

# Aliakbar Ebrahimi

## List of Publications by Year in descending order

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Version: 2024-02-01

176  
papers

3,532  
citations

159585

30  
h-index

206112

48  
g-index

178  
all docs

178  
docs citations

178  
times ranked

6326  
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Higgs Boson Decay to Bottom Quarks. Physical Review Letters, 2018, 121, 121801.	7.8	219
2	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
3	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
4	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
5	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
6	Searches for physics beyond the standard model with the $M_{T2}$ variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 3.	3.9	70
7	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
8	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	66
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.	7.8	62
10	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
11	Search for charged Higgs bosons in the $H_{\pm} \rightarrow \tau^{\pm} \nu_{\tau}$ decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	54
12	Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	4.7	54
13	Evidence for Higgs boson decay to a pair of muons. Journal of High Energy Physics, 2021, 2021, 1.	4.7	54
14	Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 121, 241802.	7.8	50
15	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
16	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
17	Measurement of properties of $B_{(s)}$ decays and search for $B \rightarrow \tau^+ \tau^-$ with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	4.7	41

#	ARTICLE	IF	CITATIONS
19	Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	41
20	Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s = 13$ TeV and combination with the lepton+jets channel. European Physical Journal C, 2019, 79, 313.	3.9	40
21	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13,\text{ext}\{\text{TeV}\}$ $s$ . European Physical Journal C, 2021, 81, 378.	3.9	40
22	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s}$ $s = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	37
23	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13,\text{ext}\{\text{TeV}\}$ $s$ . European Physical Journal C, 2021, 81, 488.	3.9	35
24	Search for single production of vector-like quarks decaying to a top quark and a $W$ boson in proton-proton collisions at $\sqrt{s} = 13,\text{ext}\{\text{TeV}\}$ $s = 13$ TeV. European Physical Journal C, 2019, 79, 90.	3.9	34
25	Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two $\ell$ , leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	33
26	Search for dark matter produced in association with a leptonically decaying $Z$ boson in proton-proton collisions at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s$ . European Physical Journal C, 2021, 81, 13.	3.9	33
27	Search for top squark pair production using dilepton final states in $pp$ collision data collected at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s$ . European Physical Journal C, 2021, 81, 3.	3.9	33
28	Measurement of $t$ - $t$ normalised multi-differential cross sections in $pp$ collisions at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s$ , 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
29	A multi-dimensional search for new heavy resonances decaying to boosted $W$ or $Z$ boson pairs in the dijet final state at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s$ . European Physical Journal C, 2020, 80, 237.	3.9	31
30	Observation of Single Top Quark Production in Association with a $Z$ Boson in Proton-Proton Collisions at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ $s$ . Physical Review Letters, 2019, 122, 132003.	7.8	30
31	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
32	Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	28
33	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
34	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
35	Search for new neutral Higgs bosons through the $H \rightarrow Z A_0$ process in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	27
36	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

#	ARTICLE	IF	CITATIONS
37	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.	4.7	26
38	Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	26
39	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	25
40	Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	25
41	The CMS Phase-1 pixel detector upgrade. Journal of Instrumentation, 2021, 16, P02027-P02027.	1.2	25
42	Search for new particles decaying to a jet and an emerging jet. Journal of High Energy Physics, 2019, 2019, 1.	4.7	24
43	Jet Shapes of Isolated Photon Tagged Jets in Pb-Pb and $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	7.8	24
44	Measurements of $\sigma(\text{pp} \rightarrow \text{ZZ})$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ , ext {TeV}. European Physical Journal C, 2021, 81, 200.	3.9	24
45	Search for resonant $\text{t}\overline{\text{t}}$ production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	23
46	Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2019, 123, 231803.	7.8	23
47	Search for a light pseudoscalar Higgs boson in the boosted $\text{t}\overline{\text{t}}$ , final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	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 $\sqrt{s} = 13$ , ext {TeV}. European Physical Journal C, 2020, 80, 752.	3.9	23
49	Search for direct pair production of supersymmetric partners to the $\text{t}\overline{\text{t}}$ lepton in proton-proton collisions at $\sqrt{s} = 13$ , ext {TeV}. European Physical Journal C, 2020, 80, 189.	3.9	22
50	Observation of a New Excited Beauty Strange Baryon Decaying to $\text{t}\overline{\text{t}}$ . Physical Review Letters, 2021, 126, 252003.	7.8	22
51	Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s} = 13$ TeV, ext {TeV} ext {V}. European Physical Journal C, 2021, 81, 200.	3.9	22
52	Search for a Light, Charged Higgs Boson Decaying to a $\text{W}$ Boson and a $\text{C}$ -Odd Higgs Boson in Final States with $\text{e}$ . Journal of High Energy Physics, 2021, 2021, 1.	7.8	21
53	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
54	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

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55	Search for rare decays of $Z$ and Higgs bosons to $J/\psi$ and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 94.	3.9	20
56	Observation of the Production of Three Massive Gauge Bosons at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 125, 151802.	7.8	20
57	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
58	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on anomalous quartic couplings. Journal of High Energy Physics, 2020, 2020, 1.	4.7	20
59	A search for the standard model Higgs boson decaying to charm quarks. Journal of High Energy Physics, 2020, 2020, 1.	4.7	20
60	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 723.	3.9	19
61	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 629.	3.9	18
62	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 970.	3.9	18
63	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
64	The time structure of hadronic showers in highly granular calorimeters with tungsten and steel absorbers. Journal of Instrumentation, 2014, 9, P07022-P07022.	1.2	17
65	Charged-particle nuclear modification factors in XeXe collisions at $\sqrt{s_{NN}} = 5.44$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
66	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
67	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
68	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.	7.8	16
69	Performance of the first prototype of the CALICE scintillator strip electromagnetic calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 278-289.	1.6	15
70	Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	15
71	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\tau\mu$ and $e\mu$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	15
72	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	15

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73	Search for anomalous triple gauge couplings in WW and WZ production in lepton + jet events in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	15
74	Location selection and layout for LB10, a lunar base at the Lunar North Pole with a liquid mirror observatory. Acta Astronautica, 2013, 85, 61-72.	3.2	14
75	Studies of $\mathcal{B}(\mathcal{B}_s^0 \rightarrow \mathcal{B}_s^0 \gamma)$ and $\mathcal{B}(\mathcal{B}_s^0 \rightarrow \mathcal{B}_s^0 \gamma)$		

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91	Tracking within Hadronic Showers in the CALICE SDHCAL prototype using a Hough Transform Technique. <i>Journal of Instrumentation</i> , 2017, 12, P05009-P05009.	1.2	12
92	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	12
93	Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidity in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 893.	3.9	12
94	Investigation into the event-activity dependence of $\bar{t}$ (nS) relative production in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	12
95	Constraints on the $\bar{t}$ relative production in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	12
96	Polarizations in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. <i>Physical Review Letters</i> , 2020, 124, 1.	4.7	12
96	Search for new physics in top quark production with additional leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV using effective field theory. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	4.7	12
97	Development and validation of HERWIG tunes from CMS underlying-event measurements. <i>European Physical Journal C</i> , 2021, 81, 312.	3.9	12
98	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2022, 2022, 1.	4.7	12
99	Pion and proton showers in the CALICE scintillator-steel analogue hadron calorimeter. <i>Journal of Instrumentation</i> , 2015, 10, P04014-P04014.	1.2	11
100	Search for supersymmetry in events with a photon, jets, $\overline{\text{b}}\text{-jets}$ , and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 444.	3.9	11
101	Search for nonresonant Higgs boson pair production in the $\overline{\text{b}}\text{-jets}$ final state at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	11
102	Search for the production of four top quarks in the single-lepton and opposite-sign dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	11
103	Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 43.	3.9	11
104	First measurement of large area jet transverse momentum spectra in heavy-ion collisions. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	4.7	11
105	Shower development of particles with momenta from 1 to 10 GeV in the CALICE Scintillator-Tungsten HCAL. <i>Journal of Instrumentation</i> , 2014, 9, P01004-P01004.	1.2	10
106	Search for resonances decaying to a pair of Higgs bosons in the $\overline{\text{b}}\text{-jets}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	10
107	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	10
108	Radiation resistant innovative 3D pixel sensors for the CMS upgrade at the High Luminosity LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 978, 164429.	1.6	10



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109	Evidence for $\text{W}^+\text{W}^-$ production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	10
110	Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at $\sqrt{s} = 8$ and 13 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
111	Hadronic energy resolution of a combined high granularity scintillator calorimeter system. Journal of Instrumentation, 2018, 13, P12022-P12022.	1.2	9
112	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
113	Search for a low-mass $\tilde{\chi}_1^0$ resonance in association with a bottom quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	9
114	Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and p-Pb Collisions at $\sqrt{s} = 2.76$ and $\sqrt{s} = 4.0$ TeV. Physical Review Letters, 2020, 125, 102001.	7.8	9
115	Angular analysis of the decay $B^+ \rightarrow \bar{K}^0 \ell^+ \nu_\ell$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	9
116	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
117	Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	8
118	Dependence of inclusive jet production on the anti-kT distance parameter in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
119	DHCAL with minimal absorber: measurements with positrons. Journal of Instrumentation, 2016, 11, P05008-P05008.	1.2	7
120	Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at $\sqrt{s} = 13$ TeV via Higgs boson decays to $\tau\tau$ , leptons. Journal of High Energy Physics, 2019, 2019, 1.	4.7	7
121	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
122	Evidence for Top Quark Production in Nucleus-Nucleus Collisions. Physical Review Letters, 2020, 125, 222001.	7.8	7
123	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.	4.7	7
124	Hadron shower decomposition in the highly granular CALICE analogue hadron calorimeter. Journal of Instrumentation, 2016, 11, P06013-P06013.	1.2	6
125	Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	6
126	Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2019, 79, 969.	3.9	6



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127	Beam test performance of prototype silicon detectors for the Outer Tracker for the Phase-2 Upgrade of CMS. Journal of Instrumentation, 2020, 15, P03014-P03014.	1.2	6
128	Search for decays of the 125 GeV Higgs boson into a Z boson and a $\Upsilon$ - or $\Upsilon'$ -meson. Journal of High Energy Physics, 2020, 2020, 1.	4.7	6
129	Determination of the strong coupling constant $\hat{\alpha}_S(m_Z)$ from measurements of inclusive $W\Delta_{\pm}$ and Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	6
130	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ . Journal of Instrumentation, 2021, 16, P07001.	1.2	6
131	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
132	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
133	Resistive Plate Chamber digitization in a hadronic shower environment. Journal of Instrumentation, 2016, 11, P06014-P06014.	1.2	5
134	Search for a $W\Delta^2$ boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
135	Search for the pair production of light top squarks in the $e\Delta_{\pm}1/4\Delta^{\pm}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
136	Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker. Journal of Instrumentation, 2020, 15, P04017-P04017.	1.2	5
137	Measurement of the cross section for $\overline{t}t$ production with additional jets and b jets in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	5
138	Measurement of differential cross sections for Z bosons produced in association with charm jets in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	5
139	Constraints on the Initial State of Pb-Pb Collisions via Measurements of $Z$ -Boson Yields and Azimuthal Anisotropy at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	7.8	5
140	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s} = 8, 13$ TeV with the CMS and TOTEM experiments. European Physical Journal C, 2020, 80, 1164.	3.9	5
141	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
142	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
143	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
144	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

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145	Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 305.	3.9	4
146	Study of small-cell 3D silicon pixel detectors for the high luminosity LHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 931, 127-134.	1.6	4
147	Search for $W \rightarrow \pi^+ \pi^- \pi^0$ Boson Decays to Three Charged Pions. Physical Review Letters, 2019, 122, 151802.	7.8	4
148	The production of isolated photons in PbPb and pp collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
149	Search for supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in events with high-momentum Z bosons and missing transverse momentum. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
150	Measurement of b jet shapes in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
151	Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	4
152	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
153	Inclusive search for supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV using razor variables and boosted object identification in zero and one lepton final states. Journal of High Energy Physics, 2019, 2019, 1.	4.7	3
154	Search for excited leptons in $e^+e^-$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	3
155	Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P05002-P05002.	1.2	3
156	Search for the lepton flavor violating decay $\tilde{t} \rightarrow t \gamma$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3
157	Study of Drell-Yan dimuon production in proton-lead collisions at $\sqrt{s_{\mathrm{NN}}} = 8.16$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3
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