

Florian Bauer

List of Publications by Year in descending order

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Version: 2024-02-01

222
papers

22,987
citations

22153

59
h-index

7950

149
g-index

229
all docs

229
docs citations

229
times ranked

10828
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 716, 1-29.	4.1	6,386
2	The ATLAS Experiment at the CERN Large Hadron Collider. Journal of Instrumentation, 2008, 3, S08003-S08003.	1.2	1,752
3	The ATLAS Simulation Infrastructure. European Physical Journal C, 2010, 70, 823-874.	3.9	1,187
4	Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s}=7$ and 8 TeV with the ATLAS and CMS Experiments. Physical Review Letters, 2015, 114, 191803.	7.8	1,062
5	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	3.9	489
6	Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $s = 7\sqrt{s}=7$ and 8 TeV . Journal of High Energy Physics, 2016, 2016, 1.	4.7	473
7	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s}=13\text{ TeV}$. European Physical Journal C, 2016, 76, 292.	3.9	453
8	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.	3.9	325
9	Evidence for the spin-0 nature of the Higgs boson using ATLAS data. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 120-144.	4.1	307
10	Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s}=8\sqrt{s}=8$. European Physical Journal C, 2016, 76, 581.	3.9	298
11	Luminosity determination in pp collisions at $\sqrt{s}=8\sqrt{s}=8\text{ TeV}$ using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653.	3.9	279
12	Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $\sqrt{s}=7\sqrt{s}=7$ and 8 TeV in the ATLAS experiment. European Physical Journal C, 2016, 76, 6.	3.9	274
13	Jet energy measurement and its systematic uncertainty in proton-proton collisions at $\sqrt{s}=7\sqrt{s}=7\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2015, 75, 17.	3.9	268
14	Performance of the ATLAS Trigger System in 2010. European Physical Journal C, 2012, 72, 1.	3.9	259
15	Combined measurements of Higgs boson production and decay using up to 80% of proton-proton collision data at $\sqrt{s}=13\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Physical Review D, 2020, 101, ..	24.1	241
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19	Jet energy resolution in proton-proton collisions at $\sqrt{s}=7\text{ TeV}$ recorded in 2010 with the ATLAS detector. European Physical Journal C, 2013, 73, 2306.	3.9	209
20	Search for an additional, heavy Higgs boson in the $H \rightarrow ZZ$ decay channel at $\sqrt{s} = 8\text{ TeV}$ in pp collision data with the ATLAS detector. European Physical Journal C, 2016, 76, 45.	3.9	197
21	Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 2.76\text{ TeV}$ with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 100.	4.1	195
22	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.	7.8	185
23	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton collisions at $\sqrt{s} = 13\text{ TeV}$. European Physical Journal C, 2018, 78, 903.	3.9	181
24	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. European Physical Journal C, 2015, 75, 476.	3.9	174
25	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.	4.1	169
26	Measurements of Higgs boson production and couplings in the four-lepton channel in pp collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector. Physical Review D, 2015, 91, 112002.	4.7	158
27	Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ with the ATLAS detector. Physical Review D, 2017, 96, 112002.	4.7	157
28	Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s} = 7\text{ TeV}$. European Physical Journal C, 2011, 71, 1.	3.9	146
29	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	3.9	145
30	Precision measurement and interpretation of inclusive W^+W^+ , W^+W^- . European Physical Journal C, 2017, 77, 367.	3.9	145
31	ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. European Physical Journal C, 2015, 75, 510.	3.9	138
32	Observation of $H \rightarrow b\bar{b}$ decays and VH production with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 100.	4.1	138
33	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. Physical Review Letters, 2019, 122, 231801.	7.8	133
34	Measurement of the $Z/\bar{\nu}$ boson transverse momentum distribution in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	131
35	Search for Invisible Decays of a Higgs Boson Produced in Association with a Z Boson in ATLAS. Physical Review Letters, 2014, 112, 112002.	7.8	130
36	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s} = 13\text{ TeV}$. European Physical Journal C, 2019, 79, 1.	3.9	130

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37	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.	1.2	124
38	Measurement of the inclusive isolated prompt photon cross section in pp collisions at $\sqrt{s} = 7, 8, 13$ TeV with the ATLAS detector. Physical Review D, 2011, 83.	4.7	121
39	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 8, 13$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538.	3.9	115
40	Measurements of Higgs boson properties in the diphoton decay channel with pp collisions at $\sqrt{s} = 7, 8, 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 601-621.	4.7	115
41	Observation and measurement of Higgs boson decays to WW with the ATLAS detector. Physical Review D, 2015, 92, .	4.7	110
42	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	3.9	93
43	Search for the $b\bar{b}$ decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	4.7	89
44	Measurement of $W\Delta$ and Z-boson production cross sections in pp collisions at $\sqrt{s} = 7, 8, 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 601-621.	3.9	88
45	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
46	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
47	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
48	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	3.9	75
49	Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2011, 71, 1.	3.9	73
50	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
51	Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 303.	3.9	70
52	ATLAS data quality operations and performance for 2015–2018 data-taking. Journal of Instrumentation, 2020, 15, P04003-P04003.	1.2	68
53	Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	64
54	Search for new phenomena in events with an energetic jet and missing transverse momentum in pp collisions at $\sqrt{s} = 7, 8, 13$ TeV with the ATLAS detector. Physical Review D, 2021, 103, .	4.7	64

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55	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
56	Measurement of the Higgs boson mass in the $H \rightarrow ZZ \rightarrow 4\mu$ and $H \rightarrow \tau\tau$ channels with $\sqrt{s}=13$ TeV pp collisions using the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 345-366.	4.1	63
57	Measurement of the Higgs boson mass in the $H \rightarrow \tau\tau$ channel with $\sqrt{s}=13$ TeV pp collisions using the ATLAS detector. Physical Review D, 2019, 99, .	4.7	63
58	Performance of the ATLAS muon triggers in Run 2. Journal of Instrumentation, 2020, 15, P09015-P09015.	1.2	62
59	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
60	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.	4.1	61
61	Search for direct top squark pair production in events with a Z boson, b -jets and missing transverse momentum in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2014, 74, 2883.	3.9	55
62	Search for pair production of Higgs bosons in the W 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
63	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	7.8	53
64	Observation of Electroweak Production of a Same-Sign W Boson Pair in Association with Two Jets in $\sqrt{s}=13$ TeV pp Collisions at the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	7.8	53
65	Performance of jet substructure techniques for large-R jets in proton-proton collisions at $\sqrt{s}=7$ TeV using the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	4.7	52
66	Measurement of the top quark mass in the $t\bar{t}$ channel from $t\bar{t} + \text{dilepton}$ channel from $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. Physical Review D, 2018, 97, .	4.1	52
67	Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector. Physical Review D, 2018, 97, .	4.7	51
68	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	3.9	50
69	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
70	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
71	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
72	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

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73	Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\mu$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	46
74	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
75	Measurements of gluon fusion and vector boson fusion Higgs boson production cross-sections in the $H \rightarrow WW \rightarrow e\bar{\nu}_e \mu \nu_\mu$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 508-529.	4.1	46
76	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
77	Measurement of the top quark pair production cross section in pp collisions at $\sqrt{s} = 7$ TeV in dilepton final states with ATLAS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 707, 459-477.	4.1	46
78	Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 1.	3.9	45
79	Search for supersymmetry at $\sqrt{s} = 8$ TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	45
80	Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ \rightarrow 4\mu$ and $ZZ \rightarrow 2\mu 2\tau$ final states with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 223-244.	4.1	43
81	Combined measurement of differential and total cross sections in the $H \rightarrow \tau\tau$ and the $H \rightarrow ZZ \rightarrow 4\mu$ decay channels at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 114-133.	4.1	43
82	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
83	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
84	Study of the $B_c \rightarrow J/\psi D_s + B_c + \tau^+ J/\psi D_s +$ and $B_c \rightarrow J/\psi D_s +$ decays with the ATLAS detector. European Physical Journal C, 2016, 76, 4.	3.9	40
85	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
86	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \nu\bar{\nu} Z Z$ 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
87	Search for invisible decays of the Higgs boson produced in association with a hadronically decaying vector boson in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 337.	3.9	39
88	Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in pp collision data at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 87.	3.9	39
89	Observation of electroweak WZ boson pair production in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 469-492.	4.1	38

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91	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
92	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
93	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
94	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
95	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
96	Measurement of the inclusive jet cross-section in proton-proton collisions at $s = 7$ TeV using 4.5 fb ⁻¹ of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	4.7	35
97	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
98	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
99	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.	7.8	33
100	Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 499-519.	4.7	33
101	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow b\bar{b}$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	32
102	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. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
103	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
104	Evidence for $t\bar{t}$ 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
105	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
106	Study of the material of the ATLAS inner detector for Run 2 of the LHC. Journal of Instrumentation, 2017, 12, P12009-P12009.	1.2	29
107	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
108	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	28

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109	Measurement of the $\sigma(\text{pp} \rightarrow \text{Z} + \text{jet})$ cross sections in proton-proton collisions with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	4.7	28
110	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
111	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
112	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
113	Measurements of electroweak W^+W^- production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	3.9	26
114	Search for Higgs bosons produced via vector-boson fusion and decaying into bottom quark pairs in proton-proton collisions with the ATLAS detector. Physical Review D, 2018, 98, 1.	4.7	26
115	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $bb\ell\ell$ and $WW\ell\ell$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	26
116	Search for charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2021, 104, 1.	4.7	25
117	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
118	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
119	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
120	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
121	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
122	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	2.9	23
123	Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	22
124	Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $s = 7$ and 8 TeV with ATLAS. Physical Review D, 2016, 94, .	4.7	22
125	Measurements of top-quark pair spin correlations in the $bb\mu\mu$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	22
126	Search for heavy neutral Higgs bosons produced in association with top quarks and decaying into $b\bar{b}$ -quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	4.7	22

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127	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
128	The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.	3.9	21
129	Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	4.7	21
130	Measurement of k_T splitting scales in $W\ell^+\ell^-$ events at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2013, 73, 2432.	3.9	19
131	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. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 557-577.	4.1	19
132	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
133	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
134	Measurements of inclusive and differential fiducial cross-sections of top production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	18
135	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
136	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
137	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
138	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
139	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
140	Search for the $HH \rightarrow b\bar{b}$ 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
141	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
142	Search for Higgs boson decays into a pair of pseudoscalar particles in the $b\bar{b}\ell^+\ell^-$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	17
143	Measurement of differential cross sections and W^+W^- 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
144	Measurement of the cross-section for electroweak production of dijets in association with a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 775, 206-228.	4.1	15

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145	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
146	Test of the universality of \tilde{g} , and \tilde{g} lepton couplings in W-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 813-818.	16.7	15
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