

# Shyam Balaji

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4964060/publications.pdf>

Version: 2024-02-01

192  
papers

4,954  
citations

101384

36  
h-index

143772

57  
g-index

203  
all docs

203  
docs citations

203  
times ranked

6647  
citing authors

#	ARTICLE	IF	CITATIONS
1	Emulating the impact of additional proton-proton interactions in the ATLAS simulation by presampling sets of inelastic Monte Carlo events. Computing and Software for Big Science, 2022, 6, 1.	1.3	5
2	Search for heavy particles in the b-tagged dijet mass distribution with additional b-tagged jets in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS experiment. Physical Review D, 2022, 105, .	1.6	2
3	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	1.4	6
4	Measurement of the c-jet mistagging efficiency in $\sqrt{s}=13$ TeV events using pp collision data at $\sqrt{s}=13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	14
5	Operation and performance of the ATLAS semiconductor tracker in LHC Run 2. Journal of Instrumentation, 2022, 17, P01013.	0.5	1
6	Search for Higgs boson decays into a pair of pseudoscalar particles in the $b\bar{b}$ final state with the ATLAS detector in $\sqrt{s}=13$ TeV collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 2022, 1.	1.6	17
7	Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
8	Observation of electroweak production of two jets in association with an isolated photon and missing transverse momentum, and search for a Higgs boson decaying into invisible particles at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, 1.	1.4	8
9	Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with $139 \text{ fb}^{-1}$ of pp collision data at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	10
10	AtI3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	1.3	23
11	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W \rightarrow \mu \nu$ events in Run 2 data. European Physical Journal C, 2022, 82, 1.	1.4	4
12	The ATLAS inner detector trigger performance in pp collisions at $\sqrt{s}=13$ TeV during LHC Run 2. European Physical Journal C, 2022, 82, 1.	1.4	5
13	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, 829, 137066.	1.5	8
14	Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	7
15	A search for an unexpected asymmetry in the production of $e^+e^-$ and $e^+\mu^-$ pairs in proton-proton collisions recorded by the ATLAS detector at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 830, 137106.	1.5	1
16	Measurement of the energy asymmetry in $t\bar{t}$ production at $\sqrt{s}=13$ TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, .	1.4	2
17	Asymmetry in flavour changing electromagnetic transitions of vector-like quarks. Journal of High Energy Physics, 2022, 2022.	1.6	11
18	Search for resonant pair production of Higgs bosons in the $b\bar{b}$ final state using $\sqrt{s}=13$ TeV collision data with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 830, 137106.	1.6	10

#	ARTICLE	IF	CITATIONS
19	Constraints on Higgs boson production with large transverse momentum using $\hat{b}$ decays in the ATLAS detector. Physical Review D, 2022, 105, .	1.6	5
20	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and $13 \text{ TeV}$ . European Physical Journal C, 2022, 82, 1.	1.4	12
21	Search for single production of a vectorlike $T$ 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
22	Search for long-lived charginos based on a disappearing-track signature using $136 \text{ fb}^{-1}$ of pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	13
23	Two-particle Bose-Einstein correlations in $pp$ collisions at $\sqrt{s} = 13 \text{ TeV}$ measured with the ATLAS detector at the LHC. European Physical Journal C, 2022, 82, .	1.4	3
24	Measurement of hadronic event shapes in high- $p_T$ multijet final states at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
25	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
26	Medium-Induced Modification of $Z$ -Tagged Charged Particle Yields in $Pb-Pb$ Collisions at $5.02 \text{ TeV}$ with the ATLAS Detector. Physical Review Letters, 2021, 126, 072301.	2.9	7
27	Search for squarks and gluinos in final states with jets and missing transverse momentum using $139 \text{ fb}^{-1}$ of $\sqrt{s} = 13 \text{ TeV}$ pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	37
28	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
29	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	38
30	Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	18
31	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	17
32	Measurement of light-by-light scattering and search for axion-like particles with $2.2 \text{ nb}^{-1}$ of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	19
33	Search for Higgs boson production in association with a high-energy photon via vector-boson fusion with decay into bottom quark pairs at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	6
34	Search for Dark Matter Produced in Association with a Dark Higgs Boson Decaying into $W$ or $Z$ in Fully Hadronic Final States. Physical Review Letters, 2021, 126, 122301.	2.9	6
35	Longitudinal flow correlations in $Pb-Pb$ collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$ . Physical Review Letters, 2021, 126, 122301.	2.9	17
36	Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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, .	1.4	13
40	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
41	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma Z$ 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.	1.4	40
42	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
43	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $e^+e^- \rightarrow e^+e^- W W$ and $e^+e^- \rightarrow e^+e^- W Z$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26
44	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
45	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. Physical Review D, 2021, 103, .	1.6	64
46	Measurements of $W+W^* \rightarrow \tau^+\tau^-$ 1 jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
47	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
48	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.	1.4	14
49	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\tau$ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
50	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 819-825.	6.5	8
51	Search for Displaced Leptons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2021, 127, 051802.	2.9	17
52	Test of the universality of $\tau$ , and $\tau$ lepton couplings in W-boson decays with the ATLAS detector. Nature Physics, 2021, 17, 813-818.	6.5	15
53	Two-particle azimuthal correlations in photonuclear ultraperipheral pp collisions at 5.02 TeV with ATLAS. Physical Review C, 2021, 104, .		
54	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.	1.6	12

#	ARTICLE	IF	CITATIONS
55	Determination of the parton distribution functions of the proton from ATLAS measurements of differential $W^{\pm}$ and Z boson production in association with jets. Journal of High Energy Physics, 2021, 2021, 1.	1.6	10
56	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
57	A search for the decays of stopped long-lived particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	5
58	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
59	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
60	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
61	The ATLAS Fast Tracker system. Journal of Instrumentation, 2021, 16, P07006.	0.5	5
62	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8, \sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	3
63	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
64	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. Journal of Instrumentation, 2021, 16, P08025.	0.5	3
65	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.	1.4	12
66	Exclusive dimuon production in ultraperipheral collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review C, 2021, 104, .	1.1	11
67	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.	2.9	14
68	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
69	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.	1.6	14
70	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
71	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.	1.6	12
72	Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. European Physical Journal C, 2021, 81, 1.	1.4	7

#	ARTICLE	IF	CITATIONS
73	Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	10
74	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
75	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
76	Search for exotic decays of the Higgs boson into long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV using displaced vertices in the ATLAS inner detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
77	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
78	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	1.4	7
79	Search for Lepton-Flavor Violation in $Z$ -Boson Decays with $L$ -Leptons with the ATLAS Detector. Physical Review Letters, 2021, 126, 10, 10.	2.9	8
80	Search for chargino and neutralino pair production in final states with two boosted hadronically decaying bosons and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2021, 104, 10, 10.	1.6	25
81	Search for new phenomena in $p\bar{p}$ collisions in final states with tau leptons, b-jets, and missing transverse momentum with the ATLAS detector. Physical Review D, 2021, 104, 10, 10.	1.6	14
82	Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow \tau^+ \tau^- J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
83	Combined measurements of Higgs boson production and decay using up to 80 pb <sup>-1</sup> of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. DiJet Resonance Search with Weak Supervision Using $m_{\text{min}}^2$ . Physical Review D, 2020, 101, 10, 10.	2.9	67
84	Measurements of inclusive and differential fiducial cross-sections of combined $\gamma$ and $t\bar{t}$ production in the $e\bar{1}/4$ channel at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
85	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
86	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
87	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $4\ell$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	1.4	32
88	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.	1.6	28
89	Performance of the ATLAS muon triggers in Run 2. Journal of Instrumentation, 2020, 15, P09015-P09015.	0.5	62

#	ARTICLE	IF	CITATIONS
91	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 $\sqrt{s}$ collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	34
92	Measurement of differential cross sections for single diffractive dissociation in $\sqrt{s} = 8$ TeV pp collisions using the ATLAS ALFA spectrometer. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
93	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
94	Properties of Higgs Boson Interactions with Top Quarks in the $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	2.9	40
95	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.	1.6	11
96	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
97	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
98	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
99	Search for heavy neutral Higgs bosons decaying into two tau leptons with the ATLAS detector using the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	2.9	97
100	Unified SU(4) theory for the $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	28
101	Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	4
102	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
103	Performance of the upgraded PreProcessor of the ATLAS Level-1 Calorimeter Trigger. Journal of Instrumentation, 2020, 15, P11016-P11016.	0.5	4
104	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
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	Higgs boson production cross-section measurements and their EFT interpretation in the $4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	41
107	Search for heavy neutral Higgs bosons produced in association with top quarks and decaying into top quarks and decaying into photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	22
108	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

#	ARTICLE	IF	CITATIONS
109	ATLAS data quality operations and performance for 2015–2018 data-taking. Journal of Instrumentation, 2020, 15, P04003-P04003.	0.5	68
110	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
111	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.	2.9	17
112	Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb <sup>-1</sup> of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	19
113	Search for dijet resonances in events with an isolated charged lepton using $\sqrt{s} = 13$ TeV proton-proton collision data collected by the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
114	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
115	Measurement of the $Z(\gamma^* \rightarrow e^+e^-)$ production cross-section in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	9
116	Measurement of long-range two-particle azimuthal correlations in Z-boson tagged $pp$ collisions at $\sqrt{s} = 8$ and 13 TeV. European Physical Journal C, 2020, 80, 1.	1.4	5
117	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s} = 8.16$ TeV $p+Pb$ collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	12
118	Measurement of $J/\psi$ production in association with a $W$ boson with $pp$ data at 8 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	10
119	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.	1.6	68
120	CP violation and circular polarisation in neutrino radiative decay. Journal of High Energy Physics, 2020, 2020, 1.	1.6	17
121	Search for $\overline{t}t$ resonances in fully hadronic final states in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
122	Reconstruction and identification of boosted $d\bar{t}$ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
123	Measurement of the $Z(\gamma^* \rightarrow e^+e^-)$ production cross-section in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 138001.	1.5	9
124	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.	2.9	6
125	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
126	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	1.4	93



#	ARTICLE	IF	CITATIONS
127	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
128	Search for top squarks in events with a Higgs or Z boson using 139 fb <sup>-1</sup> of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	4
129	Evidence for $\tau\tau$ production in the multilepton final state in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	30
130	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
131	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
132	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
133	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	1.4	12
134	CP violation in neutral lepton transition dipole moment. Journal of High Energy Physics, 2020, 2020, 1.	1.6	11
135	Asymmetries in the rare top decays $t \rightarrow c \gamma$ and $t \rightarrow b \gamma$ . $C < P < asymmetries in the rare top decays <math>t \rightarrow c \gamma</math> and <math>t \rightarrow b \gamma</math> and$	1.6	4
136	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
137	Search for long-lived neutral particles in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS calorimeter. European Physical Journal C, 2019, 79, 1.	1.4	28
138	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	21
139	Observation of Light-by-Light Scattering in Ultraperipheral $Pb-Pb$ Collisions with the ATLAS Detector. Physical Review Letters, 2019, 123, 052001.	2.9	75
140	Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	8
141	Measurement of $W^{\pm}Z$ production cross sections and gauge boson polarisation in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	41
142	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. Physical Review Letters, 2019, 122, 231801.	2.9	133
143	Searches for third-generation scalar leptoquarks in $WZ$ cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
144	Searches for third-generation scalar leptoquarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	30

#	ARTICLE	IF	CITATIONS
145	Search for scalar resonances decaying into $\hat{1}/4 + \hat{1}/4$ in events with and without b-tagged jets produced in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	15
146	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. Journal of High Energy Physics, 2019, 2019, 1.	1.6	20
147	Search for excited electrons singly produced in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment at the LHC. European Physical Journal C, 2019, 79, .	1.4	4
148	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
149	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, .	1.4	24
150	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
151	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.	1.6	13
152	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
153	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.	1.4	3
154	Observation of electroweak $W^+Z$ 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.	1.5	38
155	Search for single production of vector-like quarks decaying into $Wb$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	27
156	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
157	Search for top-quark decays $t \rightarrow Hq$ with $36 \text{ fb}^{-1}$ of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	19
158	Measurement of $VH$ , $H \rightarrow b\bar{b}$ 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
159	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.	1.6	18
160	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
161	Cross-section measurements of the Higgs boson decaying into a pair of $\tilde{l}_1\tilde{l}_1$ -leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2019, 99, .	1.6	63
162	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

#	ARTICLE	IF	CITATIONS
163	Measurements of inclusive and differential fiducial cross-sections of $\gamma$ production in leptonic final states at $\sqrt{s}=13$ -ext {TeV} in ATLAS. European Physical Journal C, 2019, 79, 1.	1.4	14
164	Search for the Production of a Long-Lived Neutral Particle Decaying within the ATLAS Hadronic Calorimeter in Association with a Z Boson from pp Collisions at $s=13$ TeV. Physical Review Letters, 2019, 2.9 122, 151801.		12
165	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
166	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
167	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
168	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
169	Measurement of the top quark mass in the $t \rightarrow t \gamma$ . European Physical Journal C, 2019, 79, 1.	1.4	47
170	Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow WZ$ 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
171	Chiral SU(4) explanation of the $b$ -anomalies. Physical Review D, 2019, 99, .	1.6	27
172	Measurement of the top-quark mass in $t$ + 1-jet events collected with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	27
173	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
174	Measurement of ZZ production in the $\gamma\gamma$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	6
175	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
176	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
177	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
178	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.	1.6	50
179	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.	1.4	17
180	ATLAS b-jet identification performance and efficiency measurement with $t$ events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 1.	1.4	130

#	ARTICLE	IF	CITATIONS
181	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ – $7$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	36
182	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
183	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.	1.6	14
184	Search for heavy charged long-lived particles in proton-proton collisions at $\sqrt{s} = 13$ TeV using an ionisation measurement with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 788, 96-116.	1.5	20
185	Measurement of the inclusive isolated-photon cross section in pp collisions at $\sqrt{s} = 13$ TeV using 36 fb <sup>-1</sup> of ATLAS data. Journal of High Energy Physics, 2019, 2019, 1.	1.6	5
186	Measurement of $K_S^0$ and $\Lambda^0$ production in $t\bar{t}$ dileptonic events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	4
187	Measurement of the $Z\gamma_{\text{loop}}$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector and limits on anomalous triple gauge-boson couplings. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
188	Combination of the Searches for Pair-Produced Vectorlike Partners of the Third-Generation Quarks at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2018, 121, 211801.	2.9	145
189	Combination of searches for heavy resonances decaying into bosonic and leptonic final states using proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2018, 98, .	1.5	138
190	Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ$ , $Z\gamma$ , and $\gamma\gamma$ final states with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 223-244.	1.5	43
192	A two dimensional analytical model for the study of ferromagnetic resonance responses of single and multilayer films. Journal of Applied Physics, 2017, 121, .	1.1	4