

# William Fawcett

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8424450/publications.pdf>

Version: 2024-02-01

220  
papers

8,802  
citations

41344

49  
h-index

62596

80  
g-index

233  
all docs

233  
docs citations

233  
times ranked

8097  
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	3.9	489
2	Muon reconstruction performance of the ATLAS detector in proton–proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 292.	3.9	453
3	Luminosity determination in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653.	3.9	279
4	Measurement of the W-boson mass in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 110.	3.9	218
5	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton–proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 903.	3.9	181
6	Search for new high-mass phenomena in the dilepton final state using 36 fb <sup>-1</sup> of proton-proton collision data at $s = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	168
7	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	3.9	145
8	Precision measurement and interpretation of inclusive $W^+W^-$ , $W^+W$ , $W^-W$ . European Physical Journal C, 2017, 77, 367.	3.9	145
9	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
10	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton–proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 199.	3.9	132
11	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	130
12	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 995.	3.9	125
13	Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb <sup>-1</sup> of pp collisions at $s = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	116
14	Search for heavy resonances decaying into WW in the $e^+e^- \mu^+\mu^-$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 24.	3.9	108
15	Search for heavy ZZ resonances in the $e^+e^- \mu^+\mu^-$ final states using proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 293.	3.9	101
16	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	3.9	93
17	Electron efficiency measurements with the ATLAS detector using 2012 LHC proton–proton collision data. European Physical Journal C, 2017, 77, 195.	3.9	87
18	Measurement of multi-particle azimuthal correlations in pp, p+Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 428.	3.9	86

#	ARTICLE	IF	CITATIONS
19	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
20	Measurement of the prompt $J/\psi$ pair production cross-section in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2017, 77, 76.	3.9	81
21	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
22	Search for lepton-flavour-violating decays of the Higgs and Z bosons with the ATLAS detector. European Physical Journal C, 2017, 77, 70.	3.9	79
23	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
24	Angular analysis of $B^0 \rightarrow \pi^+ \pi^- K^+ K^-$ decays in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	76
25	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	3.9	75
26	Measurement of quarkonium production in proton–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
27	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data. European Physical Journal C, 2016, 76, 666.	3.9	73
28	Search for squarks and gluinos in final states with jets and missing transverse momentum at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 392.	3.9	73
29	Search for supersymmetry at $\sqrt{s}=13$ TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. European Physical Journal C, 2016, 76, 259.	3.9	72
30	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton–proton collisions at the LHC. European Physical Journal C, 2017, 77, 332.	3.9	71
31	Search for resonances in diphoton events at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	70
32	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
33	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
34	Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	64
35	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
36	Charged-particle distributions at low transverse momentum in $\sqrt{s} = 13$ TeV pp interactions measured with the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 502.	3.9	61

#	ARTICLE	IF	CITATIONS
37	Prompt and non-prompt $J/\psi$ and $\psi(2S)$ suppression at high transverse momentum in $5.02\text{-TeV Pb+Pb}$ collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.	3.9	61
38	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
39	Search for dark matter produced in association with bottom or top quarks in $\sqrt{s}=13\text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 18.	3.9	60
40	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
41	Fiducial, total and differential cross-section measurements of t-channel single top-quark production in pp collisions at $8\text{ TeV}$ using data collected by the ATLAS detector. European Physical Journal C, 2017, 77, 531.	3.9	56
42	Summary of the ATLAS experiment's sensitivity to supersymmetry after LHC Run 1 interpreted in the phenomenological MSSM. Journal of High Energy Physics, 2015, 2015, 1.	4.7	55
43	Search for pair production of Higgs bosons in the $b\bar{b}$ final state using proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	55
44	Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s}=13\text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 154.	3.9	52
45	Search for minimal supersymmetric standard model Higgs Bosons $H/A$ and for a $Z^{\prime}$ boson in the $\tau\tau$ final state produced in pp collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2016, 76, 585.	3.9	51
46	Measurement of the charged-particle multiplicity inside jets from $\sqrt{s}=8\text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2016, 76, 322.	3.9	51
47	Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}}=2.76\text{ TeV}$ . European Physical Journal C, 2017, 77, 379.	3.9	51
48	Search for direct top squark pair production in final states with two leptons in $\sqrt{s}=13\text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898.	3.9	50
49	Search for a new heavy gauge-boson resonance decaying into a lepton and missing transverse momentum in $36\text{ fb}^{-1}$ of pp collisions at. European Physical Journal C, 2018, 78, 401.	3.9	50
50	Constraints on mediator-based dark matter and scalar dark energy models using $\sqrt{s}=13\text{ TeV}$ pp collision data collected by the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	49
51	Test of CP invariance in vector-boson fusion production of the Higgs boson using the Optimal Observable method in the ditau decay channel with the ATLAS detector. European Physical Journal C, 2016, 76, 658.	3.9	48
52	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using $36\text{ fb}^{-1}$ of $\sqrt{s}=13\text{ TeV}$ pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	48
53	Measurements of the production cross section of a $Z$ boson in association with jets in pp collisions at $\sqrt{s}=13\text{ TeV}$ . European Physical Journal C, 2017, 77, 361.	3.9	47
54	Study of the rare decays of $B^0 \rightarrow B^0 \mu^+ \mu^-$ and $B^0 \rightarrow B^0 \tau^+ \tau^-$ into muon pairs from data collected during the LHC Run 1 with the ATLAS detector. European Physical Journal C, 2016, 76, 513.	3.9	46

#	ARTICLE	IF	CITATIONS
55	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
56	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
57	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
58	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
59	Measurement of the inclusive isolated prompt photon cross section in pp collisions at $s=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	44
60	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
61	Measurement of the $t\bar{t}Z$ and $t\bar{t}W$ production cross sections in multilepton final states using 3.2 fb $^{-1}$ of $pp$ collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2017, 77, 40.	3.9	41
62	Higgs boson production cross-section measurements and their EFT interpretation in the $4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	41
63	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
64	Measurements of $b$ -jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	40
65	Search for heavy resonances decaying into a pair of $Z$ bosons in the $e^+e^- \rightarrow e^+e^- Z Z^* \rightarrow e^+e^- 4\ell$ 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
66	Measurement of the double-differential high-mass Drell-Yan cross section in pp collisions at $s=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	38
67	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
68	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
69	Search for bottom squark pair production in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 547.	3.9	37
70	Measurement of the $W$ boson polarisation in $t\bar{t}$ events from pp collisions at $\sqrt{s}=8$ TeV in the lepton+jets channel with ATLAS. European Physical Journal C, 2017, 77, 264.	3.9	37
71	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
72	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

#	ARTICLE	IF	CITATIONS
73	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb <sup>-1</sup> of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	37
74	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 $s = 13 \sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	36
75	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
76	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
77	Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector. European Physical Journal C, 2017, 77, 580.	3.9	35
78	Measurements of top-quark pair differential and double-differential cross-sections in the $l\bar{l} + \text{jets}$ channel with pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	34
79	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
80	Measurement of the angular coefficients in Z-boson events using electron and muon pairs from data taken at $s = 8 \sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	33
81	Measurements of $\tilde{t}(2S)$ and $X(3872) \rightarrow J/\psi + \bar{t}t$ production in pp collisions at $s = 8 \sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	33
82	Determination of the strong coupling constant $\alpha_s$ from transverse energy–energy correlations in multijet events at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2017, 77, 872.	3.9	32
83	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $l\bar{l} + \text{jets}$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	32
84	Search for gluinos in events with an isolated lepton, jets and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 565.	3.9	31
85	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $s = 13 \sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
86	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb <sup>-1</sup> of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
87	Search for W W/W Z resonance production in $\ell\bar{\ell} + 2q$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	31
88	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. Journal of High Energy Physics, 2018, 2018, 1.	4.7	31
89	Study of hard double-parton scattering in four-jet events in pp collisions at $s = 7 \sqrt{s} = 7$ TeV with the ATLAS experiment. Journal of High Energy Physics, 2016, 2016, 1.	4.7	30
90	Charged-particle distributions in pp interactions at $\sqrt{s} = 8$ TeV measured with the ATLAS detector. European Physical Journal C, 2016, 76, 403.	3.9	30



#	ARTICLE	IF	CITATIONS
91	Searches for the $Z\tilde{\chi}^0_1$ decay mode of the Higgs boson and for new high-mass resonances in pp collisions at $s = 13 \sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	30
92	Study of $WW\gamma W\tilde{\chi}^0_1$ and $WZ\gamma WZ$ . European Physical Journal C, 2017, 77, 646.	3.9	30
93	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. Journal of High Energy Physics, 2018, 2018, 1.	4.7	30
94	Evidence for $\tau^+\tau^-$ production in the multilepton final state in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	30
95	A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp-collision data with the ATLAS detector. European Physical Journal C, 2017, 77, 26.	3.9	29
96	Measurement of the inclusive cross-sections of single top-quark and top-antiquark t-channel production in pp collisions at $s = 13 \sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	29
97	Searches for heavy ZZ and ZW resonances in the $\gamma^*, \gamma, q\bar{q}$ and $\tilde{\chi}^0_1\tilde{\chi}^0_1/2q\bar{q}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	29
98	Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	29
99	Measurement of lepton differential distributions and the top quark mass in $t\bar{t}$ . European Physical Journal C, 2017, 77, 804.	3.9	28
100	Measurement of $WW/WZ \rightarrow \ell\ell uq\bar{q}'$ $WW/WZ \rightarrow \gamma^* \gamma^*, \gamma^* q\bar{q}$ production with the hadronically decaying boson reconstructed as one or two jets in pp collisions at $\sqrt{s} = 8$ – $\sqrt{s} = 13$ TeV with ATLAS, and constraints on anomalous gauge couplings. European Physical Journal C, 2017, 77, 563.	3.9	28
101	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8 \sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	28
102	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
103	Measurements of top-quark pair differential cross-sections in the $t\bar{t}e\bar{\nu}_e$ channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2017, 77, 292.	3.9	27
104	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\tau$ , -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
105	Measurements of electroweak $Wj\bar{j}$ production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	3.9	26
106	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ and $\ell\ell WW$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	26
107	Searches for heavy diboson resonances in pp collisions at $s = 13 \sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	25
108	Search for triboson $W^+W^+W^-$ production in pp collisions at $\sqrt{s} = 8$ – $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2017, 77, 141.	3.9	25

#	ARTICLE	IF	CITATIONS
109	Search for the Higgs boson produced in association with a W boson and decaying to four b-quarks via two spin-zero particles in pp collisions at 13 TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 605.	3.9	24
110	Search for supersymmetry in a final state containing two photons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions. European Physical Journal C, 2016, 76, 517.	3.9	24
111	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
112	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
113	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
114	Search for new phenomena in different-flavour high-mass dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 541.	3.9	23
115	Measurement of the inclusive jet cross-sections in proton-proton collisions at $s = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23
116	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
117	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	2.9	23
118	Measurements of top-quark pair spin correlations in the $e\mu e$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	22
119	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
120	The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.	3.9	21
121	Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $s = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	21
122	Search for new phenomena in events with a photon and missing transverse momentum in pp collisions at $s = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	20
123	Measurements of top quark spin observables in $t\bar{t}$ events using dilepton final states in $s = 8$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	20
124	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
125	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
126	Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb <sup>-1</sup> of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	19



#	ARTICLE	IF	CITATIONS
127	Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb <sup>-1</sup> of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	19
128	Search for top quark decays $t \rightarrow qH$ , with $H \rightarrow \tau\tau$ , in $s = 13 \sqrt{s} = 13 \text{ TeV}$ pp collisions using the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	18
129	Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
130	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. European Physical Journal C, 2021, 81, 1.	3.9	18
131	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. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
132	Probing the $Wtb$ vertex structure in t-channel single-top-quark production and decay in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
133	Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
134	Measurement of the cross-section for producing a W boson in association with a single top quark in pp collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$ with ATLAS. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
135	Direct top-quark decay width measurement in the $\mathbf{\vec{t}t} \rightarrow \text{lepton} + \text{jets}$ channel at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS experiment. European Physical Journal C, 2018, 78, 129.	3.9	17
136	Search for flavour-changing neutral current top-quark decays $t \rightarrow qZ$ in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
137	Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
138	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
139	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. Journal of High Energy Physics, 2020, 2020, 1.	4.7	17
140	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	17
141	Dark matter interpretations of ATLAS searches for the electroweak production of supersymmetric particles in $s = 8 \sqrt{s} = 8 \text{ TeV}$ proton-proton collisions. Journal of High Energy Physics, 2016, 2016, 1.	4.7	16
142	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	16
143	Top-quark mass measurement in the all-hadronic $t\bar{t} \rightarrow \text{hadrons}$ decay channel at $s = 8 \sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	16
144	Measurement of colour flow using jet-pull observables in $t\bar{t}$ events with the ATLAS experiment at $\sqrt{s} = 13 \text{ TeV}$ . European Physical Journal C, 2018, 78, 847.	3.9	16

#	ARTICLE	IF	CITATIONS
145	Search for exclusive Higgs and Z boson decays to $\tilde{\ell}^{\pm}\tilde{\ell}^{\mp}$ and $\tilde{\ell}^{\pm}\tilde{\nu}_{\ell}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	16
146	Measurement of differential cross sections and $W^{+}/W^{0}$ 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
147	Measurement of event-shape observables in $Z \rightarrow \ell^{+}\ell^{-}$ $Z \rightarrow \ell^{+}\ell^{-} + \gamma$ - events in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 375.	3.9	15
148	Measurement of fiducial differential cross sections of gluon-fusion production of Higgs bosons decaying to $WW \rightarrow \ell^{+}\ell^{-}\ell^{+}\ell^{-}/4\ell$ with the ATLAS detector at $s = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	15
149	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
150	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
151	Measurement of charged-particle distributions sensitive to the underlying event in $s = 13$ TeV proton-proton collisions with the ATLAS detector at the LHC. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
152	Studies of $Z\ell^{\pm}$ production in association with a high-mass dijet system in pp collisions at $s = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	14
153	Measurement of $VH$ , $\mathcal{H} \rightarrow \mathcal{B} \overline{\mathcal{B}}$ 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
154	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
155	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
156	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
157	Search for $\overline{t}t$ 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
158	Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s}=13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	3.9	14
159	Measurements of top-quark pair to Z-boson cross-section ratios at $s = 13$ TeV, 8, 7 TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	13
160	Search for new phenomena in high-mass final states with a photon and a jet from pp collisions at $\sqrt{s}$ TeV. European Physical Journal C, 2018, 78, 102.	3.9	13
161	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
162	Measurement of the $\mathcal{H} \rightarrow b\bar{b}$ dijet cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 670.	3.9	12

#	ARTICLE	IF	CITATIONS
163	Search for new phenomena in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $\sqrt{s}=13$ TeV $p\bar{p}$ collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 144.	3.9	12
164	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
165	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
166	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
167	Search for supersymmetry in events with four or more charged leptons in $139\text{ fb}^{-1}$ of $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	12
168	Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	12
169	Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	12
170	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	3.9	12
171	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s}=7, 8$ and $13$ TeV. European Physical Journal C, 2022, 82, 1.	3.9	12
172	Beam-induced and cosmic-ray backgrounds observed in the ATLAS detector during the LHC 2012 proton-proton running period. Journal of Instrumentation, 2016, 11, P05013-P05013.	1.2	11
173	Search for squarks and gluinos in events with hadronically decaying tau leptons, jets and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV recorded with the ATLAS detector. European Physical Journal C, 2016, 76, 683.	3.9	11
174	Measurement of jet activity produced in top-quark events with an electron, a muon and two b-tagged jets in the final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2017, 77, 220.	3.9	11
175	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
176	Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	11
177	Search for the Standard Model Higgs boson produced by vector-boson fusion and decaying to bottom quarks in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	10
178	Measurement of the inclusive and fiducial $t\bar{t}$ production cross-sections in the. European Physical Journal C, 2018, 78, 487.	3.9	10
179	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
180	Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10

181	Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with 139 fb <sup>-1</sup> of pp collision data at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	10
182	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
183	Measurement of the $\sigma(\text{pp} \rightarrow \gamma \gamma)$ production cross section in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
184	Measurements of charge and CP asymmetries in b-hadron decays using top-quark events collected by the ATLAS detector in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
185	Measurement of the ZZ production cross section in proton-proton collisions at $s = 8$ TeV using the ZZ $\rightarrow \gamma \gamma$ , $\gamma \gamma \rightarrow \gamma \gamma$ , $\gamma \gamma \rightarrow \gamma \gamma$ , $\gamma \gamma \rightarrow \gamma \gamma$ and ZZ $\rightarrow \gamma \gamma$ , $\gamma \gamma \rightarrow \gamma \gamma$ , $\gamma \gamma \rightarrow \gamma \gamma$ decay channels with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
186	Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
187	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. European Physical Journal C, 2019, 79, 1.	3.9	9
188	Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	9
189	Measurement of the relative width difference of the $B^0 \rightarrow B^0$ system with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	8
190	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. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
191	Measurement of b-hadron pair production with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
192	Analysis of the Wtb vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t-channel at $s = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8
193	Measurements of $W+W \rightarrow 1$ 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
194	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
195	Reconstruction and identification of boosted di- $\tilde{t}$ , 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
196	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 TeV with the ATLAS detector. European Physical Journal C, 2022, 82, 1.	3.9	8
197	Measurement of $\sigma_{\text{au}} \tilde{t}$ , polarisation in $Z/\gamma^* \rightarrow \text{au au}$ . European Physical Journal C, 2018, 78, 163.	3.9	7

#	ARTICLE	IF	CITATIONS
199	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	3.9	7
200	Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, .	3.9	7
201	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
202	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
203	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	3.9	6
204	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
205	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
206	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
207	Measurement of jet activity in top quark events using the $e^+e^-$ final state with two b-tagged jets in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	4
208	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
209	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
210	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow u^{\pm} \bar{u}^{\pm} \rightarrow \pi^{\pm} u^{\pm} \bar{u}^{\pm}$ events in Run 2 data. European Physical Journal C, 2022, 82, 1.	3.9	4
211	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
212	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
213	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
214	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
215	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
216	Search for exotic decays of the Higgs boson into $b\bar{b}$ 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

#	ARTICLE	IF	CITATIONS
217	Measurement of the energy asymmetry in $t\bar{t}$ production at $\sqrt{s}=13$ TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, .	3.9	2
218	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in $36\text{ fb}^{-1}$ of $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. , 2018, 2018, 1.		1
219	Measurement of the W-boson mass in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. , 2018, 78, 1.		1
220	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton–proton collisions at $\sqrt{s}=13$ TeV. , 2018, 78, 1.		1