

# Michael Tuts

## List of Publications by Citations

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177  
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39  
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192  
ext. papers

7,347  
ext. citations

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avg, IF

1.8  
L-index

#	Paper	IF	Citations
177	The ATLAS Simulation Infrastructure. <i>European Physical Journal C</i> , <b>2010</b> , 70, 823-874	4.2	817
176	Performance of the ATLAS trigger system in 2015. <i>European Physical Journal C</i> , <b>2017</b> , 77, 317	4.2	272
175	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , <b>2016</b> , 76, 292	4.2	263
174	Performance of the ATLAS Trigger System in 2010. <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	232
173	Jet energy measurement with the ATLAS detector in proton-proton collisions at $\sqrt{s}=7$ TeV. <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	209
172	Jet energy measurement and its systematic uncertainty in proton-proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 17	4.2	194
171	Luminosity determination in collisions at $\sqrt{s}=8$ TeV using the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2016</b> , 76, 653	4.2	188
170	Measurements of the Higgs boson production and decay rates and coupling strengths using collision data at $\sqrt{s}=7$ and 8 TeV in the ATLAS experiment. <i>European Physical Journal C</i> , <b>2016</b> , 76, 6	4.2	185
169	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. <i>European Physical Journal C</i> , <b>2017</b> , 77, 490	4.2	177
168	Measurement of the muon reconstruction performance of the ATLAS detector using 2011 and 2012 LHC proton-proton collision data. <i>European Physical Journal C</i> , <b>2014</b> , 74, 3130	4.2	166
167	Jet energy resolution in proton-proton collisions at $\sqrt{s}=7$ TeV recorded in 2010 with the ATLAS detector. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2306	4.2	153
166	Performance of pile-up mitigation techniques for jets in $\sqrt{s}=7$ TeV collisions at $\sqrt{s}=7$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 581	4.2	148
165	Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s}=7$ TeV. <i>European Physical Journal C</i> , <b>2011</b> , 71, 1	4.2	138
164	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 476	4.2	104
163	Observation of the $J/\psi$ at the Cornell Electron Storage Ring. <i>Physical Review Letters</i> , <b>1980</b> , 45, 222-225	7.4	104
162	Semileptonic decay of the B meson. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1983</b> , 130, 444-448	4.2	93
161	Observation of $J/\psi$ , $\psi(2S)$ , and $\psi(3770)$ at the Cornell Electron Storage Ring. <i>Physical Review Letters</i> , <b>1980</b> , 44, 1111-1114	7.1	88

160	Measurement of the $Z/\bar{\nu}$ boson transverse momentum distribution in pp collisions at ( $\sqrt{s}=7$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	79
159	Observation of the Lowest P-Wave $b\bar{b}$ Bound States. <i>Physical Review Letters</i> , <b>1983</b> , 51, 160-163	7.4	72
158	Masses, widths, and leptonic widths of the higher upsilon resonances. <i>Physical Review Letters</i> , <b>1985</b> , 54, 377-380	7.4	68
157	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 903	4.2	66
156	Search for the ( $\bar{b}$ ) decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	64
155	Precision measurement and interpretation of inclusive $b$ and $\bar{b}$ production cross sections with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 367	4.2	56
154	Observation of P-Wave $b\bar{b}$ Bound States. <i>Physical Review Letters</i> , <b>1982</b> , 49, 1612-1616	7.4	56
153	Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at ( $\sqrt{s}=7$ mbox{~TeV}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2011</b> , 71, 1	4.2	53
152	Search for dark matter at [Formula: see text] in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 393	4.2	52
151	Hyperfine splitting of B mesons and $B_s$ production at the Upsilon ( $5S$ ). <i>Physical Review Letters</i> , <b>1990</b> , 65, 2947-2950	7.4	52
150	Evidence for the ( $H \rightarrow \bar{b}$ ) decay with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	50
149	Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in collisions at [Formula: see text][Formula: see text]. <i>European Physical Journal C</i> , <b>2015</b> , 75, 303	4.2	49
148	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in collisions at [Formula: see text] using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 538	4.2	48
147	Observation of B production in $e^+e^-$ interactions above the b-flavor threshold. <i>Physical Review Letters</i> , <b>1985</b> , 55, 36-39	7.4	46
146	Performance of jet substructure techniques for large-R jets in proton-proton collisions at ( $\sqrt{s}=7$ ) TeV using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2013</b> , 2013, 1	5.4	43
145	ATLAS b-jet identification performance and efficiency measurement with ( $t\bar{t}$ ) events in pp collisions at ( $\sqrt{s}=13$ ) TeV. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	43
144	Jet reconstruction and performance using particle flow with the ATLAS Detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 466	4.2	42
143	Search for Structure in ( $e^+e^- \rightarrow$ hadrons) between $s=10.34$ and 11.6 GeV. <i>Physical Review Letters</i> , <b>1982</b> , 48, 906-910	7.4	42

142	Search for direct top squark pair production in events with a [Formula: see text] boson, [Formula: see text]-jets and missing transverse momentum in [Formula: see text] TeV [Formula: see text] collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2883	4.2	41
141	Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2013</b> , 73, 1	4.2	41
140	Observation of the Transition $\tau \rightarrow \mu + e + \bar{\nu}_\tau$ . <i>Physical Review Letters</i> , <b>1981</b> , 46, 1115-1118	7.4	41
139	Upper limit for axion production in radiative $\tau$ decay. <i>Physical Review D</i> , <b>1982</b> , 26, 717-719	4.9	40
138	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. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	39
137	Search for light short-lived particles in radiative $\tau$ decays. <i>Physical Review Letters</i> , <b>1986</b> , 56, 2672-2675	4.9	39
136	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> , <b>2019</b> , 79, 1	4.2	37
135	Limits on Higgs bosons, scalar-quarkonia, and $\eta$ from radiative $\tau$ decays. <i>Physical Review D</i> , <b>1987</b> , 35, 2883-2886	4.9	37
134	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	36
133	Measurement of B-Meson Semileptonic Decay. <i>Physical Review Letters</i> , <b>1981</b> , 47, 771-774	7.4	36
132	Evidence for $B_c^0$ Production in the Exclusive Reaction $B_c^0 \rightarrow (\bar{D}^0 \text{ or } D^0)$ . <i>Physical Review Letters</i> , <b>1982</b> , 49, 1616-1619	7.4	36
131	Observation of direct photons in $\tau$ and $\tau\tau$ decays and determination of the QCD scale parameter. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1984</b> , 138, 225-229	4.2	35
130	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. <i>European Physical Journal C</i> , <b>2017</b> , 77, 673	4.2	33
129	A measurement of the semileptonic decay of B mesons into muons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1984</b> , 141, 271-275	4.2	33
128	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb <sup>-1</sup> of $(\sqrt{s}) = 13$ TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	33
127	Search for pair production of Higgs bosons in the $(\bar{b}b)$ final state using proton-proton collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	31
126	Constraints on mediator-based dark matter and scalar dark energy models using $(\sqrt{s}) = 13$ TeV pp collision data collected by the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	31
125	Measurements of b-jet tagging efficiency with the ATLAS detector using $(\bar{t}t)$ events at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	31

124	A study of hadronic decays of the $\tau$ . <i>Nuclear Physics B</i> , <b>1984</b> , 242, 31-50	2.8	30
123	Performance of electron and photon triggers in ATLAS during LHC Run 2. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	30
122	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. <i>European Physical Journal C</i> , <b>2017</b> , 77, 332	4.2	29
121	Observation of $B$ production in the exclusive reaction $\tau \rightarrow B \rightarrow \tau (\tau \rightarrow e \bar{\nu}_e \nu_\tau)$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1983</b> , 130, 439-443	4.2	29
120	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2016</b> , 76, 295	4.2	28
119	Beam tests of the DØ uranium liquid argon end calorimeters. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1993</b> , 324, 53-76	1.2	28
118	Measurement of the inclusive jet cross-section in proton-proton collisions at ( $\sqrt{s}=7$ ) TeV using 4.5 fb <sup>-1</sup> of data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	27
117	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	26
116	Test of CP invariance in vector-boson fusion production of the Higgs boson using the method in the ditau decay channel with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 658	4.2	26
115	Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P03017-P03017	1	25
114	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. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	25
113	Hadron and electron response of uranium/liquid argon calorimeter modules for the DØ detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1989</b> , 280, 36-44	1.2	24
112	Search for light gluinos. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1987</b> , 186, 233-236	4.2	24
111	Prompt and non-prompt and suppression at high transverse momentum in Pb+Pb collisions with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2018</b> , 78, 762	4.2	23
110	A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 -collision data with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 26	4.2	22
109	Search for Higgs scalars in upilon decays. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1984</b> , 139, 332-336	4.2	22
108	E1 Transitions from the Upsilon " State and the Fine Structure of the $\chi_{bM}$ States. <i>Physical Review Letters</i> , <b>1991</b> , 66, 3113-3116	7.4	21
107	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	21

106	Hadron and electron response in a uranium liquid argon calorimeter from 10 to 150 GeV. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1988</b> , 269, 492-506	1.2	20
105	Performance of top-quark and (varvec{W})-boson tagging with ATLAS in Run 2 of the LHC. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	19
104	Search for direct top squark pair production in final states with two leptons in TeV collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 898	4.2	19
103	Observation of cascade decays of the $\Upsilon$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1982</b> , 118, 453-457	4.2	19
102	B semileptonic decays at the Upsilon (4S) and the Upsilon (5S). <i>Physical Review Letters</i> , <b>1991</b> , 66, 2436-2439	4.2	18
101	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. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	17
100	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. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
99	Measurement of the Drell-Yan triple-differential cross section in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	16
98	The performance of the jet trigger for the ATLAS detector during 2011 data taking. <i>European Physical Journal C</i> , <b>2016</b> , 76, 526	4.2	16
97	Measurement of fiducial and differential ( $W^+W^-$ ) production cross-sections at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	16
96	Searches for scalar leptoquarks and differential cross-section measurements in dilepton+jet events in proton-proton collisions at a centre-of-mass energy of ( $\sqrt{s}=13$ ) TeV with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	15
95	Design, construction, and performance of the electromagnetic module of the DØ end calorimeter. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1993</b> , 325, 393-416	1.2	15
94	Measurement of the branching ratio for decay of Upsilon states to micro+ micro-. <i>Physical Review Letters</i> , <b>1989</b> , 62, 2077-2079	7.4	15
93	Measurements of electroweak [ $Z/\gamma$ ] production and constraints on anomalous gauge couplings with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 474	4.2	14
92	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. <i>Journal of High Energy Physics</i> , <b>2014</b> , 2014, 1	5.4	14
91	$b\bar{b}$ spectroscopy from the Upsilon (3S) state. <i>Physical Review D</i> , <b>1992</b> , 46, 1928-1940	4.9	13
90	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. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	13
89	Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at ( $\sqrt{s}=13$ ) TeV. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	13

88	Measurements of top-quark pair differential and double-differential cross-sections in the $(\ell\ell)+\text{jets}$ channel with pp collisions at $(\sqrt{s}=13)$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	13
87	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. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	12
86	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> , <b>2018</b> , 2018, 1	5.4	12
85	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> , <b>2017</b> , 2017, 1	5.4	12
84	Sequential Decays of the Upsilon ". <i>Physical Review Letters</i> , <b>1991</b> , 66, 1563-1566	7.4	12
83	Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $(\sqrt{s}=8\text{~text {TeV}})$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	11
82	Study of $\Xi$ transitions from the $(3S)$ state. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1993</b> , 301, 307-312	4.2	11
81	Jet energy scale and resolution measured in proton-proton collisions at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	11
80	Thrust distribution and decays of the $\chi$ bound states. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1982</b> , 114, 277-281	4.2	10
79	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	9
78	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $(4\ell)$ decay channel at $(\sqrt{s}) = 13$ TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	9
77	Measurement of $VH$ , $(\text{mathrm{H}}\text{to}\text{mathrm{b}}\overline{\text{mathrm{b}}})$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
76	Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $(\sqrt{s}) = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	8
75	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. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	8
74	Measurement of splitting scales in $\rightarrow$ events at [Formula: see text] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2432	4.2	8
73	Evidence for $(\text{tbar}\{\text{t}\}\text{tbar}\{\text{t}\})$ production in the multilepton final state in proton-proton collisions at $(\sqrt{s}=13)$ (text {TeV}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	8
72	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	8
71	Measurements of top-quark pair spin correlations in the $(\text{e}\mu)$ channel at $(\sqrt{s} = 13)$ TeV using pp collisions in the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	8

70	Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	8
69	Search for heavy resonances decaying into a pair of Z bosons in the ( $e^+e^-e^+e^-$ ) and ( $e^+e^-e^+\nu_{\bar{\nu}}$ ) final states using 139 ( $\text{fb}^{-1}$ ) of proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	8
68	Search for charged Higgs bosons decaying into a top quark and a bottom quark at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	8
67	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 $\text{fb}^{-1}$ of ( $\sqrt{s}$ ) = 13 TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	8
66	Measurement of differential cross sections and $W^+/W^-$ 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> , <b>2018</b> , 2018, 1	5.4	7
65	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> , <b>2017</b> , 2017, 1	5.4	7
64	Search for $B^* \rightarrow B + \gamma$ and limits on the B-meson mass. <i>Physical Review D</i> , <b>1982</b> , 26, 720-722	4.9	7
63	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
62	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the ( $e^+e^-bb$ ) and ( $e^+e^-WW$ ) final states in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
61	Measurements of WH and ZH production in the ( $H \rightarrow b\bar{b}$ ) decay channel in pp collisions at (13 TeV) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
60	Radiation damage studies of cerium-doped radiation-resistant lead glass detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1985</b> , 238, 333-340	1.2	6
59	Inclusive $K_0$ production in $e^+e^-$ annihilation at the $\Upsilon$ resonances. <i>Nuclear Physics B</i> , <b>1982</b> , 206, 1-11	2.8	6
58	Search for ( $\overline{t}$ ) resonances in fully hadronic final states in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	6
57	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	6
56	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	6
55	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a lepton in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	6
54	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. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	5
53	Proton-proton inelastic scattering at 0.5 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1976</b> , 65, 177-180	4.2	5



52	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. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	5
51	Search for the $HH \rightarrow (\overline{b}b)$ process via vector-boson fusion production using proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	5
50	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. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	5
49	Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb <sup>-1</sup> of Pb+Pb data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	5
48	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. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	5
47	Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton-proton collisions at ATLAS. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	5
46	Search for dark matter in association with an energetic photon in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	5
45	CUSB-II: a high precision electromagnetic spectrometer. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1991</b> , 309, 450-464 <sup>1,2</sup>		4
44	Search for direct photons in Upsilon (4S) decays. <i>Physical Review Letters</i> , <b>1990</b> , 65, 2749-2752	7.4	4
43	Search for heavy diboson resonances in semileptonic final states in pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	4
42	Alignment of the ATLAS Inner Detector in Run 2. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	4
41	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. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	4
40	Search for dark matter produced in association with a single top quark in ( $\sqrt{s}$ ) = 13 TeV (pp) collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	4
39	Measurement of the B* cross section at. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1991</b> , 273, 177-180	4.2	3
38	Measurement of the branching ratio for Upsilon "→ micro micro. <i>Physical Review D</i> , <b>1987</b> , 35, 2265-2268 <sup>4,9</sup>		3
37	Determination of jet calibration and energy resolution in proton-proton collisions at ( $\sqrt{s}$ ) = 8 TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	3
36	Measurement of the inclusive jet cross-section in proton-proton collisions at ( $\sqrt{s}$ ) = 7 TeV using 4.5 fb <sup>-1</sup> of data with the ATLAS detector <b>2015</b> , 2015, 1		3
35	Reconstruction and identification of boosted di-τ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	3

34	Search for doubly and singly charged Higgs bosons decaying into vector bosons in multi-lepton final states with the ATLAS detector using proton-proton collisions at $(\sqrt{s}) = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	3
33	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> , <b>2021</b> , 2021, 1	5.4	3
32	Search for $B^* \rightarrow B + \pi$ decays and the $B^* - B$ mass difference. <i>Physical Review D</i> , <b>1984</b> , 30, 1985-1987	4.9	2
31	Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using $(\sqrt{s} = 13 \text{ TeV})$ proton-proton collision data. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	2
30	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2
29	Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton-proton collisions. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	2
28	Search for supersymmetry in events with four or more charged leptons in 139 fb of $(\sqrt{s}) = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2
27	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	2
26	Search for top squarks in events with a Higgs or Z boson using 139 fb of pp collision data at $(\sqrt{s} = 13)$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	1
25	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
24	Determination of the parton distribution functions of the proton from ATLAS measurements of differential $W$ and Z boson production in association with jets. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
23	A search for the decays of stopped long-lived particles at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	1
22	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $(\sqrt{s} = 8, \text{ TeV})$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
21	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. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
20	Search for phenomena beyond the Standard Model in events with large b-jet multiplicity using the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
19	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. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
18	Configuration and performance of the ATLAS b-jet triggers in Run 2. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
17	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	1

16	Performance of the ATLAS Level-1 topological trigger in Run 2. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	○
15	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. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
14	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 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	○
13	Measurement of the $t\bar{t}$ production cross section in pp collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
12	Measurements of $W+W$ jet production cross-sections in pp collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
11	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $(\sqrt{s}=13, \text{TeV})$ . <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	○
10	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
9	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. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	○
8	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 of pp collision data at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	○
7	AtlFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , <b>2022</b> , 6, 1	6	○
6	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow \tau^{\pm} \rightarrow \pi^{\pm} \nu_{\tau} \nu_{\tau}$ events in Run 2 data. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	○
5	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
4	Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
3	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. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
2	Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow J/\psi$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	○
1	The ATLAS inner detector trigger performance in pp collisions at 13 TeV during LHC Run 2. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	○