

# Andrey Karyukhin

## List of Publications by Year in descending order

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232  
papers

13,910  
citations

22099

59  
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24915

109  
g-index

239  
all docs

239  
docs citations

239  
times ranked

8146  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ATLAS Simulation Infrastructure. European Physical Journal C, 2010, 70, 823-874.	1.4	1,187
2	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	1.4	489
3	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s} = 13 \text{ TeV}$ . European Physical Journal C, 2016, 76, 292.	1.4	453
4	Improved luminosity determination in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ using the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 2518.	1.4	362
5	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.	1.4	325
6	Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ . European Physical Journal C, 2016, 76, 581.	1.4	298
7	Luminosity determination in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653.	1.4	279
8	Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $\sqrt{s} = 7$ and $8 \text{ TeV}$ in the ATLAS experiment. European Physical Journal C, 2016, 76, 6.	1.4	274
9	Jet energy measurement and its systematic uncertainty in proton-proton collisions at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2015, 75, 17.	1.4	268
10	Performance of the ATLAS Trigger System in 2010. European Physical Journal C, 2012, 72, 1.	1.4	259
11	Electron performance measurements with the ATLAS detector using the 2010 LHC proton-proton collision data. European Physical Journal C, 2012, 72, 1.	1.4	248

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#	ARTICLE	IF	CITATIONS
19	Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2011, 71, 1.	1.4	146
20	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
21	Precision measurement and interpretation of inclusive $W^+W^-$ , $W^+W^+$ . European Physical Journal C, 2017, 77, 367.	1.4	145
22	Search for dark matter candidates and large extra dimensions in events with a jet and missing transverse momentum with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	137
23	Measurement of the $Z/\gamma^*$ boson transverse momentum distribution in pp collisions at $s = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	131
24	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
25	Search for charged Higgs bosons decaying via $H \rightarrow \tau^+\tau^-$ in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	126
26	Readiness of the ATLAS Tile Calorimeter for LHC collisions. European Physical Journal C, 2010, 70, 1193-1236.	1.4	121
27			

#	ARTICLE	IF	CITATIONS
37	Performance of electron and photon triggers in ATLAS during LHC Run 2. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	93
38	Study of $\bar{\nu}_e n \rightarrow \bar{\nu}_e n$ and $\bar{\nu}_e n \rightarrow \bar{\nu}_e n$ reactions at 37 GeV/c. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1993, 313, 276-282.	1.5	92
39	Search for the $b \bar{b} \rightarrow \gamma \gamma$ decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2015, 2015, 1.	1.6	89
40	Jet mass and substructure of inclusive jets in $\sqrt{s} = 7; \text{TeV}$ pp collisions with the ATLAS experiment. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	1.6	88
41	Search for direct production of charginos and neutralinos in events with three leptons and missing transverse momentum in $\sqrt{s} = 8 \text{ TeV}$ pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.	1.6	88
42	Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\sqrt{s} = 13 \text{ TeV}$ . <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	82
43	Search for dark matter at $\sqrt{s} = 13 \text{ TeV}$ 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
44	Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13 \text{ TeV}$ . <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	77
45	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. <i>European Physical Journal C</i> , 2017, 77, 673.	1.4	75
46	Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2011, 71, 1.	1.4	73
47	Measurement of the production cross section of jets in association with a Z boson in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	1.6	73
48	Search for new phenomena in final states with large jet multiplicities and missing transverse momentum at $\sqrt{s} = 8 \text{ TeV}$ proton-proton collisions using the ATLAS experiment. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	1.6	71
49	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
50	Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ . <i>European Physical Journal C</i> , 2015, 75, 303.	1.4	70
51	Measurement of the $W \rightarrow \bar{\nu}_e \nu_e$ and $Z \rightarrow \nu \bar{\nu}$ production cross sections in proton-proton collisions at $\sqrt{s} = 7; \text{TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2010, 2010, 1.	1.6	64
52	Measurement of isolated-photon pair production in pp collisions at $\sqrt{s} = 7; \text{TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	1.6	64
53	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
54	Jet energy scale and resolution measured in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	64

#	ARTICLE	IF	CITATIONS
55	Readiness of the ATLAS liquid argon calorimeter for LHC collisions. European Physical Journal C, 2010, 70, 723-753.	1.4	61
56	Measurement of ZZ production in pp collisions at $\sqrt{s}=7$ TeV and limits on anomalous ZZZ and ZZ $\tilde{\chi}^0$ couplings with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	61
57	Measurements of top quark pair relative differential cross-sections with ATLAS in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2013, 73, 1.	1.4	61
58	Prompt and non-prompt $J/\psi$ and $\psi(2S)$ suppression at high transverse momentum in $5.02\text{-}5.02$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.	1.4	61
59	Measurement of $W \pm Z$ production in proton-proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. European Physical Journal C, 2012, 72, 1.	1.4	59
60	Search for resonances decaying into top-quark pairs using fully hadronic decays in pp collisions with ATLAS at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	59
61	Search for direct top-squark pair production in final states with two leptons in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	59
62	Measurement of the W boson polarization in top quark decays with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	57
63	Search for direct top squark pair production in events with a Z boson, b-jets and missing transverse momentum in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2014, 74, 2883.	1.4	55
64	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
65	Search for high-mass resonances decaying to dilepton final states in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	54
66	Study of resonance production in diffractive reaction $\pi^+ \pi^- \rightarrow \rho^0 \pi^0$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 356, 595-600.	1.5	53
67	Hunt for new phenomena using large jet multiplicities and missing transverse momentum with ATLAS in $4.7\text{-}7$ TeV proton-proton collisions. Journal of High Energy Physics, 2012, 2012, 1.	1.6	53
68	Measurement of the cross-section for W boson production in association with b-jets in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	53
69	Search for the neutral Higgs bosons of the minimal supersymmetric standard model in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	52
70	Performance of jet substructure techniques for large-R jets in proton-proton collisions at $\sqrt{s}=7$ TeV using the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	52
71	Drift Time Measurement in the ATLAS Liquid Argon Electromagnetic Calorimeter using Cosmic Muons. European Physical Journal C, 2010, 70, 755-785.	1.4	51
72	Measurement of the top quark mass with the template method in the $l\bar{l} + jets$ channel using ATLAS data. European Physical Journal C, 2012, 72, 2046.	1.4	51

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73	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	1.4	50
74	Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898.	1.4	50
75	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
76	Search for pair production of massive particles decaying into three quarks with the ATLAS detector in $\sqrt{s} = 7$ TeV pp collisions at the LHC. Journal of High Energy Physics, 2012, 2012, 1.	1.6	48
77	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
78	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using $36 \text{ fb}^{-1}$ of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	48
79	Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	46
80	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
81	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
82	Measurement of the cross section for top-quark pair production in pp collisions at $\sqrt{s} = 7, \text{ext}\{\text{TeV}\}$ with the ATLAS detector using final states with two high-p T leptons. Journal of High Energy Physics, 2012, 2012, 1.	1.6	45
83	Search for pair-produced massive coloured scalars in four-jet final states with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 1.	1.4	45
84	Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 1.	1.4	45
85	Measurement of the $t\bar{t}$ production cross section in the tau + jets channel using the ATLAS detector. European Physical Journal C, 2013, 73, 2328.	1.4	45
86	Search for supersymmetry at $\sqrt{s} = 8$ TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	45
87	Search for the Standard Model Higgs boson in the $H \rightarrow \tau\tau, \tau\tau, \tau\tau$ decay mode in $\sqrt{s} = 7, \text{TeV}$ pp collisions with ATLAS. Journal of High Energy Physics, 2012, 2012, 1.	1.6	43
88	Measurement of the top quark pair production charge asymmetry in proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	42
89	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
90	Search for supersymmetric particles in events with lepton pairs and large missing transverse momentum in $\sqrt{s} = 7$ TeV proton-proton collisions with the ATLAS experiment. European Physical Journal C, 2011, 71, 1.	1.4	41

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91	Higgs boson production cross-section measurements and their EFT interpretation in the $4\ell$ decay channel at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	41
92	Limits on the production of the standard model Higgs boson in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2011, 71, 1.	1.4	40
93	A search for $t$ resonances in lepton+jets events with highly boosted top quarks collected in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	40
94	Measurements of b-jet tagging efficiency with the ATLAS detector using $t$ events at $\sqrt{s}=13\text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	1.6	40
95	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 $\text{fb}^{-1}$ of proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	40
96	Measurements of WH and ZH production in the $H \rightarrow \bar{b}b$ decay channel in pp collisions at $13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	38
97	Search for second generation scalar leptoquarks in pp collisions at $\sqrt{s}=7\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2012, 72, 1.	1.4	37
98	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
99	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
100	ATLAS search for a heavy gauge boson decaying to a charged lepton and a neutrino in pp collisions at $\sqrt{s} = 7\text{ TeV}$ . European Physical Journal C, 2012, 72, 1.	1.4	36
101	Search for same-sign top-quark production and fourth-generation down-type quarks in pp collisions at $\sqrt{s} = 7\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	36
102	Measurement of the polarisation of W bosons produced with large transverse momentum in pp collisions at $\sqrt{s} = 7\text{TeV}$ with the ATLAS experiment. European Physical Journal C, 2012, 72, 1.	1.4	36
103	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	36
104	Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\sqrt{s} = 13\text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	36
105	Search for a scalar partner of the top quark in the all-hadronic $t\bar{t}$ plus missing transverse momentum final state at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	36
106	Measurement of the production cross section of prompt $J/\psi$ mesons in association with a $W^\pm$ boson in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	35
107	Measurement of the inclusive jet cross-section in proton-proton collisions at $\sqrt{s}=7\text{ TeV}$ using $4.5\text{ fb}^{-1}$ of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	35
108	A search for flavour changing neutral currents in top-quark decays in pp collision data collected with the ATLAS detector at $\sqrt{s}=7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	34

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109	Multi-channel search for squarks and gluinos in $\sqrt{s}=7\text{ TeV}$ pp collisions with the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 2362.	1.4	34
110	Measurements of top-quark pair differential and double-differential cross-sections in the $\ell\ell$ +jets channel with pp collisions at $\sqrt{s}=13\text{ TeV}$ using the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	34
111	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 $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	34
112	Inclusive search for same-sign dilepton signatures in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2011, 2011, 1.	1.6	33
113	Measurement of jet shapes in top-quark pair events at $\sqrt{s} = 7\text{ TeV}$ using the ATLAS detector. European Physical Journal C, 2013, 73, 2676.	1.4	33
114	Search for third generation scalar leptoquarks in pp collisions at $\sqrt{s}=7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	32
115	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $\ell\ell$ decay channel at $\sqrt{s}=13\text{ TeV}$ . European Physical Journal C, 2020, 80, 1.	1.4	32
116	Search for light scalar top-quark pair production in final states with two leptons with the ATLAS detector in $\sqrt{s}=7\text{ TeV}$ proton-proton collisions. European Physical Journal C, 2012, 72, 1.	1.4	31
117	Measurement of the differential cross-section of B + meson production in pp collisions at $\sqrt{s}=7\text{ TeV}$ at ATLAS. Journal of High Energy Physics, 2013, 2013, 1.	1.6	31
118	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $\sqrt{s} = 13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
119	Search for new phenomena in events with same-charge leptons and b-jets in pp collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	30
120	Evidence for $t\bar{t}$ 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
121	Forward-backward correlations and charged-particle azimuthal distributions in pp interactions using the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	29
122	A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp-collision data with the ATLAS detector. European Physical Journal C, 2017, 77, 26.	1.4	29
123	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
124	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $\sqrt{s} = 8\text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.	1.6	28
125	Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13\text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	28
126	Investigation of hybrid states in the VES experiment at the Institute for High Energy Physics (Protvino). Physics of Atomic Nuclei, 2005, 68, 359-371.	0.1	27



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127	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
128	Study of the reaction $\bar{p} + p \rightarrow \tau^+ \tau^- + \text{hadrons}$ at $\sqrt{s} = 36$ GeV/c. Zeitschrift für Physik C-Particles and Fields, 1992, 54, 367-369.	1.5	26
129	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
130	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $b\bar{b}$ and $WW$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26
131	A search for $t$ resonances with the ATLAS detector in $2.05 \text{ fb}^{-1}$ of proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 2083.	1.4	25
132	Search for top and bottom squarks from gluino pair production in final states with missing transverse energy and at least three b-jets with the ATLAS detector. European Physical Journal C, 2012, 72, 1.	1.4	25
133	Measurement of the low-mass Drell-Yan differential cross section at $\sqrt{s} = 7$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	25
134	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
135	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
136	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
137	Commissioning of the ATLAS Muon Spectrometer with cosmic rays. European Physical Journal C, 2010, 70, 875-916.	1.4	23
138	Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	23
139	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
140	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	1.3	23
141	Measurement of event shapes at large momentum transfer with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	22
142	Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	22
143	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
144	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

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145	Measurement of $\tilde{t}_1$ polarization in $W\tilde{t}_1\tilde{t}_1^*$ decays with the ATLAS detector in pp collisions at $\sqrt{s}=7\text{--}8\text{ TeV}$ . European Physical Journal C, 2012, 72, 2062.	1.4	21
146	The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.	1.4	21
147	Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	1.6	21
148	Search for charged Higgs bosons through the violation of lepton universality in $t\bar{t}$ events using pp collision data at $\sqrt{s}=7\text{ TeV}$ with the ATLAS experiment. Journal of High Energy Physics, 2013, 2013, 1.	1.6	19
149	Measurement of $k_T$ splitting scales in $W\tilde{t}_1\tilde{t}_1^*$ events at $\sqrt{s}=7\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2013, 73, 2432.	1.4	19
150	Search for squarks and gluinos in final states with same-sign leptons and jets using $139\text{ fb}^{-1}$ of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	19
151	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
152	Performance of the ATLAS detector using first collision data. Journal of High Energy Physics, 2010, 2010, 1.	1.6	18
153	Search for an excess of events with an identical flavour lepton pair and significant missing transverse momentum in $\sqrt{s}=7\text{ TeV}$ proton-proton collisions with the ATLAS detector. European Physical Journal C, 2011, 71, 1.	1.4	18
154	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
155	Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	18
156	Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s}=13\text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	18
157	Studies of the performance of the ATLAS detector using cosmic-ray muons. European Physical Journal C, 2011, 71, 1.	1.4	17
158	Search for anomalous production of prompt like-sign lepton pairs at $\sqrt{s}=7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	17
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182	Search for anomaly-mediated supersymmetry breaking with the ATLAS detector based on a disappearing-track signature in $pp$ collisions at $\sqrt{s} = 7\text{ TeV}$ . European Physical Journal C, 2012, 72, 1.	1.4	13
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220	Measurement of hadronic event shapes in high-pT multijet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	4
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222	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow u^{\pm} \rightarrow \pi^{\pm} u_{\text{had}} u_{\text{had}}$ events in Run 2 data. <i>European Physical Journal C</i> , 2022, 82, 1.	1.4	4
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