

# James Beacham

## List of Publications by Year in descending order

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211  
papers

10,245  
citations

47006

47  
h-index

39675

94  
g-index

222  
all docs

222  
docs citations

222  
times ranked

8429  
citing authors

#	ARTICLE	IF	CITATIONS
1	<p>Combined Measurement of the Higgs Boson Mass in <math>pp</math> Collisions at <math>\sqrt{s}=7</math> and <math>8</math> TeV with the ATLAS and CMS Experiments. <i>Physical Review Letters</i>, 2015, 114, 191803.</p>	7.8	1,062
2	Performance of the ATLAS trigger system in 2015. <i>European Physical Journal C</i> , 2017, 77, 317.	3.9	489
3	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 $\sqrt{s}=7$ and 8 TeV. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	473
4	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2016, 76, 292.	3.9	453
5	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. <i>European Physical Journal C</i> , 2017, 77, 490.	3.9	325
6	Performance of pile-up mitigation techniques for jets in $pp$ collisions at $\sqrt{s}=8$ TeV. <i>European Physical Journal C</i> , 2016, 76, 581.	3.9	298
7	Luminosity determination in $pp$ collisions at $\sqrt{s}=8$ TeV using the ATLAS detector at the LHC. <i>European Physical Journal C</i> , 2016, 76, 653.	3.9	279
8	Measurements of the Higgs boson production and decay rates and coupling strengths using $pp$ collision data at $\sqrt{s}=7$ and 8 TeV in the ATLAS experiment. <i>European Physical Journal C</i> , 2016, 76, 6.	3.9	274
9	Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s}=13$ TeV with the ATLAS Detector at the LHC. <i>Physical Review Letters</i> , 2016, 117, 182002.	7.8	185
10	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2018, 78, 903.	3.9	181
11	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. <i>European Physical Journal C</i> , 2015, 75, 476.	3.9	174
12	Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 784, 173-191.	4.1	169
13	Jet reconstruction and performance using particle flow with the ATLAS Detector. <i>European Physical Journal C</i> , 2017, 77, 466.	3.9	145
14	Precision measurement and interpretation of inclusive $W^+W^-$ and $W^+W^-$ . <i>European Physical Journal C</i> , 2017, 77, 367.	3.9	145
15	Measurement 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 $\sqrt{s}=7$ and 8 TeV. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.1	138
16	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. <i>Physical Review Letters</i> , 2019, 122, 231801.	7.8	133
17	Searching for long-lived particles beyond the Standard Model at the Large Hadron Collider. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2020, 47, 090501.	3.6	133
18	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in $pp$ collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	130

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19	Dark Matter benchmark models for early LHC Run-2 Searches: Report of the ATLAS/CMS Dark Matter Forum. Physics of the Dark Universe, 2020, 27, 100371.	4.9	126
20	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
21	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s}=8, \sqrt{s}=8$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538.	3.9	115
22	Search for Heavy Higgs Bosons Decaying into Two Tau Leptons with the ATLAS Detector Using Collisions at $\sqrt{s}=13$ TeV. Physical Review Letters, 2020, 125, 051801.	7.8	97
23	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	3.9	93
24	Measurement of $W\Delta$ and Z-boson production cross sections in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 601-621.	3.9	88
25	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
26	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
27	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
28	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	3.9	75
29	Observation of Light-by-Light Scattering in Ultraperipheral Collisions with the ATLAS Detector. Physical Review Letters, 2019, 123, 052001.	7.8	75
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	ATLAS data quality operations and performance for 2015–2018 data-taking. Journal of Instrumentation, 2020, 15, P04003-P04003.	1.2	68
32	Search for new resonances in mass distributions of jet pairs using 139 fb <sup>-1</sup> of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	68
33	Jet Resonance Search with Weak Supervision Using Collisions in the ATLAS Detector. Physical Review Letters, 2020, 125, 131801.	7.8	67
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	Measurement of the Higgs boson mass in the $H \rightarrow \tau\tau$ 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.	3.9	63

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37	Performance of the ATLAS muon triggers in Run 2. Journal of Instrumentation, 2020, 15, P09015-P09015.	1.2	62
38	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
39	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
40	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
41	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	7.8	53
42	Observation of Electroweak Production of a Same-Sign $W^+W^-$ Boson Pair in Association with Two Jets in $pp$ Collisions at $\sqrt{s}=13\text{ TeV}$ . Physical Review Letters, 2018, 120, 211802.	7.8	53
43	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	4.1	52
44	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	3.9	50
45	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
46	Search for heavy neutral leptons in decays of W bosons produced in 13 TeV pp collisions using prompt and displaced signatures with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	50
47	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
48	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
49	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
50	Measurement of the Higgs boson coupling properties in the $H \rightarrow Z\gamma^* \rightarrow 4\gamma$ decay channel at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	46
51	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
52	Measurements of gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow \tau\tau$ decay channel in $pp$ collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 508-529.	4.1	46
53	Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	46
54	Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ\gamma^* \rightarrow 4\gamma$ and $ZZ\gamma^* \rightarrow 2\gamma^* \rightarrow 4\gamma$ final states with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 223-244.	4.1	43

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55	Combined measurement of differential and total cross sections in the $H \rightarrow \tau \tau$ and the $H \rightarrow ZZ \rightarrow 4\tau$ 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.		
56	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
57	Higgs boson production cross-section measurements and their EFT interpretation in the $H \rightarrow b\bar{b}$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	41
58	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
59	Properties of Higgs Boson Interactions with Top Quarks in the $t\bar{t}$ final state using 139 fb <sup>-1</sup> of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	7.8	40
60	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 <sup>-1</sup> of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	40
61	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
62	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
63	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 <sup>-1</sup> of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 793, 469-477.	4.1	38
64	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
65	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
66	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
67	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	36
68	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
69	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
70	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
71	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
72	Measurement of the Soft-Drop Jet Mass in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2018, 121, 092001.	7.8	33



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73	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.	3.9	31
74	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	32
75	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
76	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
77	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
78	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
79	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
80	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
81	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	28
82	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
83	Fluctuations of anisotropic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	28
84	Measurement of the transverse momentum distribution of Drell-Yan lepton pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	28
85	Measurement of the Lund Jet Plane Using Charged Particles in $\sqrt{s} = 13$ TeV Proton-Proton Collisions with the ATLAS Detector. Physical Review Letters, 2020, 124, 222002.	7.8	28
86	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
87	Measurement of the top-quark mass in $t\bar{t} + 1$ -jet events collected with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	27
88	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\bar{l}_\tau$ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
89	Measurements of electroweak $W_{jj} W_{jj}$ production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	3.9	26
90	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $bb\ell\ell$ and $bbWW$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	26

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91	Search for Magnetic Monopoles and Stable High-Electric-Charge Objects in 13 TeV Proton-Proton Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , 2020, 124, 031802.	7.8	25
92	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. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	24
93	Measurement of fiducial and differential $W^+W^-$ production cross-sections at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	24
94	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.	4.7	24
95	Measurement of the inclusive jet cross-sections in proton-proton collisions at $s = 8$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	23
96	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. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	4.7	23
97	AtlFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , 2022, 6, 1.	2.9	23
98	Measurements of top-quark pair spin correlations in the $t\bar{t}$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	22
99	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. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	4.7	22
100	Observation and Measurement of Forward Proton Scattering in Association with Lepton Pairs Produced via the Photon Fusion Mechanism at ATLAS. <i>Physical Review Letters</i> , 2020, 125, 261801.	7.8	22
101	The performance of the jet trigger for the ATLAS detector during 2011 data taking. <i>European Physical Journal C</i> , 2016, 76, 526.	3.9	21
102	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. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	21
103	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at 13 TeV. <i>European Physical Journal C</i> , 2019, 79, .	3.9	21
104	Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV and decaying into collimated leptons or light hadrons with the ATLAS detector. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	21
105	Search for diboson resonances in hadronic final states in $139 \text{ fb}^{-1}$ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	20
106	Search for Higgs Boson Decays into a Z Boson and a Light Hadronically Decaying Resonance Using 13 TeV pp Collision Data from the ATLAS Detector. <i>Physical Review Letters</i> , 2020, 125, 221802.	7.8	20
107	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.	4.1	19
108	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.	4.7	19

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109	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
110	Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}$ production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	18
111	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
112	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
113	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
114	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
115	Measurement of $W^{\pm}$ boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ -ext {TeV} with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	17
116	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
117	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
118	Measurement of Azimuthal Anisotropy of Muons from Charm and Bottom Hadrons in $pp$ Collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2020, 124, 082301.	7.8	17
119	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
120	Longitudinal Flow Decorrelations in $pp$ Collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2021, 127, 051802.	7.8	17
121	Search for displaced decays of $W$ bosons in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review Letters, 2021, 127, 051802.	7.8	17
122	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
123	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, 286-288.	4.7	15
124	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
125	Test of the universality of $\hat{I}_\mu$ , and $\hat{I}_{\mu/4}$ lepton couplings in $W$ -boson decays with the ATLAS detector. Nature Physics, 2021, 17, 813-818.	16.7	15
126	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



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127	Measurement of $VH$ , $\mathbb{H}o\overline{\mathbb{H}}$ 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
128	Search for bottom-squark pair production with the ATLAS detector in final states containing Higgs bosons, b-jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
129	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
130	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
131	Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $s=13$ TeV Using the ATLAS Detector. Physical Review Letters, 2021, 127, 141801.	7.8	14
132	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
133	Search for $\overline{t}$ 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
134	Measurement of the c-jet mistagging efficiency in $t$ events using pp collision data at $\sqrt{s}=13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	3.9	14
135	Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	13
136	Measurement of the CP-violating phase $\phi_s$ in $B_{s^0} \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. European Physical Journal C, 2021, 81, .	3.9	13
137	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
138	Search for long-lived charginos based on a disappearing-track signature using 136 fb <sup>-1</sup> of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, .	3.9	13
139	Measurement of the four-lepton invariant mass spectrum in 13 TeV proton-proton collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	12
140	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
141	Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using $\sqrt{s} = 13$ TeV proton-proton collisions recorded by ATLAS in Run 2 of the LHC. Journal of High Energy Physics, 2020, 2020, 1.	4.7	12
142	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s}_{\text{mathrm}} \{NN\}=8.16$ TeV p+Pb collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	12
143	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
144	Search for supersymmetry in events with four or more charged leptons in 139 fb <sup>-1</sup> of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	12

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145	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
146	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
147	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	3.9	12
148	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
149	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
150	Two-particle azimuthal correlations in photonuclear ultraperipheral collisions at 5.02 TeV with ATLAS. Physical Review C, 2021, 104, .	2.9	11
151	Exclusive dimuon production in ultraperipheral collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review C, 2021, 104, .	2.9	11
152	A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeV pp collisions. Journal of Instrumentation, 2016, 11, P11020-P11020.	1.2	10
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157	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
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159	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
160	Measurement of the $Z(\gamma^* \rightarrow \mu^+ \mu^-)$ production cross-section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	9
161	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
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164	Measurement of $W^{\pm}$ -boson and Z-boson production cross-sections in pp collisions at $\sqrt{s} = 2.76 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	8
165	Measurement of differential cross sections for single diffractive dissociation in $\sqrt{s} = 8 \text{ TeV}$ pp collisions using the ATLAS ALFA spectrometer. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
166	Measurements of $W+W^{\pm} + \geq 1$ jet production cross-sections in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	8
167	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 819-825.	16.7	8
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177	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	3.9	7
178	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, .	3.9	7
179	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
180	Measurement of ZZ production in the $\gamma\gamma, \gamma Z, Z\gamma$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	4.7	6

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184	Search for Heavy Resonances Decaying into a Photon and a Hadronically Decaying Higgs Boson in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. Physical Review Letters, 2020, 125, 251802.	7.8	6
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188	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
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196	Measurement of $K_S^0$ and $\Lambda^0$ production in $tr$ dileptonic events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	4
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200	Measurement of distributions sensitive to the underlying event in inclusive Z boson production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	3
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203	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8, \text{ext } \{TeV\}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	3
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205	Measurement of b-quark fragmentation properties in jets using the decay $B^{\pm} \rightarrow \hat{t}^+ J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3
206	Two-particle Bose-Einstein correlations in $\{pp\}$ collisions at $\mathbf{\sqrt{s} = 13} TeV$ measured with the ATLAS detector at the LHC. European Physical Journal C, 2022, 82, .	3.9	3
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208	Search for exotic decays of the Higgs boson into $b\overline{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
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