

Benedikt Vormwald

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8429611/publications.pdf>

Version: 2024-02-01

224
papers

6,737
citations

71102

41
h-index

98798

67
g-index

229
all docs

229
docs citations

229
times ranked

7630
citing authors

#	ARTICLE	IF	CITATIONS
1	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
2	Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s}=13$, ext {TeV} TeV. European Physical Journal C, 2019, 79, 421.	3.9	355
3	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
4	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$, hbox {TeV} TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
5	Charged-particle nuclear modification factors in PbPb and pPb collisions at $s_{NN} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	103
6	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	101
7	Search for new phenomena with the M_{T2} variable in the all-hadronic final state produced in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 710.	3.9	98
8	Searches for invisible decays of the Higgs boson in pp collisions at $s = 7, 8, \text{ and } 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	95
9	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
10	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
11	Measurement of the differential cross section and charge asymmetry for inclusive $p \rightarrow p \rightarrow W^{\pm} + X$ production at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 469.	3.9	83
12	Measurement of prompt and nonprompt charmonium suppression in PbPb collisions at 5.02 TeV. European Physical Journal C, 2018, 78, 509.	3.9	83
13	Suppression and azimuthal anisotropy of prompt and nonprompt J/ψ production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. European Physical Journal C, 2017, 77, 252.	3.9	82
14	Search for a charged Higgs boson in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	4.7	81
15	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.	3.9	78
16	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 $\sqrt{s}=13$, ext {TeV} TeV. European Physical Journal C, 2020, 80, 3.	3.9	70
17	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. European Physical Journal C, 2019, 79, 368.	3.9	68
18	Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$, ext {TeV} TeV. European Physical Journal C, 2016, 76, 439.	3.9	64

#	ARTICLE	IF	CITATIONS
19	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	63
20	Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	62
21	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
22	Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at 8 TeV. European Physical Journal C, 2018, 78, 701.	3.9	58
23	Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 578.	3.9	57
24	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
25	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
26	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 451.	3.9	55
27	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.	4.7	54
28	Measurement of prompt and nonprompt J/ψ production in pp and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2017, 77, 269.	3.9	53
29	Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV and impact on parton distribution functions. European Physical Journal C, 2017, 77, 459.	3.9	52
30	Measurements of the $\mathit{pp} \rightarrow \mathit{ZZ}$ production cross section and the $\mathit{Z} \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	3.9	52
31	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.	3.9	50
32	Observation of $Y(1S)$ pair production in proton-proton collisions at $s = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	48
33	Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 364.	3.9	48
34	Search for third-generation scalar leptoquarks decaying to a top quark and a τ lepton at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 707.	3.9	46
35	Search for a light charged Higgs boson decaying to $c\bar{s}$ in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1-37.	4.7	44
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	Evidence for exclusive $\hat{t}\hat{t}^* W + W \hat{a}^*$ production and constraints on anomalous quartic gauge couplings in pp collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	42
39	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	42
40	Measurement of the $t\bar{t} \hat{A}^*$ production cross section in the $e\hat{t}^*$ channel in proton-proton collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41
41	Measurement of the $t\bar{t} \hat{A}^*$ production cross section in the all-jets final state in pp collisions at $\sqrt{s}=8$ and 8 TeV. European Physical Journal C, 2016, 76, 128.	3.9	41
42	Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	41
43	Measurement of the $t\bar{t} \hat{A}^*$ production cross section using events in the $e\hat{t}^*$ final state in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 172.	3.9	40
44	Search for new physics in dijet angular distributions using proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter and other models. European Physical Journal C, 2018, 78, 789.	3.9	40
45	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.	3.9	40
46	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
47	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
48	Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at $\sqrt{s}= 13$ TeV. European Physical Journal C, 2017, 77, 845.	3.9	38
49	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.	3.9	38
50	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying \hat{l} , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
51	Measurement of the WZ production cross section in pp collisions at $\sqrt{s} = 7$ and 8 TeV and search for anomalous triple gauge couplings at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2017, 77, 236.	3.9	37
52	Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b} \hat{A}^* \hat{A}^*$ final state in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	36
53	Search for heavy Majorana neutrinos in $e\hat{A}^* \hat{A}^* +$ jets and $e\hat{A}^* \hat{t}^* +$ jets events in proton-proton collisions at $s = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	35
54	Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	35

#	ARTICLE	IF	CITATIONS
55	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton–proton collisions at $\sqrt{s} = 13, \text{ext \{TeV\}}$. European Physical Journal C, 2021, 81, 488.	3.9	35
56	Measurement of $\overline{t}t$ production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8, \text{ext \{TeV\}}$ $s = 8 \text{ TeV}$. European Physical Journal C, 2016, 76, 379.	3.9	34
57	Measurements of the $\overline{t}t$ production cross section in lepton+jets final states in pp collisions at $8, \text{ext \{TeV\}}$ TeV and ratio of 8 to $7\text{A}, \text{ext \{TeV\}}$ TeV cross sections. European Physical Journal C, 2017, 77, 15.	3.9	34
58	Measurement of the top quark mass with lepton+jets final states using $p\overline{p}$ collisions at $\sqrt{s}=13, \text{ext \{TeV\}}$. European Physical Journal C, 2018, 78, 891.	3.9	34
59	Search for single production of vector-like quarks decaying to a top quark and a W boson in proton–proton collisions at $\sqrt{s} = 13, \text{ext \{TeV\}}$ $s = 13 \text{ TeV}$. European Physical Journal C, 2019, 79, 90.	3.9	34
60	Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks. European Physical Journal C, 2016, 76, 371.	3.9	33
61	Measurement of exclusive ρ^0 photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02, \text{ext \{TeV\}}$. European Physical Journal C, 2019, 79, 702.	3.9	33
62	Search for dark matter produced in association with a leptonically decaying Z boson in proton–proton collisions at $\sqrt{s}=13, \text{ext \{TeV\}}$. European Physical Journal C, 2021, 81, 13.	3.9	33
63	Search for top squark pair production using dilepton final states in pp collision data collected at $\sqrt{s}=13, \text{ext \{TeV\}}$. European Physical Journal C, 2021, 81, 3.	3.9	33
64	Measurement of $\overline{t}t$ normalised multi-differential cross sections in pp collisions at $\sqrt{s}=13, \text{ext \{TeV\}}$, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1.	3.9	33
65	Searches for pair production of third-generation squarks in $\sqrt{s}=13, \text{ext \{TeV\}}$ TeV pp collisions. European Physical Journal C, 2017, 77, 327.	3.9	32
66	Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at $\sqrt{s_{\text{NN}}}=2.76 \text{ TeV}$. Journal of High Energy Physics, 2016, 2016, 1.	4.7	31
67	Search for top squark pair production in pp collisions at $\sqrt{s}=13 \text{ TeV}$ using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
68	A multi-dimensional search for new heavy resonances decaying to boosted W , Z , or Z boson pairs in the dijet final state at $\sqrt{s}=13, \text{ext \{TeV\}}$. European Physical Journal C, 2020, 80, 237.	3.9	31
69	Search for massive W resonances decaying into the $u\overline{b}$ final state at $\sqrt{s}=8, \text{ext \{TeV\}}$ TeV. European Physical Journal C, 2016, 76, 237.	3.9	30
70	Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s} = 8, \text{ext \{TeV\}}$ $s = 8 \text{ TeV}$. European Physical Journal C, 2017, 77, 751.	3.9	30
71	Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s_{\text{NN}}}=5.02, \text{ext \{TeV\}}$ s_{NN} . European Physical Journal C, 2016, 76, 372.	3.9	29
72	Correlations between jets and charged particles in PbPb and pp collisions at $\sqrt{s_{\text{NN}}}=2.76 \text{ TeV}$. Journal of High Energy Physics, 2016, 2016, 1.	4.7	29

#	ARTICLE	IF	CITATIONS
73	A search for new phenomena in pp collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ $s = 13$ TeV in final states with missing transverse momentum and at least one jet using the α_{T} variable. European Physical Journal C, 2017, 77, 294.	3.9	29
74	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	29
75	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ $s = 13$ Te. European Physical Journal C, 2019, 79, 280.	3.9	29
76	Search for $\overline{\text{t}}\text{H}$ production in the $\text{H} \rightarrow \text{b}\overline{\text{b}}$ decay channel with leptonic $\overline{\text{t}}$ decays in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
77	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
78	Search for anomalous single top quark production in association with a photon in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	27
79	Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	27
80	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2018, 78, 291.	3.9	27
81	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
82	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
83	Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s} = 2.76, \text{ext}\{\text{TeV}\}$ $s = 2.76$ TeV. European Physical Journal C, 2016, 76, 1.	3.9	26
84	Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 325.	3.9	25
85	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
86	P-Type Silicon Strip Sensors for the new CMS Tracker at HL-LHC. Journal of Instrumentation, 2017, 12, P06018-P06018.	1.2	24
87	Measurements of $\text{pp} \rightarrow \text{Z}\text{Z}$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2021, 81, 200.	3.9	24
88	Observation of top quark pairs produced in association with a vector boson in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	23
89	Measurement of the jet mass in highly boosted $\overline{\text{t}}\text{t}$ events from pp collisions at $\sqrt{s} = 8, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2017, 77, 467.	3.9	23
90	Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23

#	ARTICLE	IF	CITATIONS
91	Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23
92	Measurement of the top quark mass using single top quark events in proton-proton collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 354.	3.9	23
93	Measurement of the triple-differential dijet cross section in proton-proton collisions at $\sqrt{s}=8$ TeV and constraints on parton distribution functions. European Physical Journal C, 2017, 77, 746.	3.9	23
94	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
95	Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23
96	Search for $t\bar{t}\tilde{\chi}^0$ resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
97	Search for massive resonances decaying into WW, WZ or ZZ bosons in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
98	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.	4.7	22
99	Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying \tilde{l} , leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
100	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
101	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
102	Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	21
103	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
104	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
105	Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	20
106	Search for $t\bar{t}\tilde{\chi}^0\tilde{\chi}^0$ 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
107	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
108	Search for rare decays of Z and Higgs bosons to $\tilde{\chi}^0\tilde{\chi}^0$ and a photon in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 94.	3.9	20

#	ARTICLE	IF	CITATIONS
109	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
110	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $s = 7 \sqrt{s} = 7$ TeV and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
111	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 $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
112	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$. European Physical Journal C, 2021, 81, 723.	3.9	19
113	Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at $s_{NN} = 2.76 \sqrt{s_{\text{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	18
114	Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at $\sqrt{s} = 8, \text{TeV}$. European Physical Journal C, 2016, 76, 460.	3.9	18
115	Measurement of normalized differential $\overline{\sigma}(\tau)$ cross sections in the dilepton channel from pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	18
116	Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$. European Physical Journal C, 2019, 79, 20.	3.9	18
117	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
118	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$. European Physical Journal C, 2021, 81, 629.	3.9	18
119	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$. European Physical Journal C, 2021, 81, 970.	3.9	18
120	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$. European Physical Journal C, 2022, 82, 290.	3.9	18
121	Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width. Journal of High Energy Physics, 2016, 2016, 1.	4.7	17
122	Search for new physics with the M_{T2} variable in all-jets final states produced in pp collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	17
123	Search for new physics in the monophoton final state in proton-proton collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
124	Measurement of electroweak-induced production of $W\tilde{W}^3$ with two jets in pp collisions at $s = 8 \sqrt{s} = 8$ TeV and constraints on anomalous quartic gauge couplings. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
125	Measurements of jet charge with dijet events in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
126	Constraints on the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17

#	ARTICLE	IF	CITATIONS
127	Search for $Z\tilde{\chi}^0_3$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
128	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.	3.9	17
129	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
130	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
131	Search for lepton flavour violating decays of heavy resonances and quantum black holes to an $e\mu$ pair in proton-proton collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 317.	3.9	16
132	Measurement of dijet azimuthal decorrelation in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 536.	3.9	16
133	Search for excited leptons in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	16
134	Measurement of the production cross section of a W boson in association with two b jets in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 92.	3.9	16
135	Measurement of associated Z + charm production in proton-proton collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2018, 78, 287.	3.9	16
136	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.	3.9	16
137	Measurement of top quark polarisation in t-channel single top quark production. Journal of High Energy Physics, 2016, 2016, 1.	4.7	15
138	Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
139	Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
140	Measurement of the $t\bar{t}\tilde{\chi}^0_3$ production cross section using events with one lepton and at least one jet in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
141	Search for new physics with dijet angular distributions in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
142	Search for s channel single top quark production in pp collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	14
143	Search for supersymmetry in pp collisions at $\sqrt{s}=13$ TeV in the single-lepton final state using the sum of masses of large-radius jets. Journal of High Energy Physics, 2016, 2016, 1.	4.7	14
144	Search for associated production of dark matter with a Higgs boson decaying to $b\bar{b}\tilde{\chi}^0_3$ or $\tilde{\chi}^0_3\tilde{\chi}^0_3$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14

#	ARTICLE	IF	CITATIONS
145	Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
146	Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
147	Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
148	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
149	Measurements of the $pp \rightarrow WZ$ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
150	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV . European Physical Journal C, 2020, 80, 534.	3.9	14
151	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
152	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
153	Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
154	Search for single production of vector-like quarks decaying to a Z boson and a top or a bottom quark in proton-proton collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	13
155	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
156	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
157	Jet properties in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
158	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
159	Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2015, 2015, 1.	4.7	12
160	Phenomenological MSSM interpretation of CMS searches in pp collisions at $s = 7 \sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	12
161	Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
162	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}_3^0$ or $\tilde{\chi}_1^0, \tilde{\chi}_2^0$ at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12

#	ARTICLE	IF	CITATIONS
163	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $\sqrt{s} = 13, \sqrt{s} = 8$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	12
164	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
165	Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $\sqrt{s} = 13, \sqrt{s} = 8$ TeV. European Physical Journal C, 2019, 79, 893.	3.9	12
166	Development and validation of HERWIG++ tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
167	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. European Physical Journal C, 2022, 82, 1.	3.9	12
168	Search for electroweak production of charginos in final states with two \tilde{l} , leptons in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	11
169	Measurement of the semileptonic $t \bar{t} \rightarrow \text{lepton} + \tilde{l}^3$ production cross section in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	11
170	Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at $s = 8 \sqrt{s} = 8$ TeV using $H \rightarrow WW$ decays. Journal of High Energy Physics, 2017, 2017, 1.	4.7	11
171	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
172	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
173	Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton-proton collisions at $13 \sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 444.	3.9	11
174	Study of the underlying event in top quark pair production in $pp \rightarrow t \bar{t} + X$ collisions at $13 \sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 123.	3.9	11
175	Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13, \sqrt{s} = 8$ TeV. European Physical Journal C, 2020, 80, 43.	3.9	11
176	Measurements of the $pp \rightarrow W \tilde{l}^3$ and $pp \rightarrow Z \tilde{l}^3$ cross sections and limits on anomalous quartic gauge couplings at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	10
177	Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at $s = 13 \sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	10
178	Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	10
179	Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at $\sqrt{s} = 7 \sqrt{s} = 7$ TeV. European Physical Journal C, 2018, 78, 242.	3.9	10
180	Measurement of the $\mathcal{L}(\text{Z}/\gamma^* \rightarrow \text{au au}) / \mathcal{L}(\text{Z}/\gamma^* \rightarrow \text{e}^+ \text{e}^-, \mu^+ \mu^-)$ cross section in pp collisions at $\sqrt{s} = 13$ TeV and validation of $\mathcal{L}(\text{Z}/\gamma^* \rightarrow \text{e}^+ \text{e}^-, \mu^+ \mu^-)$. European Physical Journal C, 2018, 78, 708.	3.9	10

#	ARTICLE	IF	CITATIONS
181	Search for a heavy resonance decaying into a Z boson and a vector boson in the $\overline{u}\overline{q}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
182	Evidence for W production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	10
183	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
184	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
185	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
186	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.	3.9	9
187	Searches for W bosons decaying to a top quark and a bottom quark in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
188	Pseudorapidity distributions of charged hadrons in proton-lead collisions at $\sqrt{s_{NN}}=5.02$ and 8.16 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
189	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
190	Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 773.	3.9	8
191	Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	8
192	Spin transport and polarimetry in the beam delivery system of the international linear collider. Journal of Instrumentation, 2014, 9, P07003-P07003.	1.2	7
193	Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	7
194	Search for high-mass Z resonances in e^+e^- and $\tau^+\tau^-$ final states in proton-proton collisions at $\sqrt{s} = 8$ and 13 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	7
195	Study of central exclusive "Equation missing" production in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV. European Physical Journal C, 2020, 80, 718.	3.9	7
196	Measurement of the mass of the top quark in decays with a J/ψ meson in pp collisions at 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	6
197	Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	6
198	Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	5

#	ARTICLE	IF	CITATIONS
199	Search for the production of an excited bottom quark decaying to tW in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2016, 2016, 1.	4.7	5
200	Search for a heavy resonance decaying to a top quark and a vector-like top quark at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	5
201	Test beam performance measurements for the Phase I upgrade of the CMS pixel detector. Journal of Instrumentation, 2017, 12, P05022-P05022.	1.2	5
202	Measurement of the inclusive $\overline{t}t$ cross section in pp collisions at $\sqrt{s} = 5.02 \text{ TeV}$ using final states with at least one charged lepton. Journal of High Energy Physics, 2018, 2018, 1.	4.7	5
203	Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	5
204	Search for the pair production of light top squarks in the $e\tilde{\nu}_\tau$ final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
205	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s} = 8, \sqrt{s} = 13 \text{ TeV}$ with the CMS and TOTEM experiments. European Physical Journal C, 2020, 80, 1164.	3.9	5
206	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
207	Search for dark matter particles in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ using the razor variables. Journal of High Energy Physics, 2016, 2016, 1.	4.7	4
208	Characterisation of irradiated thin silicon sensors for the CMS phase II pixel upgrade. European Physical Journal C, 2017, 77, 1.	3.9	4
209	Search for CP violation in $t\overline{t}$ production and decay in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	4
210	Measurement of differential cross sections in the kinematic angular variable ϕ_{j1}^* for inclusive Z boson production in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	4.7	4
211	Search for ZZ resonances in the $2\gamma, 2\ell$ final state in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	4
212	Test beam demonstration of silicon microstrip modules with transverse momentum discrimination for the future CMS tracking detector. Journal of Instrumentation, 2018, 13, P03003-P03003.	1.2	4
213	Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at $\sqrt{s} = 13, \sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2019, 79, 305.	3.9	4
214	Search for top quark partners with charge 5/3 in proton-proton collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	3
215	Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13 \text{ TeV}$. Journal of Instrumentation, 2020, 15, P05002-P05002.	1.2	3
216	Measurements of the $(pp) \rightarrow ZZ$ production cross section and the $(Z) \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \sqrt{s} = 13 \text{ TeV})$. , 2018, 78, 1.		3

#	ARTICLE	IF	CITATIONS
217	A quartz Cherenkov detector for Compton-polarimetry at future e^+e^- colliders. Journal of Instrumentation, 2015, 10, P05014-P05014.	1.2	2
218	Search for new phenomena with multiple charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 1.	3.9	2
219	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
220	A calibration system for Compton polarimetry at e^+e^- linear colliders. Journal of Instrumentation, 2016, 11, P01014-P01014.	1.2	2
221	Measurement of the energy asymmetry in $t\bar{t}$ production at 13 TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, .	3.9	2
222	Measurement of the inclusive $\overline{t}t$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
223	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	1
224	Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	0