

# Robert Schäffbeck

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3512337/publications.pdf>

Version: 2024-02-01

201  
papers

17,412  
citations

30070

54  
h-index

13771

129  
g-index

202  
all docs

202  
docs citations

202  
times ranked

10002  
citing authors

#	ARTICLE	IF	CITATIONS
1	Search for $W\tilde{l}^3$ resonances in proton-proton collisions at $\sqrt{s}=13$ TeV using hadronic decays of Lorentz-boosted $W$ bosons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 2022, 1.	4.1	1
2	Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of Leptons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	7.8	9
3	Inclusive and differential cross section measurements of single top quark production in association with a $Z$ boson in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
4	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
5	Search for $WZ$ resonances decaying to $WZ$ or $WZ$ in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	10
6	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 153.	3.9	14
7	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
8	Measurement of $W^{\pm}W^{\pm}W^{\pm}$ differential cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	4
9	and effective field. Physical Review D, 2022, 105, . A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2022, 17, P03014.	1.2	6
10	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 213.	3.9	3
11	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
12	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
13	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s}=13$ TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
14	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
15	Search for a heavy resonance decaying into a top quark and a $W$ boson in the lepton+jets final state at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
16	Search for heavy resonances decaying to $ZZ$ or $ZW$ and axion-like particles mediating nonresonant $ZZ$ or $ZH$ production at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
17	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
18	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5

#	ARTICLE	IF	CITATIONS
19	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
20	Precision measurement of the $W$ boson decay branching fractions in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	5
21	Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	2
22	Tree boosting for learning EFT parameters. Computer Physics Communications, 2022, 277, 108385.	7.5	6
23	Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	4
24	Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	30
25	Observation of $B^0 \rightarrow \text{supersymmetry}(2S) K^0_{\text{up}} \text{up}^+ \text{up}^+$ and $B^0_{\text{up}} \rightarrow \text{supersymmetry}(2S) K^0_{\text{up}} \text{up}^+ \text{up}^+$ decays. European Physical Journal C, 2022, 82.	3.9	1
26	Measurement of the production cross section for $Zb\bar{b}$ jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	2
27	Inclusive monojet and dilepton probes of new phenomena at $\sqrt{s} = 13$ TeV. Physical Review D, 2022, 105, .	4.7	14
28	First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2022, 129, .	7.8	7
29	Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2022, 129, .	7.8	10
30	Identification of hadronic tau lepton decays using a deep neural network. Journal of Instrumentation, 2022, 17, P07023.	1.2	12
31	Search for heavy resonances decaying to $Z\tau^+\tau^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136036.	4.7	7
32	Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 137263.	4.1	0
33	Search for heavy resonances decaying to $Z\tau^+\tau^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 137263.	4.1	20
34	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.	3.9	33
35	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3.	3.9	33
36	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

#	ARTICLE	IF	CITATIONS
37	Measurements of $\sigma(\text{pp} \rightarrow \text{ZZ})$ 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
38	Development and validation of HERWIG7 tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
39	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 378.	3.9	40
40	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. Journal of Instrumentation, 2021, 16, P05014.	1.2	62
41	Measurement of the CP-violating phase $\beta_s$ in the $B \rightarrow \text{cs}$ decay using the four-lepton final state in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 488.	4.1	12
42	Measurements of production cross sections of the Higgs boson in the four-lepton final state in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 488.	3.9	35
43	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ . Journal of Instrumentation, 2021, 16, P07001.	1.2	6
44	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
45	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . Physical Review D, 2021, 104, .	4.7	25
46	MUSIC: a model-unspecific search for new physics in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 629.	3.9	18
47	Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136409.	4.1	3
48	Search for a heavy vector resonance decaying to a $Z$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 688.	3.9	9
49	Search for isotropy of $\Lambda$ baryons and mesons in $\text{PbPb}$ collisions at $\sqrt{s_{NN}} = 5.02, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 723.	4.1	13
50	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 723.	3.9	19
51	Search for $W$ bosons produced in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 723.	4.1	33
52	Search for $W$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ . Journal of High Energy Physics, 2021, 819, 136446.	4.1	9
53	Using dileptonic final states in $\text{pp}$ collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$ in the hadronic final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136535.	4.1	5
54	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state. Physical Review D, 2021, 104, .	4.7	16

#	ARTICLE	IF	CITATIONS
55	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
56	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
57	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 852.	4.7	20
58	Measurement of the electroweak production of $Z\tau^+\tau^-$ and two jets in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 852.	4.7	13
59	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s} = 13, \text{TeV}$ Using Leptonic Decays. Physical Review Letters, 2021, 127, 191801.	7.8	6
60	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
61	Measurements of production cross sections of $WZ$ and same-sign $WW$ boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 852.	4.7	16
62	Measurements of production cross sections of $WZ$ and same-sign $WW$ boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 852.	4.1	37
63	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . Journal of Instrumentation, 2020, 15, P02027-P02027.	1.2	27
64	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	1.2	47
65	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . Journal of Instrumentation, 2020, 15, P10017-P10017.	1.2	84
66	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
67	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques. Journal of Instrumentation, 2020, 15, P06005-P06005.	1.2	56
68	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . Journal of High Energy Physics, 2020, 2020, 1.	4.7	20
69	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 852.	4.1	40
70	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\{PbPb\}$ collisions at $\sqrt{s_{NN}} = 2.76$ and $5.02, \text{TeV}$ . European Physical Journal C, 2020, 80, 534.	3.9	14
71	Constraining the Higgs boson valence contribution in the proton. Physical Review D, 2020, 101, .	4.7	6
72	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2020, 80, 75.	3.9	78

#	ARTICLE	IF	CITATIONS
73	Searches for physics beyond the standard model with the $T_2$ 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
74	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
75	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
76	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
77	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.	4.7	14
78	Observation of the $\Lambda_b^0 \rightarrow \ell^+ \ell^-$ decay in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 802, 135203.	4.1	6
79	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
80	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, .	4.7	20
81	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
82	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
83	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
84	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
85	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, 797, 134876.	4.1	36
86	Search for Dark Matter Particles Produced in Association with a Top Quark Pair at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 122, 011803.	7.8	12
87	Search for the pair production of light top squarks in the $e^+e^-$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
88	Measurements of the Higgs boson width and anomalous $HVV$ couplings from on-shell and off-shell production in the four-lepton final state. Physical Review D, 2019, 99, .	4.1	69
89	Measurements of the pp $\hat{\sigma}^{\text{tr}} WZ$ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
90	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

#	ARTICLE	IF	CITATIONS
91	Measurement of the $\sigma(\text{pp} \rightarrow t\bar{t})$ 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
92	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.	3.9	29
93	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2019, 123, 111801.	4.7	14
94	Search for $\text{pp} \rightarrow \text{H} \rightarrow \text{bb}$ production in the $\text{H} \rightarrow \text{bb}$ decay channel with leptonic $\text{H} \rightarrow \text{tt}$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
95	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
96	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
97	Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2019, 100, 074011.	4.7	14
98	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
99	Study of the $\text{B}^0 \rightarrow \text{pp}$ decay in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	3
100	Observation of Electroweak Production of Same-Sign W 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, 123, 081801.	7.8	86
101	Search for $\text{pp} \rightarrow \text{H} \rightarrow \text{bb}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	7.8	39
102	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
103	Measurements of the $\text{pp} \rightarrow \text{ZZ}$ production cross section and the $\text{Z} \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	3.9	52
104	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
105	Search for $\text{pp} \rightarrow \text{H} \rightarrow \text{bb}$ 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
106	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
107	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
108	Precision measurement of the structure of the CMS inner tracking system using nuclear interactions. Journal of Instrumentation, 2018, 13, P10034-P10034.	1.2	11

#	ARTICLE	IF	CITATIONS
109	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
110	Measurement of jet substructure observables in $t\bar{t}$ events from proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	24
111	Search for $Z^{\prime 3}$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
112	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
113	Performance of reconstruction and identification of $\tilde{l}_\nu$ , leptons decaying to hadrons and $\tilde{l}_\nu$ in pp collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P10005-P10005.	1.2	69
114	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
115	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\gamma$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
116	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
117	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
118	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\nu}\tilde{\nu}^*$ or $\tilde{l}_\nu, \tilde{l}_\nu^*$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
119	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
120	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}q\bar{q}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
121	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
122	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. Journal of High Energy Physics, 2018, 2018, 1.	4.7	35
123	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\tilde{l}_\nu$ , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
124	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
125	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
126	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62



#	ARTICLE	IF	CITATIONS
127	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
128	Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 778, 263-291.	4.1	19
129	Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks. Physical Review D, 2018, 97, 034011.	4.7	23
130	Measurement of differential cross sections for the production of top quark pairs and of additional jets in $pp$ collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034012.	4.7	30
131	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034013.	4.7	78
132	Jet properties in PbPb and pp collisions at $\sqrt{s_{NN}}=5.02$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
133	Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P06015-P06015.	1.2	180
134	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034013.	4.7	36
135	Observation of $t\bar{t}$ production in $pp$ collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2018, 120, 231801.	7.8	209
136	Search for vectorlike light-flavor quark partners in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034014.	4.7	10
137	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034013.	7.8	47
138	Measurements of the $(p\bar{p}) \rightarrow Z$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 97, 034015.		3
139	Measurement and QCD analysis of double-differential inclusive jet cross sections in $pp$ collisions at $\sqrt{s}=8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	54
140	Jet energy scale and resolution in the CMS experiment in $pp$ collisions at 8 TeV. Journal of Instrumentation, 2017, 12, P02014-P02014.	1.2	216
141	The CMS trigger system. Journal of Instrumentation, 2017, 12, P01020-P01020.	1.2	307
142	Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $\sqrt{s}=13$ TeV using the $l\bar{l}T$ variable. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 767, 403-430.		
143	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s}=13$ TeV. Physical Review D, 2017, 96, 034011.	4.7	19
144	Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using $pp$ Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2017, 119, 141802.	7.8	54

#	ARTICLE	IF	CITATIONS
145	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	103
146	Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 775, 1-24.	4.1	40
147	Searches for pair production of third-generation squarks in $\sqrt{s} = 13$ TeV pp collisions. European Physical Journal C, 2017, 77, 327.	3.9	32
148	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
149	Search for top squark pair production in pp collisions at $\sqrt{s} = 13$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
150	Measurement of the $t\bar{t}\gamma$ 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
151	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	29
152	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
153	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
154	Particle-flow reconstruction and global event description with the CMS detector. Journal of Instrumentation, 2017, 12, P10003-P10003.	1.2	348
155	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
156	Measurement of the ZZ production cross section and Z $\gamma\gamma$ , $Z\gamma$ , $Z\gamma\gamma$ , $Z\gamma\gamma\gamma$ branching fraction in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 763, 280-303.	4.1	22
157	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
158	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
159	Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 439.	3.9	64
160	Measurement of the top quark mass using proton-proton data at $\sqrt{s} = 13$ TeV. Physical Review D, 2016, 93, .	4.7	137
161	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
162	Measurement of the $t\bar{t}\gamma$ production cross section in the $e\bar{e}\gamma$ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41

#	ARTICLE	IF	CITATIONS
163	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
164	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tilde{l}, \tilde{\nu}_\tau$ leptons in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
165	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 13.	3.9	62
166	Evidence for transverse-momentum- and pseudorapidity-dependent event-plane fluctuations in PbPb and $p$ -Pb collisions. Physical Review C, 2015, 92, .	2.9	140
167	Search for a Higgs boson produced in association with a photon in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	46
168	Constraints on the spin-parity and anomalous Higgs boson couplings of the Higgs boson in proton collisions at 7 and 8 TeV. Physical Review D, 2015, 92, .	4.7	185
169	Limits on the Higgs boson lifetime and width from its decay to four charged leptons. Physical Review D, 2015, 92, .	4.7	55
170	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. Journal of High Energy Physics, 2015, 2015, 1.	4.7	92
171	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
172	Measurements of the $Z$ production cross sections in the $Z \rightarrow \tau^+ \tau^-$ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. European Physical Journal C, 2015, 75, 511.	3.9	32
173	Search for long-lived particles that decay into final states containing two electrons or two muons in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2015, 91, .	4.7	70
174	Search for Displaced Supersymmetry in Events with an Electron and a Muon with Large Impact Parameters. Physical Review Letters, 2015, 114, 061801.	7.8	44
175	Study of Vector Boson Scattering and Search for New Physics in Events with Two Same-Sign Leptons and Two Jets. Physical Review Letters, 2015, 114, 051801.	7.8	80
176	Pseudorapidity distribution of charged hadrons in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 143-163.	4.1	45
177	Measurement of higher-order harmonic azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review C, 2014, 89, .	2.9	133
178	Measurement of the properties of a Higgs boson in the four-lepton final state. Physical Review D, 2014, 89, .	4.7	299
179	Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1.	4.7	51
180	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	43

#	ARTICLE	IF	CITATIONS
181	Constraints on the Higgs boson width from off-shell production and decay to Z-boson pairs. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 64-85.	4.1	129
182	Probing color coherence effects in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2014, 74, 2901.	3.9	17
183	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.	4.1	112
184	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
185	Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	4.7	320

186

#	ARTICLE	IF	CITATIONS
199	CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192. Transverse-Momentum and Pseudorapidity Distributions of Charged Hadrons in	3.9	120
200	Collisions at Physical Review Letters, 2010, 105, 022002.	7.8	400
201	Two-loop SUSY QCD corrections to the neutralino masses in the MSSM. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 649, 67-72.	4.1	5