134985.	1.5	40
30	Production and the association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Structure of the Yukawa couplings. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 281-307.	2.9	38
31	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.	1.5	37
32	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
33	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.	1.5	36
34	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, 795, 281-307.	1.5	36
35	Measurement of exclusive $\gamma\gamma$ photoproduction from protons in $p\bar{p}$ collisions at $\sqrt{s}=5.02$ TeV. European Physical Journal C, 2019, 79, 277.	1.4	35
36	Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 269.	1.4	35

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37	Search for pair production of vectorlike quarks in the fully hadronic final state. Physical Review D, 2019, 100, .	1.6	35
38	Search for vectorlike leptons in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2019, 100, .	1.6	34
39	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two $\tilde{l}$ , leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	33
40	Measurement of exclusive $\rho^+\rho^-$ photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. European Physical Journal C, 2019, 79, 702.	1.4	33
41	Spin correlations using dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 13.	1.6	33
42	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
43	Search for top squark pair production using dilepton final states in $pp$ collision data collected at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 3.	1.4	33
44	Measurement of normalised multi-differential cross sections in $pp$ collisions at $\sqrt{s}=13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1.	1.4	33
45	Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physical Review C, 2019, 100, .	1.6	32
46	Non-Gaussian elliptic-flow fluctuations in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 643-665.	1.6	32
47	Search for pair production of first-generation scalar leptoquarks at $s=13$ TeV. Physical Review D, 2019, 99, .	1.6	31
48	A multi-dimensional search for new heavy resonances decaying to boosted $W$ or $Z$ boson pairs in the dijet final state at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 237.	1.4	31
49	Observation of Single Top Quark Production in Association with a $Z$ Boson in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 123, 122002.	2.9	30
50	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
51	Measurement and interpretation of differential cross sections for Higgs boson production at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 107-131.	1.6	28
52	Search for a $W\epsilon^2$ boson decaying to a $\tilde{l}$ , lepton and a neutrino in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 107-131.	1.6	28
53	Search for $\tilde{b}\tilde{b}^*$ production in the $\tilde{b}\tilde{b}^*\rightarrow b\bar{b}$ decay channel with leptonic $\tilde{b}\tilde{b}^*\rightarrow b\bar{b}\ell\bar{\ell}$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
54	Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 792, 107-131.	1.5	28

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55	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.	1.5	28
56	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
58	A search for pair production of new light bosons decaying into muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 796, 131-154.	1.5	27
59	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
60	Measurement of the $Y(1S)$ pair production cross section and search for resonances decaying to $Y(1S)\gamma$ 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
61	Search for new neutral Higgs bosons through the $\text{H} \rightarrow \text{ZZ}$ process in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	27
62	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.	1.5	26
63	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
64	Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	26
65	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
66	Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
67	Jet Shapes of Isolated Photon-Tagged Jets in $pp$ and $pp$ Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 122, 152001.	2.9	24
68	Study of excited $\bar{b}b0$ states decaying to $\bar{b}b0\gamma$ in proton-proton collisions at $s=13\text{TeV}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135345.	1.5	24
69	Search for resonant $\text{t}\bar{\text{t}}$ production in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	23
70	Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 123, 231803.	2.9	23
71	Search for a light pseudoscalar Higgs boson in the boosted $\bar{t}t\gamma$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	23
72	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

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73	Search for direct pair production of supersymmetric partners to the $\tau$ lepton in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 189.	1.4	22
74	Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 370.	1.4	22
75	Boson Decaying to a $W$ Boson and a $C$ -Odd Higgs Boson in Final State. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $W$ Boson and a $C$ -Odd Higgs Boson in Final State. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $C$	2.9	21
76	Observation of prompt $J/\psi$ meson elliptic flow in high-multiplicity pPb collisions at $\sqrt{s}=13.8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 791, 172-194.	1.5	21
77	Constraints on anomalous $H$ - $V$ couplings from the production of Higgs bosons decaying to lepton pairs. Physical Review D, 2019, 100, .	1.6	21
78	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
79	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
80	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
81	Observation of electroweak production of $W^3$ with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 811, 135908.	1.5	21
82	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, .	1.6	20
83	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2019, 100, .	1.6	20
84	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s}=13$ TeV. Physical Review Letters, 2020, 125, 151802.	2.9	20
85	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
86	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
87	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on anomalous quartic couplings. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
88	A search for the standard model Higgs boson decaying to charm quarks. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
89	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. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $W$ boson pairs in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $W$	1.5	20
90	Search for MSSM Higgs bosons decaying to $\tau\tau$ in proton-proton collisions at $\sqrt{s}=13$ TeV. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $\tau\tau$ in proton-proton collisions at $\sqrt{s}=13$ TeV. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> $\tau\tau$	1.5	19

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91	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
92	Observation of nuclear modifications in $W^{\pm}$ boson production in pPb collisions at $\sqrt{s_{NN}}=8.16$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 800, 135048.	1.5	18
93	Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Nuclear, Elementary Particle and High-Energy Physics, 2021, 812, 135992.	1.5	18
94	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.	1.5	18
95	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.	1.6	17
96	Mesons in Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2019, 123, 022001.	1.5	17
97	Search for new physics in top quark production in dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 886.	1.4	16
98	Measurement of prompt $\tau(2S)$ production cross sections in proton-lead and proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 509-532.	1.5	16
99	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\tau\mu$ , and $e\tau$ , in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	15
100	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
101	Search for anomalous triple gauge couplings in $WW$ and $WZ$ production in lepton + jet events in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	15
102	Meson production in pp and PbPb collisions at $\sqrt{s} = 13$ TeV. Nuclear, Elementary Particle and High-Energy Physics, 2019, 796, 168-190.	1.5	14
103	Measurements of the pp at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	14
104	Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 100, .	1.6	14
105	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
106	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

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109	Observation of the $B \rightarrow X s$ decay in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	2.9	14
110	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.	1.6	14
111	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
112	Search for top quark partners with charge $5/3$ in the same-sign dilepton and single-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	13
113	Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	13
114	Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	13
115	Measurement of the jet mass distribution and top quark mass in hadronic decays of boosted top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
116	Measurement of the jet mass distribution and top quark mass in hadronic decays of boosted top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	2.9	13
117	Measurement of the jet mass distribution and top quark mass in hadronic decays of boosted top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
118	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
119	Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	13
120	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
121	An embedding technique to determine $\tilde{t}, \tilde{b}$ backgrounds in proton-proton collision data. Journal of Instrumentation, 2019, 14, P06032-P06032.	0.5	12
122	Search for Higgs and Z boson decays to $J/\psi$ or $\Upsilon$ pairs in the four-muon final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134811.	1.5	12
123	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1.	1.4	12
124	Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 893.	1.4	12
125	Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 800, 135042.	1.5	12
126	Investigation into the event-activity dependence of $\tilde{t}(\text{nS})$ relative production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12

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127	Measurement of the CP-violating phase $\arg(\lambda_{cb})$ in the $B \rightarrow \pi^0 \ell^+ \ell^-$ decays versus $B \rightarrow \pi^0 \ell^+ \ell^-$ versus $B \rightarrow \pi^0 \ell^+ \ell^-$ decays. <i>Physical Review Letters</i> , 2020, 124, 121801.	1.6	12
128	Search for new physics in top quark production with additional leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV using effective field theory. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	12
129	Development and validation of HERWIG 7 tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , 2021, 81, 312.	1.4	12
130	Measurement of the CP-violating phase $\arg(\lambda_{cb})$ in the $B \rightarrow \pi^0 \ell^+ \ell^-$ decays versus $B \rightarrow \pi^0 \ell^+ \ell^-$ versus $B \rightarrow \pi^0 \ell^+ \ell^-$ decays. <i>Physical Review Letters</i> , 2020, 124, 121801.	1.5	12
131	Search for supersymmetry in events with a photon, jets, $\cancel{E}_T$ , and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 444.	1.4	11
132	Search for nonresonant Higgs boson pair production in the $b\bar{b}$ final state at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	11
133	Search for the production of four top quarks in the single-lepton and opposite-sign dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	11
134	Bose-Einstein correlations of charged hadrons in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	11
135	Measurement of the CP-violating phase $\arg(\lambda_{cb})$ in the $B \rightarrow \pi^0 \ell^+ \ell^-$ decays versus $B \rightarrow \pi^0 \ell^+ \ell^-$ versus $B \rightarrow \pi^0 \ell^+ \ell^-$ decays. <i>Physical Review Letters</i> , 2020, 124, 121801.	1.6	11
136	Measurement of electroweak production of a $W$ boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 43.	1.4	11
137	Search for the production of $W$ bosons in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2019, 100, 113001.	1.6	10
138	Search for resonances decaying to a pair of Higgs bosons in the $b\bar{b}q\bar{q}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	10
139	Measurement of the quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at $\sqrt{s} = 5.02$ TeV. <i>Physical Review C</i> , 2020, 101, 054907.	1.1	10
140	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	10
141	Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review D</i> , 2020, 102, 034011.	1.6	10
142	Measurement of the top quark Yukawa coupling from kinematic distributions in the dilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2020, 124, 121801.	1.6	10
143	Measurement of the top quark Yukawa coupling from kinematic distributions in the dilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2020, 124, 121801.	1.6	10
144	Evidence for $W$ production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	10

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145	Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton + jets final state in pp collisions at $\sqrt{s} = 13, \text{ext } \{TeV\}$ $s = 13$ TeV. European Physical Journal C, 2019, 79, 1.	1.4	9
146	Search for a low-mass $\tilde{l}, \tilde{\nu}^*$ , + resonance in association with a bottom quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	9
147	Combinations of single-top-quark production cross-section measurements and $ f_{LVtb} $ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments. Journal of High Energy Physics, 2019, 2019, 1.	1.6	9
148	Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2019, 123, 102301.	1.5	9
149	Diffusion inside jets Using Pb-Pb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2020, 125, 102001.	2.9	9
150	Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	9
151	Multiparticte correlation studies in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review C, 2020, 102, 054907.	1.1	9
152	Angular analysis of the decay $B^+ \rightarrow \bar{K}^0 \ell^+ \nu_\ell$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
153	Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions. Journal of Instrumentation, 2020, 15, P10002-P10002.	0.5	9
154	Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	8
155	Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in $\sqrt{s} = 13, \text{ext } \{TeV\}$ collisions at $\sqrt{s} = 13, \text{ext } \{TeV\}$ . European Physical Journal C, 2019, 79, 773.	1.4	8
156	Measurement of inclusive very forward jet cross sections in proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	8
157	Probing the chiral magnetic wave in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2019, 123, 102301.	1.1	8
158	Measurement of CKM matrix elements in single top quark $t$ -channel production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135609.	1.5	8
159	Dependence of inclusive jet production on the anti- $k_T$ distance parameter in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
160	Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at $\sqrt{s} = 13$ TeV via Higgs boson decays to $\tilde{l}, \nu$ , leptons. Journal of High Energy Physics, 2019, 2019, 1.	1.6	7
161	Study of central exclusive "Equation missing" $\rightarrow$ production in proton-proton collisions at $\sqrt{s} = 5.02$ TeV and 13 TeV. European Physical Journal C, 2020, 80, 718.	1.4	7
162	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. Physical Review Letters, 2020, 125, 222001.	2.9	7

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164	Measurement of differential $t\bar{t}$ production cross sections using top quarks at large transverse momenta in pp collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 103.	1.6	7
165	Centrality and pseudorapidity dependence of the transverse energy density in pp collisions at $\sqrt{s} = 13$ TeV. Physical Review C, 2019, 100, .	1.1	6
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167	Measurement of the top quark Yukawa coupling from $t\bar{t}$ kinematic distributions in the lepton+jets final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 100, .	1.6	6
168	Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $\sqrt{s} = 8, 13$ TeV. European Physical Journal C, 2019, 79, 969.	1.4	6
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173	Measurement of the cross section for $t\bar{t}$ meson production inside jets in pp collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 124, 041803.	1.5	6
174	Observation of the $t\bar{t}b$ decay in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 802, 135203.	1.5	6
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178	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
179	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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182	The production of isolated photons in PbPb and pp collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	4
183	Measurement of $B_c(2S)^+$ and $B_c^*(2S)^+$ cross section ratios in proton-proton collisions at $s=13\text{ TeV}$ . Physical Review D, 2020, 102, .	1.6	4
184	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
185	Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	4
186	Inclusive search for supersymmetry in pp collisions at $\sqrt{s}=13$ TeV using razor variables and boosted object identification in zero and one lepton final states. Journal of High Energy Physics, 2019, 2019, 1.	1.6	3
187	Search for excited leptons in $\hat{a}, \hat{a}', \hat{f}^3$ final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	3
188	Search for Narrow $H^3$ Resonances in Proton-Proton Collisions at $s=13\text{ TeV}$ . Physical Review Letters, 2019, 122, 081804.	2.9	3
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194	Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets. Physical Review Letters, 2019, 123, 241801.	2.9	1
195	Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	1
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