

# Carlos Lacasta

## List of Publications by Year in descending order

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665  
papers

28,023  
citations

6592

79  
h-index

14156

128  
g-index

685  
all docs

685  
docs citations

685  
times ranked

10849  
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 $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 292.	1.4	453
4	Improved luminosity determination in pp collisions at $\sqrt{s} = 7$ 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 $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 581.	1.4	298
7	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
8	Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $\sqrt{s} = 7$ and 8 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 $\sqrt{s} = 7$ 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
12	Search for new phenomena in final states with an energetic jet and large missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 299.	1.4	238

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#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Luminosity determination in $pp$ collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector at the LHC. European Physical Journal C, 2011, 71, 1.	1.4	179
22	Measurement of the distributions of event-by-event flow harmonics in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector at the LHC. Journal of High Energy Physics, 2013, 2013, 1.	1.6	175
23	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. European Physical Journal C, 2015, 75, 476.	1.4	174
24	Electron and photon energy calibration with the ATLAS detector using LHC Run 1 data. European Physical Journal C, 2014, 74, 1.	1.4	172
25	Search for new high-mass phenomena in the dilepton final state using 36 $\text{fb}^{-1}$ of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	168
26	Measurement of the transverse momentum and $\phi_{\eta}$ distributions of Drell-Yan lepton pairs in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 291.	1.4	154
27	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
28	Search for direct production of charginos, neutralinos and sleptons in final states with two leptons and missing transverse momentum in $pp$ collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	145
29	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
30	Precision measurement and interpretation of inclusive $W^+W^-$ , $W^+W^+$ . European Physical Journal C, 2017, 77, 367.	1.4	145
31	Measurement of the $t\bar{t}$ production cross-section using $e^+e^-$ events with $b$ -tagged jets in $pp$ collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS detector. European Physical Journal C, 2014, 74, 3109.	1.4	143
32	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
33	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
34	Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	136
35	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. European Physical Journal C, 2018, 78, 199.	1.4	132
36	Measurement of the $Z/\gamma^*$ boson transverse momentum distribution in $pp$ collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	131

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37	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s}=13\text{ TeV}$ . European Physical Journal C, 2019, 79, 1.	1.4	130
38	Search for squarks and gluinos with the ATLAS detector in final states with jets and missing transverse momentum using $\sqrt{s}=8\text{ TeV}$ proton-proton collision data. Journal of High Energy Physics, 2014, 2014, 1.	1.6	128
39	Search for charged Higgs bosons decaying via $H \rightarrow \tau^+\tau^-$ in $t\bar{t}$ events using pp collision data at $\sqrt{s}=7\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2012, 2012, 1.	1.6	126
40	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2018, 78, 995.	1.4	125
41	Search for the Standard Model Higgs boson produced in association with top quarks and decaying into $b\bar{b}$ in pp collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2015, 75, 349.	1.4	123
42	Readiness of the ATLAS Tile Calorimeter for LHC collisions. European Physical Journal C, 2010, 70, 1193-1236.	1.4	121
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#	ARTICLE	IF	CITATIONS
55	Measurement of the inclusive jet cross-section in pp collisions at $\sqrt{s}=2.76$ mbox{TeV} and comparison to the inclusive jet cross-section at $\sqrt{s}=7$ mbox{TeV} using the ATLAS detector. European Physical Journal C, 2013, 73, 2509.	1.4	105
56	Design and performance of the ABCD3TA ASIC for readout of silicon strip detectors in the ATLAS semiconductor tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 552, 292-328.	0.7	104
57	Search for direct third-generation squark pair production in final states with missing transverse momentum and two b-jets in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	102
58	Search for heavy neutrinos and right-handed W bosons in events with two leptons and jets in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. European Physical Journal C, 2012, 72, 2056.	1.4	101
59	Search for heavy ZZ resonances in the $e^+e^-e^+e^-$ , $e^+e^-e^+e^-$ and $e^+e^-u\bar{u}$ final states using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 293.	1.4	101
60	Rapidity gap cross sections measured with the ATLAS detector in pp collisions at $\sqrt{s}=7$ mbox{TeV}. European Physical Journal C, 2012, 72, 1.	1.4	100
61	The ATLAS Inner Detector commissioning and calibration. European Physical Journal C, 2010, 70, 787-821.	1.4	95
62	Constraints on the off-shell Higgs boson signal strength in the high-mass ZZ and WW final states with the ATLAS detector. European Physical Journal C, 2015, 75, 335.	1.4	95
63	Search for new phenomena in events with at least three photons collected in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 210.	1.4	95
64	Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.	1.4	93
65	Measurements of the $W$ production cross sections in association with jets with the ATLAS detector. European Physical Journal C, 2015, 75, 82.	1.4	92
66	Search for Higgs boson pair production in the $b\bar{b}b\bar{b}$ final state from pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 412.	1.4	90
67	Search for the $b\bar{b}$ decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	89
68	Jet mass and substructure of inclusive jets in $\sqrt{s}=7$ TeV pp collisions with the ATLAS experiment. Journal of High Energy Physics, 2012, 2012, 1.	1.6	88
69	Search for direct production of charginos and neutralinos in events with three leptons and missing transverse momentum in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	88
70	Electron efficiency measurements with the ATLAS detector using 2012 LHC proton-proton collision data. European Physical Journal C, 2017, 77, 195.	1.4	87
71	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
72	Search for heavy Majorana neutrinos with the ATLAS detector in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.	1.6	84

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73	Search for neutral Higgs bosons of the minimal supersymmetric standard model in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	82
74	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
75	Measurement of the prompt $J/\psi$ pair production cross-section in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2017, 77, 76.	1.4	81
76	Search for dark matter at $\sqrt{s} = 13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393.	1.4	80
77	The barrel modules of the ATLAS semiconductor tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 642-671.	0.7	79
78	Search for production of $WW/WZ$ resonances decaying to a lepton, neutrino and jets in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 209.	1.4	79
79	Search for lepton-flavour-violating decays of the Higgs and Z bosons with the ATLAS detector. European Physical Journal C, 2017, 77, 70.	1.4	79
80	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
81	Search for high-mass diboson resonances with boson-tagged jets in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1-39.	1.6	78
82	Light-quark and gluon jet discrimination in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2014, 74, 3023.	1.4	77
83	Search for dark matter in events with heavy quarks and missing transverse momentum in pp collisions with the ATLAS detector. European Physical Journal C, 2015, 75, 92.	1.4	77
84	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
85	Angular analysis of $B_0 \rightarrow K^{*0} \ell^+ \ell^-$ decays in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	76
86	Development of n-on-p silicon sensors for very high radiation environments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 636, S24-S30.	0.7	75
87	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.	1.4	75
88	Measurement of quarkonium production in lead and proton-proton collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 171.	1.4	75
89	Search for resonant diboson production in the $\ell\ell \rightarrow q\bar{q}$ final state in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 69.	1.4	74
90	Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2011, 71, 1.	1.4	73

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91	Measurement of the production cross section of jets in association with a Z boson in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	73
92	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data. European Physical Journal C, 2016, 76, 666.	1.4	73
93	Search for squarks and gluinos in final states with jets and missing transverse momentum at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 392.	1.4	73
94	Search for supersymmetry at $\sqrt{s}=13$ TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. European Physical Journal C, 2016, 76, 259.	1.4	72
95	Search for new phenomena in final states with large jet multiplicities and missing transverse momentum at $\sqrt{s}=8$ TeV proton-proton collisions using the ATLAS experiment. Journal of High Energy Physics, 2013, 2013, 1.	1.6	71
96	Search for production of vector-like quark pairs and of four top quarks in the lepton-plus-jets final state in pp collisions at $s=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	71
97	Search for a high-mass Higgs boson decaying to a W boson pair in pp collisions at $s=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	1.6	71
98	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. European Physical Journal C, 2017, 77, 332.	1.4	71
99	Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2015, 75, 303.	1.4	70
100	Search for resonances in diphoton events at $s=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	1.6	70
101	Search for charged Higgs bosons decaying via $H \rightarrow \tau^+ \tilde{\nu}_\tau, \tau^\pm \tilde{\nu}_\tau$ in fully hadronic final states using pp collision data at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	69
102	Measurement of flow harmonics with multi-particle cumulants in Pb+Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector. European Physical Journal C, 2014, 74, 3157.	1.4	68
103	Measurement of charged-particle spectra in Pb+Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector at the LHC. Journal of High Energy Physics, 2015, 2015, 1.	1.6	67
104	Search for direct pair production of a chargino and a neutralino decaying to the 125 GeV Higgs boson in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2015, 75, 208.	1.4	67
105	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
106	Search for top squark pair production in final states with one isolated lepton, jets, and missing transverse momentum in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	66
107	A search for $t \tilde{t}^*$ resonances using lepton-plus-jets events in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	66
108	A search for pair-produced resonances in four-jet final states at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 250.	1.4	66

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109	The ATLAS semiconductor tracker end-cap module. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 575, 353-389.	0.7	65
110	Measurement of the $W \rightarrow \tau \nu_\tau$ and $Z \rightarrow \tau \tau$ production cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2010, 2010, 1.	1.6	64
111	Measurement of isolated-photon pair production in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	64
112	Observation and measurements of the production of prompt and non-prompt $\psi(2S)$ mesons in association with a $Z$ boson in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 229.	1.4	64
113	Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	64
114	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
115	The silicon microstrip sensors of the ATLAS semiconductor tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 578, 98-118.	0.7	63
116	Measurement of the differential cross-sections of prompt and non-prompt production of $\psi(2S)$ and $\psi(1S)$ in pp collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 283.	1.4	63
117	Performance of the ATLAS muon trigger in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 120.	1.4	62
118	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
119	Readiness of the ATLAS liquid argon calorimeter for LHC collisions. European Physical Journal C, 2010, 70, 723-753.	1.4	61
120	Measurement of ZZ production in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous ZZZ and ZZ $\gamma$ couplings with the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1.	1.6	61
121	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
122	Charged-particle distributions at low transverse momentum in $\sqrt{s} = 13$ TeV pp interactions measured with the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 502.	1.4	61
123	Performance of algorithms that reconstruct missing transverse momentum in $\sqrt{s} = 8$ TeV proton-proton collisions in the ATLAS detector. European Physical Journal C, 2017, 77, 241.	1.4	61
124	Prompt and non-prompt $\psi(2S)$ and $\psi(1S)$ suppression at high transverse momentum in $\sqrt{s} = 5.02$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.	1.4	61
125	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
126	Measurement of multi-jet cross sections in proton-proton collisions at a 7 TeV center-of-mass energy. European Physical Journal C, 2011, 71, 1.	1.4	60

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127	Summary of the searches for squarks and gluinos using $\sqrt{s} = 8$ TeV pp collisions with the ATLAS experiment at the LHC. Journal of High Energy Physics, 2015, 2015, 1.	1.6	60
128	Search for anomalous production of prompt same-sign lepton pairs and pair-produced doubly charged Higgs bosons with $\sqrt{s} = 8$ TeV pp collisions using the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	60
129	Search for a new resonance decaying to a W or Z boson and a Higgs boson in the $\ell\ell u / \ell\ell u + b\bar{b}$ final states with the ATLAS detector. European Physical Journal C, 2015, 75, 263.	1.4	60
130	Measurement of the centrality dependence of the charged-particle pseudorapidity distribution in proton-proton collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 199.	1.4	60
131	Search for dark matter produced in association with bottom or top quarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 18.	1.4	60
132	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
133	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
134	Measurement of the production of a W boson in association with a charm quark in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	1.6	59
135	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
136	Measurement of longitudinal flow decorrelations in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.0. European Physical Journal C, 2018, 78, 142.	1.4	59
137	Search for charged Higgs bosons decaying via $H \rightarrow \tau^+ \tau^-$ , in the $\tau^+, \text{jets}$ and $\tau^-, \text{lepton}$ 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
138	Muon reconstruction efficiency and momentum resolution of the ATLAS experiment in proton-proton collisions at $\sqrt{s} = 7$ TeV in 2010. European Physical Journal C, 2014, 74, 3034.	1.4	58
139	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
140	Measurement of the jet fragmentation function and transverse profile in proton-proton collisions at a center-of-mass energy of 7 TeV with the ATLAS detector. European Physical Journal C, 2011, 71, 1.	1.4	56
141	Search for supersymmetry in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2015, 75, 318.	1.4	56
142	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
143	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
144	Characterization of a PET detector head based on continuous LYSO crystals and monolithic, 64-pixel silicon photomultiplier matrices. Physics in Medicine and Biology, 2010, 55, 7299-7315.	1.6	55

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145	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
146	Summary of the ATLAS experiment's sensitivity to supersymmetry after LHC Run 1 interpreted in the phenomenological MSSM. Journal of High Energy Physics, 2015, 2015, 1.	1.6	55
147	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
148	Search for a heavy top-quark partner in final states with two leptons with the ATLAS detector at the LHC. Journal of High Energy Physics, 2012, 2012, 1.	1.6	54
149	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
150	Measurements of fiducial cross-sections for $t\bar{t}\hat{A}$ production with one or two additional $b$ -jets in $pp$ collisions at $\sqrt{s}=8$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 11.	1.4	54
151	Hunt for new phenomena using large jet multiplicities and missing transverse momentum with ATLAS in $4.7\text{ fb}^{-1}$ of $\sqrt{s}=7$ TeV proton-proton collisions. Journal of High Energy Physics, 2012, 2012, 1.	1.6	53
152	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
153	Search for Higgs boson pair production in the $\gamma\gamma WW^*W$ 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
154	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
155	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
156	Search for lepton-flavour-violating $H \rightarrow \tau\mu$ , decays of the Higgs boson with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	1.6	52
157	Measurement of the top quark mass in the $t \rightarrow \text{lepton} + \text{jets}$ and $t \rightarrow \text{dilepton}$ channels using $\sqrt{s}=7$ TeV ATLAS data. European Physical Journal C, 2015, 75, 330.	1.4	52
158	Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s}=13$ TeV $pp$ collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 154.	1.4	52
159	Drift Time Measurement in the ATLAS Liquid Argon Electromagnetic Calorimeter using Cosmic Muons. European Physical Journal C, 2010, 70, 755-785.	1.4	51
160	Measurement of the top quark mass with the template method in the $t \rightarrow \text{lepton} + \text{jets}$ channel using ATLAS data. European Physical Journal C, 2012, 72, 2046.	1.4	51
161	Search for minimal supersymmetric standard model Higgs Bosons $H/\tilde{A}$ and for a $Z^{\prime}$ boson in the $\text{au} \rightarrow \tilde{l}, \tilde{l}^*$ final state produced in $pp$ collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2016, 76, 585.	1.4	51
162	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

#	ARTICLE	IF	CITATIONS
163	Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{\text{NN}}} = 2.76$ s NN = 2.76. European Physical Journal C, 2017, 77, 379.	1.4	51
164	Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s_{\text{NN}}} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 997.	1.4	51
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270	Measurements of underlying-event properties using neutral and charged particles in pp collisions at $\sqrt{s}=900$ GeV and $\sqrt{s}=7$ TeV with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , 2011, 71, 1.	1.4	31

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