

Ali Eren Simsek

List of Publications by Year in descending order

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Version: 2024-02-01

185
papers

3,398
citations

172386

29
h-index

243529

44
g-index

187
all docs

187
docs citations

187
times ranked

6022
citing authors

#	ARTICLE	IF	CITATIONS
1	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 800$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800. Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at $\sqrt{s} = 2.76, 5.02$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135502.	1.4	123
2	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 75.	1.5	87
3	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.	0.5	84
4	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.4	78
5	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. Observation of Two Excited States and Measurement of the α_s at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 124, 131802.	1.6	66
6	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.5	63
7	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 124, 131802.	2.9	62
8	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. Journal of Instrumentation, 2021, 16, P05014.	0.5	62
9	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	62
10	Search for heavy, energetic, hadronically decaying particles using machine-learning techniques. Journal of Instrumentation, 2020, 15, P06005-P06005.	0.5	56
11	Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	1.6	54
12	Evidence for Higgs boson decay to a pair of muons. Journal of High Energy Physics, 2021, 2021, 1.	1.6	54
13	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	0.5	47
14	Measurement of properties of $B_s^0 \rightarrow \mu^+ \mu^-$ decays and search for $B_s^0 \rightarrow \mu^+ \mu^- \gamma$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	41
15	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. Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135502.	1.6	41
16	Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135502.	1.5	40

#	ARTICLE	IF	CITATIONS
19	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Measurements of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mover accent="true" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="false" \rangle \hat{\langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$	1.4	40
20	Production and the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mover accent="true" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="false" \rangle \hat{\langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ association with two leptons in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Structure of the Yukawa $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mover accent="true" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="false" \rangle \hat{\langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$	2.9	38
21	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2020, 2020, 1.	1.5	37
22	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2020, 2020, 1.	1.6	37
23	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2021, 2021, 1.	1.6	36
24	Search for pair production of vectorlike quarks in the fully hadronic final state. Physical Review D, 2019, 100, .	1.6	35
25	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . European Physical Journal C, 2021, 81, 488.	1.4	35
26	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . European Physical Journal C, 2021, 81, 13.	1.4	33
27	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . European Physical Journal C, 2021, 81, 3.	1.4	33
28	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136446.	1.5	33
29	A multi-dimensional search for new heavy resonances decaying to boosted W boson pairs in the dijet final state at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . European Physical Journal C, 2020, 80, 237.	1.4	31
30	A deep neural network to search for new long-lived particles decaying to jets. Machine Learning: Science and Technology, 2020, 1, 035012.	2.4	31
31	Production of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mover accent="true" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="false" \rangle \hat{\langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ baryons in proton-proton and lead-lead collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	1.5	28
32	Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2021, 2021, 1.	1.6	28
33	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
34	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of Instrumentation, 2020, 15, P02027-P02027.	0.5	27
35	Measurement of the $Y(1S)$ pair production cross section and search for resonances decaying to $Y(1S) \rightarrow 4\tau$ in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135578.	1.5	27
36	Search for new neutral Higgs bosons through the $H \rightarrow b\bar{b}$ process in pp collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ \sqrt{s} . Journal of High Energy Physics, 2020, 2020, 1.	1.6	27

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37	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
38	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134876.	1.5	26
39	Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	26
40	Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	26
41	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
42	Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
43	Search for long-lived particles using displaced jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	25
44	Search for lepton-flavor violating decays of the Higgs boson in the $h \rightarrow \tau^+ \tau^- \tau^+ \tau^-$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135345.	1.6	25
45	Study of excited $b\bar{b}$ states decaying to $b\bar{b}\tau^+\tau^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135345.	1.5	24
46	Measurements of $\sigma(\text{pp} \rightarrow \text{Z}\text{Z})$ 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.	1.4	24
47	Search for a light pseudoscalar Higgs boson in the boosted $h \rightarrow \tau^+ \tau^- \tau^+ \tau^-$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	23
48	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 $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2020, 80, 752.	1.4	23
49	Evidence for $X(3872)$ in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2022, 128, 032001.	2.9	23
50	Search for direct pair production of supersymmetric partners to the $\tau^+ \tau^-$ lepton in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2020, 80, 189.	1.4	22
51	Observation of a New Excited Beauty Strange Baryon Decaying to $W^+ \tau^- \nu_\tau$. Physical Review Letters, 2021, 126, 252003.	2.9	22
52	Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2020, 80, 370.	1.4	22
53	Measurement of the cross section for $h \rightarrow W^+ W^- \tau^+ \tau^-$ in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$. European Physical Journal C, 2020, 80, 370.	2.9	21
54	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	1.3	21

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55	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	21
56	Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	21
57	Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 100, .	1.6	20
58	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 125, 151802.	2.9	20
59	Search for top squark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
60	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
61	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on anomalous quartic couplings. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
62	A search for the standard model Higgs boson decaying to charm quarks. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
63	Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV.	1.5	20
64	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, .	1.6	20
65	Search for top squark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135263.	1.5	19
66	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 723.	1.4	19
67	Search for top squark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135263.	1.5	18
68	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 629.	1.4	18
69	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 970.	1.4	18
70	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 290.	1.4	18
71	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134952.	1.5	17
72	Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2021, 127, 261804.	2.9	17

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73	Measurement of the differential cross sections for the production and decay of a neutral heavy Higgs boson to $\tau\tau$ and $e\tau$, in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.5	16
74	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, .	1.6	16
75	Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2021, 127, 122001.	2.9	16
76	Measurement of differential Higgs boson production cross sections in the full kinematic range using production cross sections in the full kinematic range using $\tau\tau$ and $e\tau$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	16
77	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\tau\tau$, and $e\tau$, in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	15
78	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	15
79	Search for anomalous triple gauge couplings in WW and WZ production in lepton + jet events in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	15
80	Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 100, .	1.6	14
81	Search for electroweak production of a vector-like T quark using fully hadronic final states. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
82	Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
83	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.	2.9	14
84	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV Pb-Pb collisions. European Physical Journal C, 2020, 80, 534.	1.4	14
85	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
86	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14
87	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.	1.4	14
88	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
89	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.	2.9	13
90	Measurements of the Higgs boson rapidity, helicity, double-differential cross sections, and charge asymmetry in $\tau\tau$ and $e\tau$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	13

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91	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136036.	1.5	13
92	Measurement of the $W\tilde{\chi}^0_1$ Production Cross Section in Proton-Proton Collisions at $\sqrt{s}=13$ TeV and Constraints on Effective Field Theory Coefficients. Physical Review Letters, 2021, 126, 252002.	2.9	13
93	Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.5	13
94	Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	13
95	Measurement of the electroweak production of $Z\tilde{\chi}^0_1$ and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on anomalous quartic gauge couplings. Physical Review D, 2021, 104.	1.6	13
96	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	13
97	Search for Higgs and Z boson decays to J/ψ or Y pairs in the four-muon final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134811.	1.5	12
98	Investigation into the event-activity dependence of $\tilde{p}(nS)$ relative production in proton-proton collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
99	Constraints on the production of $Z\tilde{\chi}^0_1$ versus $Z\tilde{\chi}^0_1$ and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2021, 104.	1.6	12
100	Polarizations in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2020, 124, 1.	1.6	12
101	Search for new physics in top quark production with additional leptons in proton-proton collisions at $\sqrt{s}=13$ TeV using effective field theory. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
102	Development and validation of HERWIG tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	1.4	12
103	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	12
104	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.	1.6	11
105	Search for supersymmetry in pp collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2020, 101.	1.6	11
106	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
107	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\tilde{t}, \tilde{t}, b\bar{b}$ final state at 13 TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
108	Search for the production of $W\tilde{A}_\pm$ events at $\sqrt{s}=13$ TeV. Physical Review D, 2019, 100, .	1.6	10

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109	Search for resonances decaying to a pair of Higgs bosons in the $b\bar{b}\overline{\text{q}}\overline{\text{q}}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	10
110	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	10
111	Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2020, 102, .	1.6	10
112	Measurement of the top quark Yukawa coupling from kinematic distributions in the dilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 103, .	1.6	10
113	Measurement of the top quark Yukawa coupling from the $t\bar{t}b\bar{b}Z$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 103, .	1.6	10
114	Evidence for W production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	1.4	10
115	The very forward CASTOR calorimeter of the CMS experiment. Journal of Instrumentation, 2021, 16, P02010-P02010.	0.5	10
116	Construction and commissioning of CMS CE prototype silicon modules. Journal of Instrumentation, 2021, 16, T04002.	0.5	10
117	Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	9
118	Angular analysis of the decay $B \rightarrow \bar{t} K^* \rightarrow (892)^+ \rightarrow \bar{t} \bar{t} \bar{t} \bar{t}$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
119	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	1.4	9
120	Search for $W\bar{t}$ bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV in the hadronic final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136535.	1.5	9
121	Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions. Journal of Instrumentation, 2020, 15, P10002-P10002.	0.5	9
122	Measurement of CKM matrix elements in single top quark t -channel production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, .	1.5	8
123	Search for long-lived particles decaying to jets with displaced vertices in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, .	1.6	8
124	Dependence of inclusive jet production on the anti- k_T distance parameter in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
125	Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb^{-1} of proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
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128	Study of central exclusive "Equation missing" \langle !- No EquationSource Format="TEX", only image \rightarrow production in proton-proton collisions at $\sqrt{s} = 5.02$ and 13TeV. European Physical Journal C, 2020, 80, 718.	1.4	7
129	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. Physical Review Letters, 2020, 125, 222001.	2.9	7
130	Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
131	$\hat{\Lambda}^{\pm}$ production cross sections using top quarks at large transverse momenta in pp collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 103, 114011.	1.6	7
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138	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV Using Leptonic Decays. Physical Review Letters, 2021, 127, 191801.	2.9	6
139	Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
140	Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
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147	Search for pair production with a additional charm jets using di leptonic final states in pp collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2021, 127, 102102.	1.5	5
148	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
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151	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
152	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
153	Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
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155	Measurement of $B_c(2S)^+$ and $B_c^*(2S)^+$ cross section ratios in proton-proton collisions at $s = 13$ TeV. Physical Review D, 2020, 102, 1.	1.6	4
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157	Measurement of b jet shapes in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
158	Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, 1.	1.6	4
159	Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	4
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165	Hard color-singlet exchange in dijet events in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2021, 104, .	1.6	3
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173	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.	1.4	2
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183	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	1
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