

Jaana Heikkilä

List of Publications by Year in descending order

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Version: 2024-02-01

229
papers

7,307
citations

71102

41
h-index

79698

73
g-index

236
all docs

236
docs citations

236
times ranked

7490
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.	3.9	541
2	Combined measurements of Higgs boson couplings in proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 421.	3.9	355
3	Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV. Journal of Instrumentation, 2018, 13, P05011-P05011.	1.2	241
4	Observation of Higgs Boson Decay to Bottom Quarks. Physical Review Letters, 2018, 121, 121801.	7.8	219
5	Observation of $H \rightarrow b\bar{b}$ in proton collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2018, 120, 231801.	7.8	209
6	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	3.9	198
7	Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2018, 120, 221801.	7.8	160
8	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, 793, 520-551.	7.8	160
9	Precision luminosity measurement in proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
10	Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 122, 121803.	7.8	102
11	Search for Higgs Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 122, 121803.	7.8	86
12	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	86
13	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	1.2	84
14	Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s} = 13$ TeV using the CMS detector. Journal of Instrumentation, 2019, 14, P07004-P07004.	1.2	83
15	Search for narrow and broad dijet resonances in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter mediators and other new particles. Journal of High Energy Physics, 2018, 2018, 1.	4.7	82
16	Measurement of angular parameters from the decay $B_0 \rightarrow \bar{a}_1 \ell^+ \ell^-$ in proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 781, 517-541.	4.7	81
17	Search for production of four top quarks in final states with same-sign or multiple leptons in proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 75.	3.9	78
18	Search for additional neutral MSSM Higgs bosons in the $\tau\tau$, $\tau\tau$, final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	73

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19	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 $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 3.	3.9	70
20	Performance of reconstruction and identification of \tilde{l} , leptons decaying to hadrons and $\tilde{\chi}_0^0$ in pp collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P10005-P10005.	1.2	69
21	Measurement of the $\sigma(\text{pp} \rightarrow t\bar{t}\tilde{A})$ 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.	3.9	68
22	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.	4.7	66
23	Evidence for the Higgs boson decay to a bottom quark-antiquark pair. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 501-532.	4.1	63
24	A measurement of the Higgs boson mass in the diphoton decay channel. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135425.	4.1	63
25	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
26	Observation of Two Excited B_c States and Measurement of the B_c States. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135425.	7.8	62
27	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2020, 124, 131802.	7.8	61
28	Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	57
29	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	57
30	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. Journal of Instrumentation, 2020, 15, P06005-P06005.	1.2	56
31	Search for charged Higgs bosons in the $H_{\pm} \rightarrow \tau^{\pm} \tilde{\nu}_{\tau}$ decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	54
32	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.	4.7	54
33	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	7.8	50
34	Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity Pb-Pb Collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physical Review Letters, 2018, 121, 082301.	7.8	48
35	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	7.8	47
36	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	1.2	47

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37	Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 140.	3.9	44
38	Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 791, 96-129.	4.1	44
39	Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2018, 2018, 1.	4.7	43
40	Search for vector-like T and B quark pairs in final states with leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	42
41	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	42
42	Measurement of properties of $B_{(s)}$ decays and search for $B_0 \rightarrow \tau^+ \tau^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	4.7	41
43	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.	4.7	41
44	Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	40
45	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.	3.9	40
46	Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
47	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying W , leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
48	Production and the structure of the Yukawa interaction of the Higgs boson with top quarks. Physical Review Letters, 2018, 120, 201801.	7.8	38
49	Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	37
50	Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 122, 021801.	7.8	37
51	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.	4.7	37
52	Search for Narrow Resonances in the Tagged Dijet Mass Spectrum in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 120, 201801.	7.8	36
53	Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134985.	4.1	36
54	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.	4.1	36

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55	Measurement of the cross section for top quark pair production in association with a W or Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	35
56	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 488.	3.9	35
57	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two \tilde{l} , leptons in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	34
58	Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	34
59	Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark final state in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 781, 244-269.	4.1	33
60	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. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	33
61	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 13.	3.9	33
62	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 3.	3.9	33
63	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. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	33
64	Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	31
65	A multi-dimensional search for new heavy resonances decaying to boosted W , Z , or Z boson pairs in the dijet final state at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 237.	3.9	31
66	Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , 2019, 122, 132003.	7.8	30
67	Search for lepton flavour violating decays of the Higgs boson to $\tilde{l}\tilde{l}$, and $e\tilde{l}$, in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	29
68	Observation of proton-tagged, central (semi)exclusive production of high-mass lepton pairs in pp collisions at 13 TeV with the CMS-TOTEM precision proton spectrometer. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	29
69	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. <i>European Physical Journal C</i> , 2019, 79, 280.	3.9	29
70	Measurements of differential cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV using events containing two leptons. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	28
71	Search for $\tilde{t}\tilde{t}^*\rightarrow b\bar{b}$ production in the $\tilde{t}\rightarrow b\tilde{t}^*$ decay channel with leptonic $\tilde{t}\rightarrow b\tilde{t}^*$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	28
72	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	28

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73	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 291.	3.9	27
74	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.	1.2	27
75	Search for new neutral Higgs bosons through the $\text{H} \rightarrow \text{Z} \text{b} \bar{\text{b}}$ process in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	27
76	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.	4.7	27
77	Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	26
78	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134876.	4.1	26
79	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.	4.7	26
80	Search for high-mass resonances in final states with a lepton and missing transverse momentum at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	25
81	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.	4.7	25
82	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.	4.7	25
83	Search for new particles decaying to a jet and an emerging jet. Journal of High Energy Physics, 2019, 2019, 1.	4.7	24
84	Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $\sqrt{s} = 2.76$ and $2.76 < \sqrt{s} < 2.76$ TeV. Physical Review Letters, 2019, 122, 152001.	7.8	24
85	Measurements of $\text{pp} \rightarrow \text{Z} \text{Z} \text{Z}$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	3.9	24
86	Observation of Top Quark Production in Proton-Nucleus Collisions. Physical Review Letters, 2017, 119, 242001.	7.8	23
87	Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	23
88	Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	23
89	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.	4.7	23
90	Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 123, 231803.	7.8	23

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91	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.	3.9	23
92	Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s}=2.76$ TeV. Physical Review Letters, 2022, 128, 032001.	7.8	23
93	Constraining Gluon Distributions in Nuclei Using Dijets in Proton-Proton and Proton-Lead Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2018, 121, 062002.	7.8	22
94	Search for direct pair production of supersymmetric partners to the $\tilde{\tau}_1$ lepton in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 189.	3.9	22
95	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.	3.9	22
96	Search for supersymmetry in events with a $\tilde{\chi}_1^0$, lepton pair and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	21
97	Search for beyond the standard model Higgs bosons decaying into a $\tilde{b}\tilde{b}$ pair in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	21
98	Search for a Light Charged Higgs Boson Decaying to a W Boson and a C -Odd Higgs Boson in Final States with e . Journal of High Energy Physics, 2018, 2018, 1.	7.8	21
99	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	2.9	21
100	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.	4.7	21
101	Search for $t\bar{t}H$ production in the all-jet final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
102	Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
103	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.	4.7	20
104	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.	4.7	20
105	A search for the standard model Higgs boson decaying to charm quarks. Journal of High Energy Physics, 2020, 2020, 1.	4.7	20
106	Observation of the $\tilde{b}_1(3P)$ and $\tilde{b}_2(3P)$ and Measurement of their Masses. Physical Review Letters, 2018, 121, 092002.	7.8	19
107	Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at 13 TeV. Physical Review Letters, 2018, 120, 241801.	7.8	19
108	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.	3.9	19

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109	Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	18
110	Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	18
111	Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	18
112	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 629.	3.9	18
113	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.	3.9	18
114	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 290.	3.9	18
115	Charged-particle nuclear modification factors in XeXe collisions at $\sqrt{s_{NN}} = 5.44$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
116	Search for $Z\tilde{\chi}^0_1$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
117	Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
118	Search for the decay of a Higgs boson in the $h \rightarrow \tilde{\chi}^0_1 \tilde{\chi}^0_1$ channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
119	Electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 1.	3.9	17
120	Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	17
121	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134952.	4.1	17
122	Studies of Beauty Suppression via Nonprompt Mesons in Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2019, 123, 022001.	7.8	17
123	Search for single production of vector-like quarks decaying to a b quark and a Higgs boson. Journal of High Energy Physics, 2018, 2018, 1.	4.7	16
124	Search for a singly produced third-generation scalar leptoquark decaying to a $\tilde{\chi}^0_1$, lepton and a bottom quark in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	15
125	Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	15
126	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\tilde{\chi}^0_1 \tilde{\chi}^0_1$, and $e\tilde{\chi}^0_1$, in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	15

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127	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.	4.7	15
128	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.	4.7	15
129	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
130	Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 121, 221802.	7.8	14
131	Studies of $B_s^0 \rightarrow B_s^- \mu^+ \nu_\mu$ and $B_s^0 \rightarrow B_s^- \mu^+ \nu_\mu$ and $B_s^0 \rightarrow B_s^- \mu^+ \nu_\mu$		

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145	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.	4.7	13
146	Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	7.8	13
147	Physical Review Letters, 2020, 124, 202001. Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136036.	4.1	13
148	Measurement of the azimuthal anisotropy of Λ and mesons in $PbPb$ collisions at $\sqrt{s_{NN}}=5.02$ TeV. Nuclear Physics A, 2021, 995, 172217.	4.1	13
149	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.	4.7	13
150	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
151	Comparing transverse momentum balance of b jet pairs in pp and $PbPb$ collisions at $\sqrt{s_{NN}}=5.02$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
152	Measurement of the groomed jet mass in $PbPb$ and pp collisions at $\sqrt{s_{NN}}=5.02$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
153	Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
154	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\nu}\tilde{\nu}^*$ or $\tilde{\nu}, \tilde{\nu}^*$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
155	Search for Dark Matter Particles Produced in Association with a Top Quark Pair at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	7.8	12
156	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.	3.9	12
157	Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	12
158	Investigation into the event-activity dependence of $\tilde{p}_T(nS)$ relative production in proton-proton collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	12
159	Polarizations in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	12
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161	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	12
162	Search for gauge-mediated supersymmetry in events with at least one photon and missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 118-143.	4.1	11

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163	Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
164	Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
165	Search for nonresonant Higgs boson pair production in the $\overline{b}b$ final state at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	11
166	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. Journal of High Energy Physics, 2019, 2019, 1.	4.7	11
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168	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. Journal of High Energy Physics, 2021, 2021, 1.	4.7	11
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174	Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
175	Search for lepton-flavor violating decays of heavy resonances and quantum black holes to $e\tau$ final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
176	Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 1.	3.9	9
177	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 $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	9
178	Search for a low-mass $\overline{\text{t}}\text{t}$ resonance in association with a bottom quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	9
179	Studies of Charm Quark Diffusion Inside Jets Using Pb-Pb and pp Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 125, 102001.	7.8	9
180	Search for a heavy vector resonance decaying to a $\text{Z}\overline{\text{Z}}$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	3.9	9

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182	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.	4.7	8
183	Search for pair production of excited top quarks in the lepton + jets final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 778, 349-370.	4.1	8
184	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.	4.7	8
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187	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 $\bar{l}l$, leptons. Journal of High Energy Physics, 2019, 2019, 1.	4.7	7
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193	Search for dijet resonances using events with three jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 800, 291-300.	4.1	6
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205	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
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213	Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	4
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222	Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions. European Physical Journal C, 2021, 81, 852.	3.9	2
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226	Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets. Physical Review Letters, 2019, 123, 241801.	7.8	1
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