

# Claire Antel

## List of Publications by Year in descending order

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172  
papers

6,256  
citations

66315  
42  
h-index

85498  
71  
g-index

179  
all docs

179  
docs citations

179  
times ranked

7237  
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	1.4	489
2	Combined measurements of Higgs boson production and decay using up to $\sqrt{s} = 13 \text{ TeV}$ proton-proton collision data at $\sqrt{s} = 13 \text{ TeV}$ . Physical Review D, 2020, 101, 092001.	2.1	211
3	Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS Detector at the LHC. Physical Review Letters, 2016, 117, 182002.	2.9	185
4	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . European Physical Journal C, 2018, 78, 903.	1.4	181
5	Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 173-191.	1.5	169
6	Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . Physical Review D, 2017, 96, 112001.	1.6	157
7	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
8	Precision measurement and interpretation of inclusive $W^+ W^-$ events in $\sqrt{s} = 13 \text{ TeV}$ proton-proton collisions. European Physical Journal C, 2017, 77, 367.	1.4	145
9	Decays and VH production with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 173-191.	1.5	138
10	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. Physical Review Letters, 2019, 122, 231801.	2.9	133
11	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in $\sqrt{s} = 13 \text{ TeV}$ proton-proton collisions. European Physical Journal C, 2019, 79, 1.	1.4	130
12	Electron and photon performance measurements with the ATLAS detector using the 2015–2017 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P12006-P12006.	0.5	124
13	Measurements of Higgs boson properties in the diphoton decay channel with the ATLAS detector. Physical Review D, 2018, 98, 092001.	1.6	115
14	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	1.4	93
15	Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\sqrt{s} = 13 \text{ TeV}$ . European Physical Journal C, 2021, 81, 1.	1.4	82
16	Search for dark matter at $\sqrt{s} = 13 \text{ TeV}$ in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393.	1.4	80
17	Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13 \text{ TeV}$ . European Physical Journal C, 2019, 79, 1.	1.4	77
18	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	1.4	75

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19	Reconstruction of primary vertices at the ATLAS experiment in Run 1 protonâ€“proton collisions at the LHC. European Physical Journal C, 2017, 77, 332.	1.4	71
20	ATLAS data quality operations and performance for 2015â€“2018 data-taking. Journal of Instrumentation, 2020, 15, P04003-P04003.	0.5	68
21	Evidence for the $H \rightarrow b\bar{b} \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. Search for new phenomena in events with an energetic jet and missing transverse momentum in protonâ€“proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2021, 103, .	1.6	64
22	Measurement of the Higgs boson mass in the $H \rightarrow Z\gamma \rightarrow 4\ell$ and $H \rightarrow \tau^+\tau^-$ channels with protonâ€“proton collisions at $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 345-366.	1.6	64
23	Jet energy scale and resolution measured in protonâ€“proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	64
24	Measurement of the Higgs boson mass in the $H \rightarrow Z\gamma \rightarrow 4\ell$ and $H \rightarrow \tau^+\tau^-$ channels with protonâ€“proton collisions at $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 345-366.	1.6	63
25	Search for pair production of Higgs bosons in the $b\bar{b}$ final state using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	63
26	Performance of the ATLAS muon triggers in Run 2. Journal of Instrumentation, 2020, 15, P09015-P09015.	0.5	62
27	Prompt and non-prompt $J/\psi$ 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.	1.4	61
28	A search for the dimuon decay of the Standard Model Higgs boson with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 812, 135980.	1.5	61
29	Search for pair production of Higgs bosons in the $b\bar{b}$ final state using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	55
30	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	2.9	53
31	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	2.9	53
32	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	1.5	52
33	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	1.6	51
34	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.	1.4	50
35	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.	1.6	49
36	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using $36 \text{ fb}^{-1}$ of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	48

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37	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. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	46
38	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	46
39	Measurements of gluon-gluon fusion and vector boson fusion Higgs boson production cross-sections in the $H \rightarrow WW \rightarrow 2\ell^+ 2\ell^-$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Physics Letters B</i> , 2019, 789, 508-529.	1.5	46
40	Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	46
41	Constraints on off-shell Higgs boson production and the Higgs boson total width in $Z Z \rightarrow 4\ell$ and $Z Z \rightarrow 2\ell^+ 2\ell^-$ final states with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 786, 223-244.	1.5	43
42	Combined measurement of differential and total cross sections in the $H \rightarrow 3\ell^+$ and the $H \rightarrow ZZ \rightarrow 4\ell$ decay channels at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 786, 114-133.	1.5	42
43	Performance of top-quark and $\varvec{W}$ -boson tagging with ATLAS in Run 2 of the LHC. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	42
44	Higgs boson production cross-section measurements and their EFT interpretation in the $\ell^+ \ell^-$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	41
45	Measurements of b-jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	40
46	Search for heavy resonances decaying into a pair of Z bosons in the $\ell^+ \ell^- + \ell^+ \ell^- + \ell^+ \ell^-$ final states using 139 $\text{fb}^{-1}$ of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	40
47	Combination of searches for heavy resonances decaying into bosonic and leptonic final states using $\text{fb}^{-1}$ of proton-proton collision data. <i>Observation of electroweak WAZ boson pair production in association with two jets in pp collisions</i> .	1.5	39
48	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. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 793, 469-492.	1.5	38
49	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. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	38
50	Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data. <i>Journal of Instrumentation</i> , 2019, 14, P03017-P03017.	0.5	37
51	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 $\text{fb}^{-1}$ of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	37
52	Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	36
53	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. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	36
54	Measurements of top-quark pair differential and double-differential cross-sections in the $\ell^+ \ell^- + \text{jets}$ channel with pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	34

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55	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 $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.  Measurement of the Soft-Drop Jet Mass in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	34
56	Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. Physical Review Letters, 2018, 121, 091801.	2.9	33
57	Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 499-519.	1.4	32
58	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $4\ell$ decay channel at $\sqrt{s}=13 \text{ TeV}$ . European Physical Journal C, 2020, 80, 1.	1.4	32
59	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in $\text{pp}$ collisions at $s = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
60	Search for new phenomena in events with same-charge leptons and b-jets in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	30
61	Evidence for $t\bar{t}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	30
62	A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 $\text{pp}$ -collision data with the ATLAS detector. European Physical Journal C, 2017, 77, 26.	1.4	29
63	Study of the material of the ATLAS inner detector for Run 2 of the LHC. Journal of Instrumentation, 2017, 12, P12009-P12009.	0.5	29
64	Search for heavy diboson resonances in semileptonic final states in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	29
65	Measurement of the Drell-Yan triple-differential cross section in $\text{pp}$ collisions at $s = 8 \text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.  Measurement of the $t\bar{t}$ cross section in $\text{pp}$ collisions at $\sqrt{s}=8 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	1.6	28
66	Measurement of the $t\bar{t}$ cross sections in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.6	28
67	In situ calibration of large-radius jet energy and mass in $13 \text{ TeV}$ proton-proton collisions with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	28
68	Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	28
69	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\tilde{\tau}_1$ -lepton in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
70	Measurements of electroweak $W_{jj}$ production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.  Search for Higgs bosons produced via vector boson fusion and decaying into bottom quark pairs in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2018, 78, 474.	1.4	26
71	Search for Higgs bosons produced via vector boson fusion and decaying into bottom quark pairs in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2018, 78, 474.	1.6	26
72	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\text{ell}^+ \text{ell}^- \text{bb}^+$ and $\text{ell}^+ \text{ell}^- \text{WW}^+$ final states in $\text{pp}$ collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26

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73	Search for charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	1.6	25
74	Measurement of the cross-section and charge asymmetry of $W$ bosons produced in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	24
75	Measurement of fiducial and differential $W^+ + W^-$ production cross-sections at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	24
76	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	24
77	Measurement of the inclusive jet cross-sections in proton-proton collisions at $s = 8 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	23
78	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 $\sqrt{s} = 13 \text{ TeV}$ . <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	23
79	AtFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , 2022, 6, 1.	1.3	23
80	Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $\sqrt{s} = 7 \text{ and } 8 \text{ TeV}$ with ATLAS. <i>Physical Review D</i> , 2016, 94, 1.	1.6	22
81	Measurements of top-quark pair spin correlations in the $t\bar{t}$ channel at $\sqrt{s} = 13 \text{ TeV}$ using pp collisions in the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	22
82	Search for heavy neutral Higgs bosons produced in association with $b$ -quarks and decaying into $b$ -quarks and $\tau$ -leptons with the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	1.6	22
83	Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	22
84	Measurement of the production cross-section of a single top quark in association with a $Z$ boson in proton-proton collisions at 13 TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 780, 557-577.	1.5	19
85	Search for squarks and gluinos in final states with same-sign leptons and jets using $139 \text{ fb}^{-1}$ of data collected with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	19
86	Measurement of light-by-light scattering and search for axion-like particles with $2.2 \text{ nb}^{-1}$ of Pb+Pb data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	19
87	Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}$ production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	18
88	Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	18
89	Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	18
90	Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	18

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91	Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	17
92	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	17
93	Search for the $HH \rightarrow b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	17
94	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	17
95	Measurement of differential cross sections and $W^+/\bar{W}^-$ cross-section ratios for $W$ boson production in association with jets at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	17
96	Measurement of the cross-section for electroweak production of dijets in association with a $Z$ boson in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 775, 206-220.	1.6	16
97	Optimisation of large-radius jet reconstruction for the ATLAS detector in $13 \text{ TeV}$ proton-proton collisions. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	15
98	Test of the universality of $\tilde{l}_\nu$ and $\tilde{l}_e$ lepton couplings in $W$ -boson decays with the ATLAS detector. <i>Nature Physics</i> , 2021, 17, 813-818.	6.5	15
100	Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ using the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	15
101	Measurement of VH, $H\rightarrow b\bar{b}$ production as a function of the vector-boson transverse momentum in $13 \text{ TeV}$ pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	14
102	Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	14
103	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s} = 13 \text{ TeV}$ . <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	14
104	Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $s=13 \text{ TeV}$ Using the ATLAS Detector. <i>Physical Review Letters</i> , 2021, 127, 141801.	2.9	14
105	Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	14
106	Search for $t\bar{t}$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	14
107	Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 13 \text{ TeV}$ collected with the ATLAS detector. <i>European Physical Journal C</i> , 2022, 82, .	1.4	14
108	Search for new phenomena in $t\bar{t}$ collisions in final states with tau leptons, $b$ -jets, and missing transverse momentum with the ATLAS detector. <i>Physical Review D</i> , 2021, 104, .	1.6	14

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109	Search for four-top-quark production in the single-lepton and opposite-sign dilepton final states in collisions at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. <i>Physical Review D</i> , 2019, 99, .	1.6	13
110	Measurement of the CP-violating phase $\phi_s$ in $B_s \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. <i>European Physical Journal C</i> , 2021, 81, .	1.4	13
111	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	13
112	Search for long-lived charginos based on a disappearing-track signature using 136 fb $^{-1}$ of pp collisions at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2022, 82, .	1.4	13
113	Measurement of the four-lepton invariant mass spectrum in 13 TeV proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	12
114	Observation of the associated production of a top quark and a Z boson in pp collisions at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	12
115	Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton-proton collisions at ATLAS. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	12
116	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. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	12
117	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. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	12
118	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. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	12
119	Alignment of the ATLAS Inner Detector in Run 2. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	12
120	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and $13\text{TeV}$ . <i>European Physical Journal C</i> , 2022, 82, 1.	1.4	12
121	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. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	11
122	Two-particle azimuthal correlations in photonuclear ultraperipheral collisions at 5.02 TeV with ATLAS. <i>Physical Review C</i> , 2021, 104, .		
123	Exclusive dimuon production in ultraperipheral collisions at $\sqrt{s} = 13\text{TeV}$ with ATLAS. <i>Physical Review C</i> , 2021, 104, .	1.1	11
124	A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeV pp collisions. <i>Journal of Instrumentation</i> , 2016, 11, P11020-P11020.	0.5	10
125	Determination of the parton distribution functions of the proton from ATLAS measurements of differential $W^\pm$ and Z boson production in association with jets. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	10
126	Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties. <i>Journal of Instrumentation</i> , 2017, 12, P05002-P05002.	0.5	10

#	ARTICLE	IF	CITATIONS
127	Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	10
128	Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with $139 \text{ fb}^{-1}$ of pp collision data at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2022, 2022, 1.	1.6	10
129	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. <i>Journal of High Energy Physics</i> , 2021, 2021, 1. Search for resonant pair production of Higgs bosons in the $t\bar{t}$ final state using $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	10
130	Search for single production of a vectorlike quark decaying into a Higgs boson and top quark with fully hadronic final states using the ATLAS detector. <i>Physical Review D</i> , 2022, 105, 1.	1.6	10
131	Combinations of single-top-quark production cross-section measurements and $ f_{LVtb} $ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	9
132	Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at 8 TeV using the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	9
133	Search for dark matter produced in association with a single top quark in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	9
134	Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $s = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	8
135	Measurements of $W+W^-$ 1 jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	8
136	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. <i>Nature Physics</i> , 2021, 17, 819-825.	6.5	8
137	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	8
138	Reconstruction and identification of boosted di- $\tilde{l}_i$ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	8
139	Observation of electroweak production of two jets in association with an isolated photon and missing transverse momentum, and search for a Higgs boson decaying into invisible particles at $13\text{TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2022, 82, 1.	1.4	8
140	Search for associated production of a Z boson with an invisibly decaying Higgs boson or dark matter candidates at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2022, 82, 1.	1.5	8
141	Search for Lepton-Flavor Violation in $t\bar{t}$ Boson Decays with Leptons with the ATLAS Detector. <i>Physical Review Letters</i> , 2021, 127, 271801.	2.9	8
142	Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using ATLAS and CMS data at $\sqrt{s}=7$ and 8 TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	7

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146	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	1.4	7
147	Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	7
148	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.	1.6	6
149	Search for Higgs boson production in association with a high-energy photon via vector-boson fusion with decay into bottom quark pairs at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	6
150	Performance of the ATLAS RPC detector and Level-1 muon barrel trigger at $\sqrt{s}=13\text{TeV}$ . Journal of Instrumentation, 2021, 16, P07029.	0.5	6
151	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	1.4	6
152	A search for the decays of stopped long-lived particles at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
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155	Emulating the impact of additional proton-proton interactions in the ATLAS simulation by presampling sets of inelastic Monte Carlo events. Computing and Software for Big Science, 2022, 6, 1.	1.3	5
156	The ATLAS inner detector trigger performance in pp collisions at $13\text{TeV}$ during LHC Run 2. European Physical Journal C, 2022, 82, 1.	1.4	5
157	Constraints on Higgs boson production with large transverse momentum using $\text{H} \rightarrow b\bar{b}$ decays in the ATLAS detector. Physical Review D, 2022, 105,	1.6	5
158	Performance of the upgraded PreProcessor of the ATLAS Level-1 Calorimeter Trigger. Journal of Instrumentation, 2020, 15, P11016-P11016.	0.5	4
159	Measurement of hadronic event shapes in high-pT multijet final states at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
160	Search for top squarks in events with a Higgs or Z boson using $139\text{fb}^{-1}$ of pp collision data at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	4
161	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm}\pi^{\pm}$ events in Run 2 data. European Physical Journal C, 2022, 82, 1.	1.4	4
162	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.	1.6	4

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164	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	3
165	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. <i>Journal of Instrumentation</i> , 2021, 16, P08025.	0.5	3
166	Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow J/\psi K$ in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	3
167	Two-particle Bose-Einstein correlations in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ measured with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , 2022, 82, .	1.4	3
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169	Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2022, 2022, 1.	1.6	2
170	Measurement of the energy asymmetry in $t\bar{t}$ production at $13 \text{ TeV}$ with the ATLAS experiment and interpretation in the SMEFT framework. <i>European Physical Journal C</i> , 2022, 82, .	1.4	2
171	Operation and performance of the ATLAS semiconductor tracker in LHC Run2. <i>Journal of Instrumentation</i> , 2022, 17, P01013. A search for an unexpected asymmetry in the production of $e^{\pm}\gamma$ pairs in proton-proton collisions recorded by the ATLAS detector at $\sqrt{s} = 13 \text{ TeV}$ . <i>Physics Letters Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 830, 137106.	0.5	1
172	$\text{altimg="si1.svg"}><\mathml:msqrt><\mathml:mrow><\mathml:mi>s</\mathml:mi></\mathml:mrow></\mathml:msqrt><\mathml:mo linebreak="goodbreak" linebreakstyle="after">=</\mathml:mo><\mathml:mn>13</\mathml:mn></\mathml:math> \text{TeV.}$	1.5	1