

Benjamin Freund

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2589726/publications.pdf>

Version: 2024-02-01

217
papers

7,567
citations

50276

46
h-index

82547

72
g-index

234
all docs

234
docs citations

234
times ranked

7773
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 421.	3.9	355
2	Measurement of the W-boson mass in pp collisions at $\sqrt{s}=7$, $\sqrt{s}=7$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 110.	3.9	218
3	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 903.	3.9	181
4	Search for new high-mass phenomena in the dilepton final state using 36 fb ⁻¹ of proton-proton collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	168
5	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	3.9	145
6	Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	136
7	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 199.	3.9	132
8	ATLAS b-jet identification performance and efficiency measurement with tt events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	130
9	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 995.	3.9	125
10	Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s}=13$ TeV pp collisions using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	124
11	Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb ⁻¹ of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	116
12	Search for heavy resonances decaying into WW in the $e^+e^-e^+e^-e^+e^-e^+e^-$ final state in pp collisions at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 24.	3.9	108
13	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
14	Search for heavy ZZ resonances in the $e^+e^-e^+e^-e^+e^-e^+e^-$ final states using proton-proton collisions at $\sqrt{s}=13$, $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 293.	3.9	101
15	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	3.9	93
16	Measurement of multi-particle azimuthal correlations in pp, pPb and low-multiplicity PbPb collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 428.	3.9	86
17	Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 1.	3.9	82
18	Search for dark matter at $\sqrt{s}=13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393.	3.9	80

#	ARTICLE	IF	CITATIONS
19	Search for heavy particles decaying into top-quark pairs using lepton-plus-jets events in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 565.	3.9	79
20	Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	77
21	Angular analysis of $B_0 \rightarrow K^* \ell^+ \ell^-$ decays in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	76
22	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	3.9	75
23	Measurement of quarkonium production in lead and proton-proton collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 171.	3.9	75
24	Search for new resonances in mass distributions of jet pairs using 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	68
25	Search for long-lived charginos based on a disappearing-track signature in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	67
26	A search for pair-produced resonances in four-jet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 250.	3.9	66
27	Evidence for the $H \rightarrow b \bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	64
28	Jet energy scale and resolution measured in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	64
29	Prompt and non-prompt J/ψ and $\psi(2S)$ suppression at high transverse momentum in $\sqrt{s} = 5.02$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.	3.9	61
30	Search for doubly charged scalar bosons decaying into same-sign W boson pairs with the ATLAS detector. European Physical Journal C, 2019, 79, 58.	3.9	61
31	Search for dark matter produced in association with bottom or top quarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 18.	3.9	60
32	Measurement of longitudinal flow decorrelations in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.0. European Physical Journal C, 2018, 78, 142.	3.9	59
33	Search for charged Higgs bosons decaying via $H^{\pm} \rightarrow \ell^{\pm} \nu_{\ell}$, in the $\ell^{\pm} + \text{jets}$ and $\ell^{\pm} + \text{lepton}$ final states with 36 fb^{-1} of pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS experiment. Journal of High Energy Physics, 2018, 2018, 1.	4.7	59
34	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
35	Search for charged Higgs bosons decaying into top and bottom quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	56
36	Search for pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	55

#	ARTICLE	IF	CITATIONS
37	Search for Higgs boson pair production in the $\gamma\gamma WW^* \rightarrow \gamma\gamma WW$ channel using pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 1007.	3.9	53
38	Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 154.	3.9	52
39	Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{\text{NN}}} = 2.76$ s NN = 2.76. European Physical Journal C, 2017, 77, 379.	3.9	51
40	Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s_{\text{ext}} \text{NN}} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 997.	3.9	51
41	Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898.	3.9	50
42	Search for a new heavy gauge-boson resonance decaying into a lepton and missing transverse momentum in 36 fb^{-1} of pp collisions at. European Physical Journal C, 2018, 78, 401.	3.9	50
43	Search for heavy neutral leptons in decays of W bosons produced in 13 TeV pp collisions using prompt and displaced signatures with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	50
44	Constraints on mediator-based dark matter and scalar dark energy models using $\sqrt{s} = 13$ TeV pp collision data collected by the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	49
45	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	48
46	Measurement of the top quark mass in the $t \rightarrow t \hat{A}^- \hat{A}^+$. European Physical Journal C, 2019, 79, 1.	3.9	47
47	Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	46
48	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. European Physical Journal C, 2019, 79, 1.	3.9	46
49	Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	46
50	Search for a scalar partner of the top quark in the jets plus missing transverse momentum final state at $s = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	45
51	Performance of top-quark and W -boson tagging with ATLAS in Run 2 of the LHC. European Physical Journal C, 2019, 79, 1.	3.9	42
52	Measurement of $W^{\pm} Z$ production cross sections and gauge boson polarisation in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	41
53	Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	41
54	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	40

#	ARTICLE	IF	CITATIONS
55	Measurements of b-jet tagging efficiency with the ATLAS detector using $\sqrt{s}=13$ TeV $\tau\tau$ events at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	40
56	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma\gamma$ final states using 139 fb ⁻¹ of proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	40
57	Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with two charged leptons and two jets at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	39
58	Search for pair production of vector-like top quarks in events with one lepton, jets, and missing transverse momentum in $s=13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	38
59	Search for Higgs boson pair production in the $\gamma\gamma b\bar{b}$ final state with 13 TeV pp collision data collected by the ATLAS experiment. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
60	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	38
61	Search for supersymmetry in final states with missing transverse momentum and multiple b-jets in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	37
62	Electron and photon energy calibration with the ATLAS detector using 2015–2016 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P03017-P03017.	1.2	37
63	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb ⁻¹ of $\sqrt{s}=13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	37
64	Search for pair production of heavy vector-like quarks decaying to high-p T W bosons and b quarks in the lepton-plus-jets final state in pp collisions at $s=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	36
65	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}}=5.02$ – 8.76 TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	36
66	Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	36
67	Search for a scalar partner of the top quark in the all-hadronic $t\bar{t}$ plus missing transverse momentum final state at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	36
68	Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector. European Physical Journal C, 2017, 77, 580.	3.9	35
69	Measurements of top-quark pair differential and double-differential cross-sections in the $t\bar{t} + \text{jets}$ channel with pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	34
70	Search for direct production of electroweakinos in final states with one lepton, missing transverse momentum and a Higgs boson decaying into two b-jets in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	34
71	Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b-jets with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	33
72	Determination of the strong coupling constant α_s from transverse energy-energy correlations in multijet events at $\sqrt{s}=8$ – 13 TeV. European Physical Journal C, 2017, 77, 872.	3.9	32

#	ARTICLE	IF	CITATIONS
73	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	32
74	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $s = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	31
75	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	31
76	Search for W / W / Z resonance production in γ , γ / $q\bar{q}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	31
77	Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	31
78	Searches for the $Z\gamma$ decay mode of the Higgs boson and for new high-mass resonances in pp collisions at $s = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	30
79	Study of $WW\gamma$ and $WZ\gamma$ production in γ , γ / $q\bar{q}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2017, 77, 646.	3.9	30
80	Search for new phenomena in events with same-charge leptons and b-jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	30
81	Searches for third-generation scalar leptoquarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	30
82	Evidence for $t\bar{t}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	30
83	Search for dark matter in events with a hadronically decaying vector boson and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	29
84	Searches for heavy ZZ and ZW resonances in the γ , γ / $q\bar{q}$ and γ / $q\bar{q}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	29
85	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 280.	3.9	29
86	Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	29
87	Measurement of lepton differential distributions and the top quark mass in $t\bar{t}$. <i>European Physical Journal C</i> , 2017, 77, 804.	3.9	28
88	Measurement of $WW/WZ \rightarrow \ell\ell uq\bar{q}'$ production with the hadronically decaying boson reconstructed as one or two jets in pp collisions at $\sqrt{s} = 8$ TeV with ATLAS, and constraints on anomalous gauge couplings. <i>European Physical Journal C</i> , 2017, 77, 563.	3.9	28
89	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	28
90	Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow aa \rightarrow 4b$ channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	28

#	ARTICLE	IF	CITATIONS
91	Search for long-lived neutral particles in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS calorimeter. European Physical Journal C, 2019, 79, 1.	3.9	28
92	In situ calibration of large-radius jet energy and mass in $\sqrt{s} = 13$ TeV proton-proton collisions with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	28
93	Fluctuations of anisotropic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	28
94	Measurement of the transverse momentum distribution of Drell-Yan lepton pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	28
95	Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	28
96	Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 625.	3.9	27
97	Search for single production of vector-like quarks decaying into Wb in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	27
98	Measurement of the top-quark mass in t + 1-jet events collected with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	27
99	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a τ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
100	Measurements of electroweak Wj production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	3.9	26
101	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $ell b\bar{b}$ and $ell W\bar{W}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	26
102	Operation and performance of the ATLAS Tile Calorimeter in Run 1. European Physical Journal C, 2018, 78, 987.	3.9	25
103	A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment. European Physical Journal C, 2019, 79, 1.	3.9	25
104	Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	24
105	Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	24
106	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	24
107	Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23
108	Search for doubly and singly charged Higgs bosons decaying into vector bosons in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	23

#	ARTICLE	IF	CITATIONS
109	Search for pair production of heavy vector-like quarks decaying into high-pT W bosons and top quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	22
110	Measurements of top-quark pair spin correlations in the $\mu\mu$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	22
111	Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	22
112	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	21
113	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, .	3.9	21
114	Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV and decaying into collimated leptons or light hadrons with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	21
115	Measurement of differential cross-sections of a single top quark produced in association with a W boson at $\sqrt{s} = 13$ TeV with ATLAS. European Physical Journal C, 2018, 78, 186.	3.9	20
116	Search for diboson resonances in hadronic final states in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	20
117	Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2017, 77, 765.	3.9	19
118	Prompt and non-prompt $\psi(2S)$ elliptic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 784.	3.9	19
119	Search for top-quark decays $t \rightarrow qH$ with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	19
120	Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb^{-1} of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	19
121	Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb^{-1} of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	19
122	Search for top quark decays $t \rightarrow qH$, with $H \rightarrow \tau\tau$, in $s = 13$ TeV pp collisions using the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	18
123	Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
124	Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	18
125	Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
126	Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17

#	ARTICLE	IF	CITATIONS
127	Direct top-quark decay width measurement in the $\mathbf{\vec{t}} t \hat{A}^-$ lepton+jets channel at $\sqrt{s}=8$ TeV with the ATLAS experiment. European Physical Journal C, 2018, 78, 129.	3.9	17
128	Search for flavour-changing neutral current top-quark decays $t \hat{A}^+ qZ$ in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
129	Electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 1.	3.9	17
130	Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
131	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
132	Measurements of W and Z boson production in pp collisions at $\sqrt{s}=5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	17
133	Measurement of W^{\pm} boson production in Pb+Pb collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	17
134	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1.	4.7	17
135	Search for the $HH \hat{A}^+ b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	17
136	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	17
137	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	16
138	Measurement of colour flow using jet-pull observables in $t\bar{t} \hat{A}^-$ events with the ATLAS experiment at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 847.	3.9	16
139	Search for exclusive Higgs and Z boson decays to $\tilde{\chi}_1^0 \tilde{\chi}_1^0$ and $\tilde{\chi}_1^{\pm} \tilde{\chi}_1^{\mp}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	16
140	Measurement of differential cross sections and W^+/W^{\pm} cross-section ratios for W boson production in association with jets at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	16
141	Search for supersymmetry in final states with charm jets and missing transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	15
142	Search for scalar resonances decaying into $\tilde{\chi}_1^0 \tilde{\chi}_1^0$ in events with and without b-tagged jets produced in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	15
143	Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton-proton collisions. European Physical Journal C, 2021, 81, 1.	3.9	15
144	Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s}=8$ TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	15

#	ARTICLE	IF	CITATIONS
145	Measurement of charged-particle distributions sensitive to the underlying event in $\sqrt{s}=13$ TeV proton-proton collisions with the ATLAS detector at the LHC. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
146	Studies of $Z\bar{1}^3$ production in association with a high-mass dijet system in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
147	Measurement of VH , $\text{H}o\text{b}\overline{\text{b}}$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
148	Measurements of inclusive and differential fiducial cross-sections of $\text{Star}\{\text{t}\}\gamma$ production in leptonic final states at $\sqrt{s}=13$ TeV in ATLAS. European Physical Journal C, 2019, 79, 1.	3.9	14
149	Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
150	Search for bottom-quark pair production with the ATLAS detector in final states containing Higgs bosons, b-jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
151	Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	14
152	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 1.	3.9	14
153	Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	14
154	Search for $\text{toverline}\{\text{t}\}$ resonances in fully hadronic final states in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
155	Search for new phenomena in high-mass final states with a photon and a jet from pp collisions at \sqrt{s} s. European Physical Journal C, 2018, 78, 102.	3.9	13
156	Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	13
157	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	13
158	Search for new phenomena in a lepton plus high jet multiplicity final state with the ATLAS experiment using $\sqrt{s}=13$ TeV proton-proton collision data. Journal of High Energy Physics, 2017, 2017, 1.	4.7	12
159	Observation of the associated production of a top quark and a Z boson in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	12
160	Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using $\sqrt{s}=13$ TeV proton-proton collisions recorded by ATLAS in Run 2 of the LHC. Journal of High Energy Physics, 2020, 2020, 1.	4.7	12
161	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s}_{\text{NN}}=8.16$ TeV p+Pb collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	12
162	Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton-proton collisions at ATLAS. European Physical Journal C, 2021, 81, 1.	3.9	12

#	ARTICLE	IF	CITATIONS
163	Search for supersymmetry in events with four or more charged leptons in 139 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	12
164	Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	12
165	Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	12
166	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	3.9	12
167	Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions. Journal of High Energy Physics, 2017, 2017, 1.	4.7	11
168	Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	11
169	Measurement of the $Z\gamma \rightarrow u\bar{u}$ production cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector and limits on anomalous triple gauge-boson couplings. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
170	Measurement of the inclusive and fiducial $t\bar{t} \rightarrow t\bar{t} \gamma$ production cross-sections in the. European Physical Journal C, 2018, 78, 487.	3.9	10
171	Determination of the parton distribution functions of the proton from ATLAS measurements of differential W_{\pm} and Z boson production in association with jets. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
172	Measurement of J/ψ production in association with a W_{\pm} boson with pp data at 8 TeV . Journal of High Energy Physics, 2020, 2020, 1.	4.7	10
173	Measurement of the $t\bar{t} \rightarrow t\bar{t} \gamma$ production cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
174	Search for dark matter produced in association with a Standard Model Higgs boson decaying into b-quarks using the full Run 2 dataset from the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
175	Measurement of the $t\bar{t} \rightarrow t\bar{t} \gamma$ production cross section in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
176	Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
177	Measurement of the $Z(\gamma^* \rightarrow \mu^+ \mu^-)$ production cross-section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	9
178	Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	9
179	Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
180	Measurement of b-hadron pair production with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8

#	ARTICLE	IF	CITATIONS
181	Analysis of the Wtb vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t-channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
182	Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	8
183	Measurement of W^{\pm} -boson and Z-boson production cross-sections in pp collisions at $\sqrt{s} = 2.76$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	8
184	Measurement of differential cross sections for single diffractive dissociation in $\sqrt{s} = 8$ TeV pp collisions using the ATLAS ALFA spectrometer. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
185	Measurements of $W+W^{\pm} + \cancel{e} + 1$ jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	8
186	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	8
187	Reconstruction and identification of boosted $d\bar{t}$ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
188	Measurement of $\sigma_{\text{au}} \bar{t}$, polarisation in $Z/\gamma^* \rightarrow \text{au} \bar{t}$. European Physical Journal C, 2018, 78, 163.	3.9	7
189	Search for dijet resonances in events with an isolated charged lepton using $\sqrt{s} = 13$ TeV proton-proton collision data collected by the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	7
190	Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. European Physical Journal C, 2021, 81, 1.	3.9	7
191	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	3.9	7
192	Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	6
193	Measurement of ZZ production in the $\bar{t}t, \bar{t}t + \cancel{e}$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	6
194	Search for Higgs boson production in association with a high-energy photon via vector-boson fusion with decay into bottom quark pairs at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	6
195	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	3.9	6
196	Measurement of long-range two-particle azimuthal correlations in Z-boson tagged pp collisions at $\sqrt{s} = 8$ and 13 TeV. European Physical Journal C, 2020, 80, 1.	3.9	5
197	A search for the decays of stopped long-lived particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	5
198	Search for phenomena beyond the Standard Model in events with large b-jet multiplicity using the ATLAS detector at the LHC. European Physical Journal C, 2021, 81, 1.	3.9	5

#	ARTICLE	IF	CITATIONS
199	Measurement of the inclusive isolated-photon cross section in pp collisions at $\sqrt{s} = 13$ TeV using 36 fb ⁻¹ of ATLAS data. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
200	The ATLAS inner detector trigger performance in pp collisions at 13 TeV during LHC Run 2. European Physical Journal C, 2022, 82, 1.	3.9	5
201	Search for excited electrons singly produced in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment at the LHC. European Physical Journal C, 2019, 79, .	3.9	4
202	Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
203	Measurement of hadronic event shapes in high-pT multijet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
204	Search for top squarks in events with a Higgs or Z boson using 139 fb ⁻¹ of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	4
205	Measurement of K_S^0 and Λ^0 production in tr dileptonic events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	4
206	Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
207	Search for exotic decays of the Higgs boson into long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV using displaced vertices in the ATLAS inner detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
208	Measurement of the k_t splitting scales in $Z \rightarrow \tau^+ \tau^-$ events in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	3
209	Measurement of distributions sensitive to the underlying event in inclusive Z boson production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	3
210	Measurements of inclusive and differential cross-sections of combined $\overline{t}\gamma$ and tW^{\pm} production in the $e\mu$ channel at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	3
211	Measurement of isolated-photon plus two-jet production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	3
212	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	3
213	Measurement of b-quark fragmentation properties in jets using the decay $B_{\pm} \rightarrow J/\psi K_{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3
214	Search for exotic decays of the Higgs boson into $b\overline{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
215	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in 36 fb ⁻¹ of ($\sqrt{s} = 13$) TeV pp collisions with the ATLAS detector. , 2018, 2018, 1.		1
216	Measurement of the W-boson mass in pp collisions at ($\sqrt{s} = 7$, $\sqrt{s} = 13$) TeV with the ATLAS detector. , 2018, 78, 1.		1

#	ARTICLE	IF	CITATIONS
217	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton–proton collisions at $\sqrt{s}=13, \text{ext } \{\text{TeV}\}$. , 2018, 78, 1.		1