

Karol Krizka

List of Publications by Year in descending order

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207
papers

8,548
citations

50170

46
h-index

58464

82
g-index

221
all docs

221
docs citations

221
times ranked

7584
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	1.4	489
2	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
3	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.	1.4	325
4	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
5	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
6	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
7	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
8	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
9	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	1.4	145
10	Precision measurement and interpretation of inclusive W^+W^- , W^+W^+ , W^-W^- . European Physical Journal C, 2017, 77, 367.	1.4	145
11	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
12	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
13	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
14	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 995.	1.4	125
15	Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	124
16	Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	116
17	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538.	1.4	115
18	Search for heavy resonances decaying into WW in the $e^+e^- \rightarrow \mu^+\mu^- e^+e^-$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 24.	1.4	108

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37	Search for Higgs boson pair production in the $\gamma\gamma WW^* \rightarrow \gamma\gamma WW$ channel using $\sqrt{s} = 13$ TeV pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 1007.	1.4	53
38	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
39	Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s_{NN}} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 997.	1.4	51
40	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	1.4	50
41	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
42	Search for heavy neutral leptons in decays of W bosons produced in 13 TeV pp collisions using prompt and displaced signatures with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	50
43	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
44	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
45	Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	48
46	Measurement of the top quark mass in the $t \rightarrow t \hat{A}^- \hat{A}^+$. European Physical Journal C, 2019, 79, 1.	1.4	47
47	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
48	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
49	Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	46
50	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
51	Measurement of $W^{\pm}Z$ production cross sections and gauge boson polarisation in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	41
52	Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	41
53	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	40
54	Measurements of b-jet tagging efficiency with the ATLAS detector using $t \bar{t}$ events at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	40

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55	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma \gamma$ final states using 139 fb^{-1} of proton-proton collisions at $\sqrt{s} = 13, \text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	40
56	Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with two charged leptons and two jets at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	39
57	Search for Higgs boson pair production in the $\gamma\gamma$ final state with 13 TeV pp collision data collected by the ATLAS experiment. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38
58	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s} = 13, \text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	38
59	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
60	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	37
61	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
62	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
63	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
64	Measurements of top-quark pair differential and double-differential cross-sections in the $t\bar{t} + \text{jets}$ channel with pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	34
65	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
66	Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b-jets with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	33
67	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow \gamma\gamma$ decay channel at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 1.	1.4	32
68	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
69	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collision data with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
70	Search for W W/W Z resonance production in $\gamma\gamma$ final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	31
71	Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1.	1.6	31
72	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

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73	Searches for third-generation scalar leptoquarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	30
74	Evidence for $t\bar{t}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	30
75	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
76	Search for dark matter in events with a hadronically decaying vector boson and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	29
77	Searches for heavy ZZ and ZW resonances in the $q\bar{q}$ and $\gamma\gamma/2q\bar{q}$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	29
78	Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	29
79	Measurement of lepton differential distributions and the top quark mass in $t\bar{t}$. European Physical Journal C, 2017, 77, 804.	1.4	28
80	Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	28
81	Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow a a \rightarrow 4b$ channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	28
82	Search for long-lived neutral particles in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS calorimeter. European Physical Journal C, 2019, 79, 1.	1.4	28
83	In situ calibration of large-radius jet energy and mass in 13 TeV proton-proton collisions with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	28
84	Fluctuations of anisotropic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	28
85	Measurement of the transverse momentum distribution of Drell-Yan lepton pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	28
86	Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	28
87	Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2018, 78, 625.	1.4	27
88	Search for single production of vector-like quarks decaying into Wb in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	27
89	Measurement of the top-quark mass in $t\bar{t} + 1$ -jet events collected with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	27
90	Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a \bar{l} -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27

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91	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
92	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $ell\bar{b}b$ and $ell\bar{ell}WW$ final states in pp collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	26
93	Operation and performance of the ATLAS Tile Calorimeter in Run 1. European Physical Journal C, 2018, 78, 987.	1.4	25
94	A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment. European Physical Journal C, 2019, 79, 1.	1.4	25
95	Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	24
96	Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	24
97	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
98	Measurement of the inclusive jet cross-sections in proton-proton collisions at $s = 8\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	23
99	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 $\sqrt{s} = 13\text{ TeV}$. Journal of High Energy Physics, 2021, 2021, 1.	1.6	23
100	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	1.3	23
101	Search for pair production of heavy vector-like quarks decaying into high-pT W bosons and top quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	22
102	Searches for scalar leptoquarks and differential cross-section measurements in dilepton-dijet events in proton-proton collisions at a centre-of-mass energy of $\sqrt{s} = 13\text{ TeV}$ with the ATLAS experiment. European Physical Journal C, 2019, 79, 1.	1.4	22
103	Measurements of top-quark pair spin correlations in the emu channel at $\sqrt{s} = 13\text{ TeV}$ using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	22
104	Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	22
105	The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.	1.4	21
106	Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $s = 8\text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.	1.6	21
107	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at $\sqrt{s} = 13\text{ TeV}$. Journal of High Energy Physics, 2019, 2019, 1.	1.6	21
108	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at 13 TeV . European Physical Journal C, 2019, 79, .	1.4	21

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109	Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV and decaying into collimated leptons or light hadrons with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	21
110	Measurement of differential cross-sections of a single top quark produced in association with a W boson at $\sqrt{s} = 13$ TeV with ATLAS. European Physical Journal C, 2018, 78, 186.	1.4	20
111	Search for diboson resonances in hadronic final states in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	20
112	Prompt and non-prompt $\psi(2S)$ elliptic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2018, 78, 784.	1.4	19
113	Search for top-quark decays $t \rightarrow Hq$ with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	19
114	Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb^{-1} of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	19
115	Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb^{-1} of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	19
116	Search for top quark decays $t \rightarrow qH$, with $H \rightarrow \tau\tau$, in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	18
117	Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	18
118	Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	18
119	Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	18
120	Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	17
121	Direct top-quark decay width measurement in the $t \rightarrow \tau \nu_{\tau}$ lepton+jets channel at $\sqrt{s} = 8$ TeV with the ATLAS experiment. European Physical Journal C, 2018, 78, 129.	1.4	17
122	Search for flavour-changing neutral current top-quark decays $t \rightarrow qZ$ in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
123	Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
124	Measurements of W and Z boson production in pp collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	17
125	Measurement of W^{\pm} boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	17
126	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1.	1.6	17

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127	Search for the $HH \rightarrow b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	17
128	Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	17
129	Measurement of colour flow using jet-pull observables in $t\bar{t}$ events with the ATLAS experiment at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 847.	1.4	16
130	Search for exclusive Higgs and Z boson decays to $\tau^+\tau^-$ and $\tau^+\tau^-$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	16
131	Measurement of differential cross sections and W^+/W^0 cross-section ratios for W boson production in association with jets at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	16
132	Search for supersymmetry in final states with charm jets and missing transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	15
133	Search for scalar resonances decaying into $\tau^+\tau^-$ in events with and without b-tagged jets produced in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	15
134	Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton-proton collisions. European Physical Journal C, 2021, 81, 1.	1.4	15
135	Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	15
136	Measurement of VH , $H \rightarrow b\bar{b}$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	14
137	Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}\gamma$ production in leptonic final states at $\sqrt{s} = 13$ TeV in ATLAS. European Physical Journal C, 2019, 79, 1.	1.4	14
138	Search for bottom-quark pair production with the ATLAS detector in final states containing Higgs bosons, b-jets and missing transverse momentum. Journal of High Energy Physics, 2019, 2019, 1.	1.6	14
139	Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14
140	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 1.	1.4	14
141	Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	14
142	Search for $t\bar{t}$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	14
143	Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	1.4	14
144	Search for new phenomena in high-mass final states with a photon and a jet from pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 102.	1.4	13

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145	Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	13
146	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	13
147	Observation of the associated production of a top quark and a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
148	Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using $\sqrt{s} = 13$ TeV proton-proton collisions recorded by ATLAS in Run 2 of the LHC. Journal of High Energy Physics, 2020, 2020, 1.	1.6	12
149	Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s_{\mathbb{N}\mathbb{N}}}=8.16$ TeV p+Pb collisions with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	12
150	Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton-proton collisions at ATLAS. European Physical Journal C, 2021, 81, 1.	1.4	12
151	Search for supersymmetry in events with four or more charged leptons in 139 fb^{-1} of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
152	Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	12
153	Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	12
154	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.	1.4	12
155	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. European Physical Journal C, 2022, 82, 1.	1.4	12
156	Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions. Journal of High Energy Physics, 2017, 2017, 1.	1.6	11
157	Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	11
158	Measurement of the $Z\gamma \rightarrow u\bar{u}\gamma$ production cross section in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector and limits on anomalous triple gauge-boson couplings. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
159	Measurement of the inclusive and fiducial $\sigma_{t\bar{t}}$ production cross-sections in the. European Physical Journal C, 2018, 78, 487.	1.4	10
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161	Measurement of J/ψ production in association with a $W\Delta^\pm$ boson with pp data at 8 TeV. Journal of High Energy Physics, 2020, 2020, 1.	1.6	10
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164	Search for dark matter produced in association with a Standard Model Higgs boson decaying into b-quarks using the full Run 2 dataset from the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	10
165	Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	1.6	9
166	Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at 8 TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	9
167	Measurement of the $Z(\tau^+\tau^-, \tau^+\tau^0, \tau^0\tau^0)$ production cross-section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	9
168	Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	9
169	Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	1.6	8
170	Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	8
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174	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	8
175	Reconstruction and identification of boosted di- τ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
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177	Measurement of σ_{pol} , polarisation in $Z/\gamma^* \rightarrow \mu\mu$. European Physical Journal C, 2018, 78, 163.	1.4	7
178	Search for dijet resonances in events with an isolated charged lepton using $\sqrt{s} = 13 \text{ TeV}$ proton-proton collision data collected by the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
179	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. European Physical Journal C, 2021, 81, 1.	1.4	7
180	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.	1.4	7

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182	Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	1.6	6
183	Measurement of ZZ production in the $\mu^+\mu^-l^+l^-$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	6
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185	Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.	1.4	6
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194	Search for top squarks in events with a Higgs or Z boson using 139 fb^{-1} of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	1.4	4
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196	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W \rightarrow \mu \nu$ events in Run 2 data. European Physical Journal C, 2022, 82, 1.	1.4	4
197	Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4
198	Search for exotic decays of the Higgs boson into long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV using displaced vertices in the ATLAS inner detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	4

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199	Measurement of distributions sensitive to the underlying event in inclusive Z boson production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	1.4	3
200	Measurements of inclusive and differential cross-sections of combined $t\bar{t}\gamma$ and $t\bar{t}W^3$ production in the $e^{\pm}\mu^{\pm}$ channel at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
201	Measurement of isolated-photon plus two-jet production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	1.6	3
202	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8, \text{ext } \{TeV\}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	1.4	3
203	Measurement of b-quark fragmentation properties in jets using the decay $B^{\pm} \rightarrow \mu^{\pm} J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	1.6	3
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206	Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b-jets in 36 fb^{-1} of ($\sqrt{s} = 13$) TeV pp collisions with the ATLAS detector. , 2018, 2018, 1.		1
207	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at ($\sqrt{s} = 13, \text{ext } \{TeV\}$). , 2018, 78, 1.		1