

Benjamin Nachman

List of Publications by Year in descending order

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Version: 2024-02-01

334
papers

13,716
citations

20797

60
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34964

98
g-index

354
all docs

354
docs citations

354
times ranked

8886
citing authors

#	ARTICLE	IF	CITATIONS
1	Reconstructing the kinematics of deep inelastic scattering with deep learning. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1025, 166164.	0.7	12
2	Active readout-error mitigation. Physical Review A, 2022, 105, .	1.0	16
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	A cautionary tale of decorrelating theory uncertainties. European Physical Journal C, 2022, 82, 1.	1.4	9
6	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
7	Publishing unbinned differential cross section results. Journal of Instrumentation, 2022, 17, P01024.	0.5	14
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 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	10
10	AtlFast3: 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	Online-compatible unsupervised nonresonant anomaly detection. Physical Review D, 2022, 105, .	1.6	14
14	Computationally efficient zero-noise extrapolation for quantum-gate-error mitigation. Physical Review A, 2022, 105, .	1.0	17
15	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
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	High-dimensional anomaly detection with radiative return in e^+e^- collisions. Journal of High Energy Physics, 2022, 2022, .	1.6	2
18	Neural conditional reweighting. Physical Review D, 2022, 105, .	1.6	4

#	ARTICLE	IF	CITATIONS
19	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
20	Machine learning in the search for new fundamental physics. Nature Reviews Physics, 2022, 4, 399-412.	11.9	31
21	Symmetry discovery with deep learning. Physical Review D, 2022, 105, .	1.6	14
22	Data-directed search for new physics based on symmetries of the SM. European Physical Journal C, 2022, 82, .	1.4	3
23	Structure Functions and Parton Densities: a Session Summary. SciPost Physics Proceedings, 2022, , .	0.2	1
24	Optimizing observables with machine learning for better unfolding. Journal of Instrumentation, 2022, 17, P07009.	0.5	1
25	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
26	Quantum Gate Pattern Recognition and Circuit Optimization for Scientific Applications. EPJ Web of Conferences, 2021, 251, 03023.	0.1	8
27	Parameter estimation using neural networks in the presence of detector effects. Physical Review D, 2021, 103, .	1.6	11
28	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 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
29	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
30	Measurements of WH and ZH production in the $H \rightarrow \bar{b}b$ decay channel in pp collisions at $\sqrt{s} = 13, 8, 7\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	38
31	Readout rebalancing for near-term quantum computers. Physical Review A, 2021, 103, .	1.0	17
32	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
33	Automating the ABCD method with machine learning. Physical Review D, 2021, 103, .	1.6	23
34	Quantum Algorithm for High Energy Physics Simulations. Physical Review Letters, 2021, 126, 062001.	2.9	67
35	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13, 8, 7\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	17
36	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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37	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
38	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
39	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
40	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
41	Enhancing searches for resonances with machine learning and moment decomposition. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
42	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
43	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma \gamma$ 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
44	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
45	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $e^+e^- \rightarrow e^+e^- b\bar{b}$ and $e^+e^- \rightarrow e^+e^- W W$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26
46	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
47	Learning from many collider events at once. Physical Review D, 2021, 103, .	1.6	17
48	Measurements of $W+W\bar{\nu} + \text{1 jet}$ 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
49	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
50	GANplifying event samples. SciPost Physics, 2021, 10, .	1.5	38
51	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
52	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a τ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
53	Comparing weak- and unsupervised methods for resonant anomaly detection. European Physical Journal C, 2021, 81, 1.	1.4	26
54	Search for supersymmetry in events with four or more charged leptons in 139 fb ⁻¹ of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12

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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	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
60	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
61	Simulation-assisted decorrelation for resonant anomaly detection. Physical Review D, 2021, 104, .	1.6	34
62	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
63	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
64	Uncertainty-aware machine learning for high energy physics. Physical Review D, 2021, 104, .	1.6	24
65	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
66	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
67	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
68	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
69	Preserving new physics while simultaneously unfolding all observables. Physical Review D, 2021, 104, .	1.6	5
70	The LHC Olympics 2020 a community challenge for anomaly detection in high energy physics. Reports on Progress in Physics, 2021, 84, 124201.	8.1	70
71	Simulating Collider Physics on Quantum Computers Using Effective Field Theories. Physical Review Letters, 2021, 127, 212001.	2.9	28
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

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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	Mitigating Depolarizing Noise on Quantum Computers with Noise-Estimation Circuits. Physical Review Letters, 2021, 127, 270502.	2.9	56
75	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
76	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
77	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
78	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
79	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	1.4	7
80	Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
81	Electromagnetic showers beyond shower shapes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 951, 162879.	0.7	19
82	Jet substructure at the Large Hadron Collider: A review of recent advances in theory and machine learning. Physics Reports, 2020, 841, 1-63.	10.3	230
83	Measurements of inclusive and differential cross-sections of combined $t\bar{t}\gamma$ and tW production in the $e\bar{\nu}_e$ channel at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
84	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
85	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
86	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	1.4	32
87	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
88	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
89	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
90	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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91	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
92	Zero-noise extrapolation for quantum-gate error mitigation with identity insertions. Physical Review A, 2020, 102, .	1.0	81
93	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.	1.6	17
94	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
95	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
96	Neural networks for full phase-space reweighting and parameter tuning. Physical Review D, 2020, 101, .	1.6	32
97	OmniFold: A Method to Simultaneously Unfold All Observables. Physical Review Letters, 2020, 124, 182001.	2.9	56
98	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
99	Anomaly detection with density estimation. Physical Review D, 2020, 101, .	1.6	128
100	Simulation assisted likelihood-free anomaly detection. Physical Review D, 2020, 101, .	1.6	78
101	Error detection on quantum computers improving the accuracy of chemical calculations. Physical Review A, 2020, 102, .	1.0	19
102	Unfolding quantum computer readout noise. Npj Quantum Information, 2020, 6, .	2.8	65
103	Measurements of top-quark pair spin correlations in the e^+e^- channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	22
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	Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	41
106	Supervised jet clustering with graph neural networks for Lorentz boosted bosons. Physical Review D, 2020, 102, .	1.6	23
107	Neural resampler for Monte Carlo reweighting with preserved uncertainties. Physical Review D, 2020, 102, .	1.6	23
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

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109	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
110	Search for dijet resonances in events with an isolated charged lepton using $\sqrt{s} = 13 \text{ TeV}$ proton-proton collision data collected by the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
111	Measurement of the $Z(\hat{a}^+ \hat{a}^-, \hat{a}^0, \hat{a}^{\pm 1})^3$ production cross-section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	9
112	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
113	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s} = 8.16 \text{ TeV}$ p+Pb collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	12
114	Measurement of J/ψ production in association with a W^{\pm} boson with pp data at 8 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	10
115	Search for new resonances in mass distributions of jet pairs using 139 fb^{-1} of pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	68
116	The motivation and status of two-body resonance decays after the LHC Run 2 and beyond. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
117	Search for $\overline{t}t$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
118	Reconstruction and identification of boosted $di\bar{l}$ 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
119	Searching for long-lived particles beyond the Standard Model at the Large Hadron Collider. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 090501.	1.4	133
120	A quantum algorithm to efficiently sample from interfering binary trees. Quantum Science and Technology, 2020, 5, 035004.	2.6	5
121	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	1.4	93
122	Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	124
123	Search for top squarks in events with a Higgs or Z boson using 139 fb^{-1} of pp collision data at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	4
124	Evidence for $\text{star}t\text{tar}t$ production in the multilepton final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	30
125	Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	29
126	Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ and decaying into collimated leptons or light hadrons with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	21

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127	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
128	A guide for deploying Deep Learning in LHC searches: How to achieve optimality and account for uncertainty. SciPost Physics, 2020, 8, .	1.5	29
129	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	1.4	12
130	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.	1.4	15
131	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
132	Investigating the topology dependence of quark and gluon jets. Journal of High Energy Physics, 2019, 2019, 1.	1.6	19
133	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
134	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
135	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
136	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
137	Extracting the Top-Quark Width from Nonresonant Production. Physical Review Letters, 2019, 122, 231803.	2.9	6
138	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
139	Search for scalar resonances decaying into $\tau^+\tau^-$ 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
140	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
141	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
142	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
143	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
144	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

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145	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
146	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
147	Searches for scalar leptoquarks and differential cross-section measurements in dilepton-dijet events in proton-proton collisions at a centre-of-mass energy of $\sqrt{s} = 13$ TeV with the ATLAS experiment. European Physical Journal C, 2019, 79, 1.	1.4	22
148	Extending the search for new resonances with machine learning. Physical Review D, 2019, 99, .	1.6	94
149	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
150	Search for top-quark decays $t \rightarrow Hq$ with 36 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
151	Measurement of VH , $\text{H} \rightarrow \text{b}\bar{\text{b}}$ 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
152	Machine learning templates for QCD factorization in the search for physics beyond the standard model. Journal of High Energy Physics, 2019, 2019, 1.	1.6	19
153	Measurements of W and Z boson production in pp collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	17
154	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
155	Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}\gamma$ production in leptonic final states at $\sqrt{s} = 13$ TeV in ATLAS. European Physical Journal C, 2019, 79, 1.	1.4	14
156	Charm-quark Yukawa coupling in $t\bar{t}c$ production at LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 90-96.	1.5	7
157	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
158	Search for doubly charged scalar bosons decaying into same-sign W boson pairs with the ATLAS detector. European Physical Journal C, 2019, 79, 58.	1.4	61
159	Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with two charged leptons and two jets at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	39
160	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
161	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
162	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

#	ARTICLE	IF	CITATIONS
163	Measurement of the top quark mass in the $t \rightarrow t \hat{A} \hat{A}^*$. European Physical Journal C, 2019, 79, 1.	1.4	47
164	Search for pair production of Higgs bosons in the $b\bar{b}$ 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
165	A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment. European Physical Journal C, 2019, 79, 1.	1.4	25
166	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
167	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
168	Measurement of ZZ production in the $\hat{a}, \hat{a}, \hat{a}^{1/2} \hat{1}^{1/2}$ 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
169	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
170	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
171	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
172	Measurement of W^{\pm} boson production in Pb+Pb collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	17
173	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
174	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	36
175	Next Generation Generative Neural Networks for HEP. EPJ Web of Conferences, 2019, 214, 09005.	0.1	9
176	Automating the construction of jet observables with machine learning. Physical Review D, 2019, 100, .	1.6	21
177	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
178	Jet substructure at the Large Hadron Collider. Reviews of Modern Physics, 2019, 91, .	16.4	128
179	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
180	Measurement of the inclusive isolated-photon cross section in pp collisions at $\sqrt{s} = 13$ TeV using 36 fb ⁻¹ of ATLAS data. Journal of High Energy Physics, 2019, 2019, 1.	1.6	5

#	ARTICLE	IF	CITATIONS
199	Learning to Remove Pileup at the LHC with Jet Images. Journal of Physics: Conference Series, 2018, 1085, 042010.	0.3	4
200	Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow \gamma \gamma \rightarrow 4b$ channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	28
201	Boosting $H \rightarrow b\bar{b}$ with machine learning. Journal of High Energy Physics, 2018, 2018, 1.	1.6	55
202	Measurement of the $Z \rightarrow \mu\mu$ 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
203	Prompt and non-prompt J/ψ elliptic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 784.	1.4	19
204	Search for Higgs boson pair production in the $\gamma\gamma \rightarrow W^+W^-$ channel using pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 1007.	1.4	53
205	Measurement of colour flow using jet-pull observables in $t\bar{t}$ events with the ATLAS experiment at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 847.	1.4	16
206	Controlling Physical Attributes in GAN-Accelerated Simulation of Electromagnetic Calorimeters. Journal of Physics: Conference Series, 2018, 1085, 042017.	0.3	24
207	Deep Learning usage by Large Experiments. Journal of Physics: Conference Series, 2018, 1085, 022002.	0.3	0
208	Angular analysis of $B \rightarrow D^* \ell \bar{\nu}_\ell$ decays in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	76
209	Search for a new heavy gauge-boson resonance decaying into a lepton and missing transverse momentum in 36 fb^{-1} of pp collisions at. European Physical Journal C, 2018, 78, 401.	1.4	50
210	Search for dark matter in events with a hadronically decaying vector boson and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	29
211	Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	9
212	Search for Higgs boson pair production in the $\gamma\gamma \rightarrow b\bar{b}$ final state with 13 TeV pp collision data collected by the ATLAS experiment. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38
213	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
214	Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s_{NN}} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 997.	1.4	51
215	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
216	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 995.	1.4	125

#	ARTICLE	IF	CITATIONS
217	Anomaly Detection for Resonant New Physics with Machine Learning. Physical Review Letters, 2018, 121, 241803.	2.9	126
218	Search for charged Higgs bosons decaying into top and bottom quarks at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	56
219	Operation and performance of the ATLAS Tile Calorimeter in Run 1. European Physical Journal C, 2018, 78, 987.	1.4	25
220	Search for supersymmetry in final states with missing transverse momentum and multiple b-jets in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	37
221	Learning to classify from impure samples with high-dimensional data. Physical Review D, 2018, 98, .	1.6	50
222	Search for pair production of heavy vector-like quarks decaying into high-pT W bosons and top quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	22
223	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
224	Search for long-lived charginos based on a disappearing-track signature in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	67
225	Search for supersymmetry in final states with charm jets and missing transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	15
226	Search for charged Higgs bosons decaying via $H^{\pm} \rightarrow \tau^{\pm} \tilde{\nu}_{\tau}$, in the $\tilde{\nu}_{\tau} + \text{jets}$ and $\tilde{\nu}_{\tau} + \text{lepton}$ final states with 36 fb^{-1} of pp collision data recorded at $\sqrt{s}=13$ TeV with the ATLAS experiment. Journal of High Energy Physics, 2018, 2018, 1.	1.6	59
227	Prompt and non-prompt $\psi(2S) \rightarrow J/\psi \tilde{\chi}^0$ and $\psi(2S) \rightarrow \tilde{\chi}^0 \tilde{\chi}^0$ suppression at high transverse momentum in 5.02 TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.	1.4	61
228	Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	31
229	Search for exclusive Higgs and Z boson decays to $\tilde{\chi}^0 \tilde{\chi}^0$ and $\tilde{\chi}^{\pm} \tilde{\chi}^{\mp}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	16
230	Measurements of b-jet tagging efficiency with the ATLAS detector using τ events at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	40
231	Search for flavour-changing neutral current top-quark decays $t \rightarrow qZ$ in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
232	Measurement of the inclusive and fiducial $t \bar{t} \tilde{A}^0$ production cross-sections in the. European Physical Journal C, 2018, 78, 487.	1.4	10
233	Search for heavy particles decaying into top-quark pairs using lepton-plus-jets events in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 565.	1.4	79
234	Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 625.	1.4	27

#	ARTICLE	IF	CITATIONS
235	CaloGAN: Simulating 3D high energy particle showers in multilayer electromagnetic calorimeters with generative adversarial networks. <i>Physical Review D</i> , 2018, 97, .	1.6	177
236	Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	136
237	Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	17
238	Search for dark matter produced in association with bottom or top quarks in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. <i>European Physical Journal C</i> , 2018, 78, 18.	1.4	60
239	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2018, 78, 199.	1.4	132
240	Observables for possible QGP signatures in central pp collisions. <i>European Physical Journal C</i> , 2018, 78, 1.	1.4	16
241	Measurement of u , d , polarisation in $Z/\gamma \rightarrow u\bar{u}$. <i>European Physical Journal C</i> , 2018, 78, 163.	1.4	7
242	Searches for heavy ZZ and ZW resonances in the $\gamma, \gamma\gamma$ and $\gamma\gamma/2\gamma\gamma$ final states in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	29
243	Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b-jets with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	33
244	Measurement of differential cross sections and W^+/W^{\pm} cross-section ratios for W boson production in association with jets at $\sqrt{s}=8$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	1.6	16
245	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in 36 fb^{-1} of ($\sqrt{s}=13$) TeV pp collisions with the ATLAS detector. , 2018, 2018, 1.		1
246	Measurement of the W-boson mass in pp collisions at ($\sqrt{s}=7$, $\sqrt{s}=13$ TeV) with the ATLAS detector. , 2018, 78, 1.		1
247	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at ($\sqrt{s}=13$, $\sqrt{s}=13$ TeV). , 2018, 78, 1.		1
248	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. <i>European Physical Journal C</i> , 2017, 77, 26.	1.4	29
249	Measurement of the inclusive cross-sections of single top-quark and top-antiquark t-channel production in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	29
250	Measurement of jet activity produced in top-quark events with an electron, a muon and two b-tagged jets in the final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2017, 77, 220.	1.4	11
251	Measurement of the W boson polarisation in $t\bar{t}$ events from pp collisions at $\sqrt{s}=8$ TeV in the lepton+jet channel with ATLAS. <i>European Physical Journal C</i> , 2017, 77, 264.	1.4	37
252	Electron efficiency measurements with the ATLAS detector using 2012 LHC proton-proton collision data. <i>European Physical Journal C</i> , 2017, 77, 195.	1.4	87

#	ARTICLE	IF	CITATIONS
253	Measurements of top-quark pair differential cross-sections in the e^+e^- channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2017, 77, 292.	1.4	27
254	Mathematical properties of numerical inversion for jet calibrations. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 858, 1-11.	0.7	6
255	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.	1.4	325
256	Fiducial, total and differential cross-section measurements of t-channel single top-quark production in pp collisions at 8 TeV using data collected by the ATLAS detector. European Physical Journal C, 2017, 77, 531.	1.4	56
257	Measurements of electroweak Wj production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	1.4	26
258	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
259	Measurement of multi-particle azimuthal correlations in pp, p+Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 428.	1.4	86
260	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
261	Measurement of lepton differential distributions and the top quark mass in $t\bar{t}$. European Physical Journal C, 2017, 77, 804.	1.4	28
262	Measurement of the $\overline{t}\gamma$ production cross section in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	9
263	Classification without labels: learning from mixed samples in high energy physics. Journal of High Energy Physics, 2017, 2017, 1.	1.6	138
264	Measurements of charge and CP asymmetries in b-hadron decays using top-quark events collected by the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	9
265	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	1.4	75
266	Search for new phenomena in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 144.	1.4	12
267	Probing the Wtb vertex structure in t-channel single-top-quark production and decay in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	17
268	Weakly supervised classification in high energy physics. Journal of High Energy Physics, 2017, 2017, 1.	1.6	72
269	Measurements of top-quark pair to Z-boson cross-section ratios at $\sqrt{s} = 13, 8, 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	13
270	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	1.4	489

#	ARTICLE	IF	CITATIONS
271	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton–proton collisions at the LHC. <i>European Physical Journal C</i> , 2017, 77, 332.	1.4	71
272	Precision measurement and interpretation of inclusive W^+W^- , W^+W^+ , W^-W^- . <i>European Physical Journal C</i> , 2017, 77, 367.	1.4	145
273	Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{\text{NN}}} = 2.76$ s NN = 2.76. <i>European Physical Journal C</i> , 2017, 77, 379.	1.4	51
274	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. <i>European Physical Journal C</i> , 2017, 77, 393.	1.4	80
275	Measurement of charged-particle distributions sensitive to the underlying event in $\sqrt{s} = 13$ TeV proton-proton collisions with the ATLAS detector at the LHC. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	14
276	Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. <i>European Physical Journal C</i> , 2017, 77, 898.	1.4	50
277	Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	8
278	Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions at the ATLAS detector. <i>European Physical Journal C</i> , 2017, 77, 765.	1.4	19
279	Measurement of b-hadron pair production with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	8
280	Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	17
281	Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	23
282	Search for pair production of vector-like top quarks in events with one lepton, jets, and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	38
283	Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector. <i>European Physical Journal C</i> , 2017, 77, 580.	1.4	35
284	Measurement of $WW/WZ \rightarrow \ell u q q'$, $WW/WZ \rightarrow \ell \bar{u} \bar{q} q'$ production with the hadronically decaying boson reconstructed as one or two jets in pp collisions at $\sqrt{s} = 8$ TeV with ATLAS, and constraints on anomalous gauge couplings. <i>European Physical Journal C</i> , 2017, 77, 563.	1.4	28
285	Search for new phenomena in a lepton plus high jet multiplicity final state with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	12
286	Searches for the $Z\bar{Z}$ decay mode of the Higgs boson and for new high-mass resonances in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	30
287	Studies of $Z\bar{Z}$ production in association with a high-mass dijet system in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	14
288	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	16

#	ARTICLE	IF	CITATIONS
289	Search for top quark decays $t \rightarrow qH$, with $H \rightarrow \tilde{\nu}\tilde{\nu}^*$, in $s = 13 \sqrt{s}=13 \text{ TeV}$ pp collisions using the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	18
290	Study of $WW\gamma W \tilde{\nu}^3$ and $WZ\gamma W Z$. <i>European Physical Journal C</i> , 2017, 77, 646.	1.4	30
291	Measurements of top quark spin observables in $t \bar{t} \rightarrow \text{dilepton}$ events using dilepton final states in $s = 8 \sqrt{s}=8 \text{ TeV}$ pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	20
292	Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	11
293	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8 \sqrt{s}=8 \text{ TeV}$. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	28
294	Pileup Mitigation with Machine Learning (PUMML). <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	69
295	Search for a scalar partner of the top quark in the jets plus missing transverse momentum final state at $s = 13 \sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	45
296	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb^{-1} of $\sqrt{s}=13 \text{ TeV}$ pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	31
297	Search for pair production of heavy vector-like quarks decaying to high- p_T W bosons and b quarks in the lepton-plus-jets final state in pp collisions at $s = 13 \sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	36
298	Measurement of the k_t splitting scales in $Z \rightarrow \nu\bar{\nu}$ events in pp collisions at $s = 8 \sqrt{s}=8 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	3
299	Analysis of the Wtb vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t -channel at $s = 8 \sqrt{s}=8 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	8
300	Evidence for the $H \rightarrow b \bar{b}$ decay with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	64
301	Search for new high-mass phenomena in the dilepton final state using 36 fb^{-1} of proton-proton collision data at $s = 13 \sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	168
302	Determination of the strong coupling constant α_s from transverse energy-energy correlations in multijet events at $\sqrt{s} = 8 \text{ TeV}$. <i>European Physical Journal C</i> , 2017, 77, 872.	1.4	32
303	Learning Particle Physics by Example: Location-Aware Generative Adversarial Networks for Physics Synthesis. <i>Computing and Software for Big Science</i> , 2017, 1, 1.	1.3	162
304	Learning Particle Physics by Example: Location-Aware Generative Adversarial Networks for Physics Synthesis. , 2017, 1, 1.		1
305	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data. <i>European Physical Journal C</i> , 2016, 76, 666.	1.4	73
306	The performance of the jet trigger for the ATLAS detector during 2011 data taking. <i>European Physical Journal C</i> , 2016, 76, 526.	1.4	21

#	ARTICLE	IF	CITATIONS
307	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
308	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
309	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	1.4	50
310	Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 581.	1.4	298
311	Measurement of the charged-particle multiplicity inside jets from $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2016, 76, 322.	1.4	51
312	A search for top squarks with R-parity-violating decays to all-hadronic final states with the ATLAS detector in $\sqrt{s} = 8$ TeV proton-proton collisions. Journal of High Energy Physics, 2016, 1.	1.6	14
313	Identification of high transverse momentum top quarks in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	1.6	17
314	Beam-induced and cosmic-ray backgrounds observed in the ATLAS detector during the LHC 2012 proton-proton running period. Journal of Instrumentation, 2016, 11, P05013-P05013.	0.5	11
315	Fuzzy jets. Journal of High Energy Physics, 2016, 2016, 1.	1.6	9
316	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538.	1.4	115
317	Jet-images – deep learning edition. Journal of High Energy Physics, 2016, 2016, 1.	1.6	222
318	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
319	Search for squarks and gluinos in events with hadronically decaying tau leptons, jets and missing transverse momentum in proton–proton collisions at $\sqrt{s} = 13$ TeV recorded with the ATLAS detector. European Physical Journal C, 2016, 76, 683.	1.4	11
320	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
321	Identification of boosted, hadronically decaying W bosons and comparisons with ATLAS data taken at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 154.	1.4	62
322	A new method to distinguish hadronically decaying boosted Z bosons from W bosons using the ATLAS detector. European Physical Journal C, 2016, 76, 238.	1.4	9
323	For a light stop, less is more when gluinos mediate. Modern Physics Letters A, 2016, 31, 1650052.	0.5	1
324	Superposition Coding Is Almost Always Optimal for the Poisson Broadcast Channel. IEEE Transactions on Information Theory, 2016, 62, 1782-1794.	1.5	15

#	ARTICLE	IF	CITATIONS
325	Search for an additional, heavy Higgs boson in the $H \rightarrow ZZ$ decay channel at $\sqrt{s} = 8$ TeV in pp collision data with the ATLAS detector. European Physical Journal C, 2016, 76, 45.	1.4	197
326	Sneaky light stop. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 743, 218-223.	1.5	18
327	Jets from jets: re-clustering as a tool for large radius jet reconstruction and grooming at the LHC. Journal of High Energy Physics, 2015, 2015, 1.	1.6	36
328	Bisection-based asymmetric M T2 computation: a higher precision calculator than existing symmetric methods. Journal of High Energy Physics, 2015, 2015, 1.	1.6	63
329	A meta-analysis of the 8 TeV ATLAS and CMS SUSY searches. Journal of High Energy Physics, 2015, 2015, 1.	1.6	2
330	ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. European Physical Journal C, 2015, 75, 510.	1.4	138
331	Investigating multiple solutions in the constrained minimal supersymmetric standard model. Journal of High Energy Physics, 2014, 2014, 1.	1.6	5
332	Significance variables. Physical Review D, 2013, 88, .	1.6	12
333	Evidence for conservatism in LHC SUSY searches. European Physical Journal Plus, 2012, 127, 1.	1.2	4
334	Jets and Jet Substructure at Future Colliders. Frontiers in Physics, 0, 10, .	1.0	4