

Laura Barranco Navarro

List of Publications by Year in descending order

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Version: 2024-02-01

213
papers

8,529
citations

50244

46
h-index

56687

83
g-index

224
all docs

224
docs citations

224
times ranked

7813
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	1.4	489
2	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.	1.6	473
3	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 292.	1.4	453
4	Luminosity determination in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653.	1.4	279
5	Combined measurements of Higgs boson production and decay using up to $\sqrt{s} = 13$ TeV of proton-proton collision data at $\sqrt{s} = 7, 8, 13$ TeV. Physical Review Letters, 2020, 124, 171801.	2.4	241
6	Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s} = 13$ TeV with the ATLAS Detector at the LHC. Physical Review Letters, 2016, 117, 182002.	2.9	185
7	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.	1.4	181
8	Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 173-191.	1.5	169
9	Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2017, 96, 072002.	1.6	157
10	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
11	Precision measurement and interpretation of inclusive W^+W^+ , W^+W^- . European Physical Journal C, 2017, 77, 367.	1.4	145
12	Observation of $H \rightarrow \tau^+\tau^-$ decays and VH production with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 784, 231801.	1.5	138
13	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. Physical Review Letters, 2019, 122, 231801.	2.9	133
14	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.	1.4	130
15	Electron and photon performance measurements with the ATLAS detector using the 2015-2017 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P12006-P12006.	0.5	124
16	Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	124
17	Search for Heavy Higgs Bosons Decaying into Two Tau Leptons with the ATLAS Detector Using $H \rightarrow \tau^+\tau^-$ decay channel with $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 125, 051801.	1.6	115
18	Search for Heavy Higgs Bosons Decaying into Two Tau Leptons with the ATLAS Detector Using $H \rightarrow \tau^+\tau^-$ decay channel with $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 125, 051801.	2.9	97

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19	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	1.4	93
20	Measurement of $W\hat{A}\pm$ 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.	1.4	88
21	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.	1.4	82
22	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.	1.4	80
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.	1.4	77
24	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	1.4	75
25	Observation of Light-by-Light Scattering in Ultraperipheral Pb-Pb collisions with the ATLAS Detector. Physical Review Letters, 2019, 123, 052001.	2.9	75
26	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. European Physical Journal C, 2017, 77, 332.	1.4	71
27	ATLAS data quality operations and performance for 2015-2018 data-taking. Journal of Instrumentation, 2020, 15, P04003-P04003.	0.5	68
28	Search for new resonances in mass distributions of jet pairs using 139 fb ⁻¹ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	68
29	Dijet Resonance Search with Weak Supervision Using Collisions in the ATLAS Detector. Physical Review Letters, 2020, 125, 131801.	2.9	67
30	Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	64
31	Search for new phenomena in events with an energetic jet and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2021, 103, .	1.6	64
32	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.	1.4	64
33	Measurement of the Higgs boson mass in the $H \rightarrow ZZ \rightarrow 4\ell$, $H \rightarrow ZZ \rightarrow 2\ell 2\gamma$, and $H \rightarrow Z\gamma \rightarrow \ell^+\ell^-\gamma$ channels with $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 601-621.	1.6	63
34	Cross-section measurements of the Higgs boson decaying into a pair of τ -leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2019, 99, .	1.6	63
35	Performance of the ATLAS muon triggers in Run 2. Journal of Instrumentation, 2020, 15, P09015-P09015.	0.5	62
36	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.	1.4	61

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37	A search for the dimuon decay of the Standard Model Higgs boson with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 812, 135980.	1.5	61
38	Search for pair production of Higgs bosons in the W^+W^- final state using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	55
39	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	2.9	53
40	Observation of Electroweak Production of a Same-Sign W^+W^- Boson Pair in Association with Two Jets in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	2.9	53
41	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802.	1.5	52
42	Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector. Physical Review D, 2018, 97, .	1.6	51
43	Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898.	1.4	50
44	Constraints on mediator-based dark matter and scalar dark energy models using $\sqrt{s} = 13$ TeV pp collision data collected by the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	49
45	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.	1.4	48
46	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.	1.6	48
47	Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	46
48	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. European Physical Journal C, 2019, 79, 1.	1.4	46
49	Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow \tau\tau$ decay channel in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 508-529.	1.5	46
50	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.	1.6	46
51	Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ \rightarrow 4\ell$ and $ZZ \rightarrow 2\ell 2\tau$ final states with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 223-244.	1.5	43
52	Combined measurement of differential and total cross sections in the $H \rightarrow \tau\tau$ and the $H \rightarrow ZZ \rightarrow 4\ell$ 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.	1.5	42
53	Performance of top-quark and W -boson tagging with ATLAS in Run 2 of the LHC. European Physical Journal C, 2019, 79, 1.	1.4	42
54	Higgs boson production cross-section measurements and their EFT interpretation in the $g g \rightarrow H \rightarrow 4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	41

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55	Measurements of b-jet tagging efficiency with the ATLAS detector using $\sqrt{s} = 13$ TeV $\tau \rightarrow \mu \nu \nu$ events at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	40
56	Properties of Higgs Boson Interactions with Top Quarks in the $t \rightarrow t^* \gamma$ and $t \rightarrow t^* Z$ channels. Physical Review D, 2018, 98, 074004.	2.9	40
57	Search for heavy resonances decaying into a pair of Z bosons in the $pp \rightarrow Z Z$ and $pp \rightarrow Z Z + \mu^+ \mu^-$ 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.	1.4	40
58	Combination of searches for heavy resonances decaying into bosonic and leptonic final states using of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	39
59	Search for heavy resonances decaying into a pair of Z bosons in the $pp \rightarrow Z Z$ and $pp \rightarrow Z Z + \mu^+ \mu^-$ final states using 139 fb $^{-1}$ 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, 469-497.	1.5	38
60	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	38
61	Electron and photon energy calibration with the ATLAS detector using 2015–2016 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P03017-P03017.	0.5	37
62	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.	1.6	37
63	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ – 7.0 TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	36
64	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.	1.6	36
65	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.	1.4	36
66	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.	1.4	34
67	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.	1.4	34
68	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.	2.9	33
69	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, 2018, 793, 498-518.	1.4	33
70	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow \mu^+ \mu^-$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	1.4	32
71	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.	1.6	31
72	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.	1.6	30

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73	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.	1.4	30
74	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.	1.4	29
75	Study of the material of the ATLAS inner detector for Run 2 of the LHC. Journal of Instrumentation, 2017, 12, P12009-P12009.	0.5	29
76	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.	1.4	29
77	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	28
78	Measurement of the $t\bar{t}Z$ and $t\bar{t}W$ cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.6	28
79	In situ calibration of large-radius jet energy and mass in 13 TeV proton-proton collisions with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	28
80	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.	1.4	28
81	Measurement of the Lund Jet Plane Using Charged Particles in 13 TeV Proton-Proton Collisions with the ATLAS Detector. Physical Review Letters, 2020, 124, 222002.	2.9	28
82	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.	1.4	28
83	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a \bar{l} , lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
84	Measurements of electroweak W_{jj} production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	1.4	26
85	Search for Higgs bosons produced via vector-boson fusion and decaying into bottom quark pairs in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.6	26
86	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ and $\ell\ell W$ final states in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26
87	Search for Magnetic Monopoles and Stable High-Electric-Charge Objects in 13 TeV Proton-Proton Collisions with the ATLAS Detector. Physical Review Letters, 2020, 124, 031802.	2.9	25
88	Search for charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in $p\bar{p}$ collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physical Review D, 2021, 104, 012002.	1.6	25
89	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.	1.4	24
90	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.	1.4	24

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91	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	24
92	Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	23
93	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.	1.6	23
94	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	1.3	23
95	Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV with ATLAS. Physical Review D, 2016, 94, .	1.6	22
96	Measurements of top-quark pair spin correlations in the $\mu\mu$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	22
97	Search for heavy neutral Higgs bosons produced in association with $b\bar{b}$ -quarks and decaying into $b\bar{b}$ -quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	22
98	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.	1.6	22
99	Observation and Measurement of Forward Proton Scattering in Association with Lepton Pairs Produced via the Photon Fusion Mechanism at ATLAS. Physical Review Letters, 2020, 125, 261801.	2.9	22
100	The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.	1.4	21
101	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.	1.6	21
102	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, .	1.4	21
103	Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV and decaying into collimated leptons or light hadrons with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	21
104	Search for diboson resonances in hadronic final states in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	20
105	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. Physical Review Letters, 2020, 125, 221802.	2.9	20
106	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.	1.5	19
107	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.	1.6	19
108	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.	1.6	19

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109	Measurements of inclusive and differential fiducial cross-sections of $\overline{t}t$ 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.	1.6	18
110	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.	1.6	18
111	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.	1.4	18
112	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.	1.6	18
113	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.	1.6	17
114	Measurement of $W^{\pm}Z$ boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ – 8.16 TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	17
115	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1.	1.6	17
116	Search for the $HH \rightarrow \gamma\gamma$ 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.	1.6	17
117	Measurement of the fiducial cross-sections of $W^{\pm}Z$ boson production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review Letters, 2020, 124, 082301.	2.9	17
118	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.	1.4	17
119	Longitudinal Flow Decorrelations in $W^{\pm}Z$ boson production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review Letters, 2020, 124, 082301.	2.9	17
120	Search for Displaced Leptons in $W^{\pm}Z$ boson production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review Letters, 2020, 124, 082301.	2.9	17
121	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.	1.6	17
122	Measurement of differential cross sections and $W^{\pm}Z$ 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.	1.6	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.	1.6	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.	1.4	15
125	Test of the universality of $\hat{\Gamma}_l$ and $\hat{\Gamma}_l^2$ lepton couplings in W-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 813–818.	6.5	15
126	Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8$ – 13 TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	15

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127	Measurement of $VH, \mathbb{H}o\overline{\mathbb{b}}$ 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.	1.6	14
128	Search for bottom-quark pair production with the ATLAS detector in final states containing Higgs bosons, b-jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	1.6	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.	1.6	14
130	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s}=13,ext \{TeV\}$. European Physical Journal C, 2021, 81, 1.	1.4	14
131	Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $s=13\hat{\epsilon}\%{\hat{\epsilon}}\%TeV$ Using the ATLAS Detector. Physical Review Letters, 2021, 127, 141801.	2.9	14
132	Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{\mathbb{s}} = 13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	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.	1.6	14
134	Measurement of the c-jet mistagging efficiency in $\mathbb{Star}\{t\}$ events using pp collision data at $\sqrt{s}=13\mathbb{A}ext \{TeV\}$ collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	14
135	Search for new phenomena in p collisions in final states with tau leptons, b -jets, and missing transverse momentum with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14
136	Search for four-top-quark production in the single-lepton and opposite-sign dilepton final states in p collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2019, 99, .	1.6	13
137	Measurement of the CP-violating phase $\phi_{_s}$ in $B_{_s} \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. European Physical Journal C, 2021, 81, .	1.4	13
138	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.	1.4	13
139	Search for long-lived charginos based on a disappearing-track signature using 136 fb $^{-1}$ of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	13
140	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.	1.6	12
141	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.	1.6	12
142	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.	1.6	12
143	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s}_{\mathbb{NN}}=8.16\mathbb{A}TeV$ p+Pb collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	12
144	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.	1.4	12

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145	Search for supersymmetry in events with four or more charged leptons in 139 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
146	Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	12
147	Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
148	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	1.4	12
149	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.	1.4	12
150	Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	11
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152	Exclusive dimuon production in ultraperipheral collisions at $\sqrt{s} = 13 \text{ TeV}$ with ATLAS. Physical Review C, 2021, 104, .	1.1	11
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155	Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties. Journal of Instrumentation, 2017, 12, P05002-P05002.	0.5	10
156	Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	10
157	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^{-1} of pp collision data at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2022, 2022, 1.	1.6	10
158	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.	1.6	10
159	Search for resonant pair production of Higgs bosons in the $b\bar{b}$ channel using the full Run 2 dataset from the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	10
160	Search for single production of a vectorlike quark decaying into a Higgs boson and top quark with fully hadronic final states using the ATLAS detector. Physical Review D, 2022, 105, .	1.6	10
161	Combinations of single-top-quark production cross-section measurements and $ f_{LVtb} $ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments. Journal of High Energy Physics, 2019, 2019, 1.	1.6	9
162	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.	1.4	9

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164	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.	1.4	9
165	Search for dark matter produced in association with a single top quark in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 81, 1.	1.5	9
166	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.	1.6	8
167	Measurement of W^{\pm} -boson and Z-boson production cross-sections in pp collisions at $\sqrt{s}=2.76$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	8
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170	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 819-825.	6.5	8
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174	Search for associated production of a Z boson with an invisibly decaying Higgs boson or dark matter candidates at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 819-137066.	1.5	8
175	Search for Lepton-Flavor Violation in $Z \rightarrow \tau^+ \tau^-$ -Boson Decays with the ATLAS Detector. Physical Review Letters, 2021, 127, 271801.	2.9	8
176	Combination of inclusive and differential $\overline{\text{charge asymmetry}}$ measurements using ATLAS and CMS data at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	7
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180	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	1.4	7

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182	Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	6
183	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.	1.6	6
184	Search for Dark Matter Produced in Association with a Dark Higgs Boson Decaying into WZ or WZ in Fully Hadronic Final States from Z in Fully Hadronic Final States from Z . Physical Review Letters, 2021	2.9	6
185	Performance of the ATLAS RPC detector and Level-1 muon barrel trigger at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2021, 16, P07029.	0.5	6
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187	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	1.4	6
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189	The ATLAS Fast Tracker system. Journal of Instrumentation, 2021, 16, P07006.	0.5	5
190	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.	1.4	5
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197	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.	1.6	4
198	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.	1.4	4

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199	Measurement of K_S^0 and Λ^0 production in $ar\{t\}$ dileptonic events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	4
200	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow \mu^{\pm} \nu_{\mu}$ events in Run2 data. European Physical Journal C, 2022, 82, 1.	1.4	4
201	Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
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203	Measurements of inclusive and differential cross-sections of combined $\overline{t}\gamma$ and tW^3 production in the $e^{\pm}45$ channel at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
204	Measurement of isolated-photon plus two-jet production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
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206	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. Journal of Instrumentation, 2021, 16, P08025.	0.5	3
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208	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, .	1.4	3
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