

# Olivier Arnaez

## List of Publications by Citations

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346  
papers

16,388  
citations

48  
h-index

121  
g-index

371  
ext. papers

19,724  
ext. citations

4.9  
avg, IF

2.78  
L-index

#	Paper	IF	Citations
346	Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 716, 1-29	4.2	5271
345	The ATLAS Simulation Infrastructure. <i>European Physical Journal C</i> , <b>2010</b> , 70, 823-874	4.2	817
344	Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s}=7$ and 8 TeV with the ATLAS and CMS Experiments. <i>Physical Review Letters</i> , <b>2015</b> , 114, 191803	7.4	709
343	Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	364
342	Performance of the ATLAS trigger system in 2015. <i>European Physical Journal C</i> , <b>2017</b> , 77, 317	4.2	272
341	Evidence for the spin-0 nature of the Higgs boson using ATLAS data. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 726, 120-144	4.2	267
340	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
339	Performance of the ATLAS Trigger System in 2010. <i>European Physical Journal C</i> , <b>2012</b> , 72, 1	4.2	232
338	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
337	Measurement of the pseudorapidity and transverse momentum dependence of the elliptic flow of charged particles in lead-lead collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 707, 330-348	4.2	200
336	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
335	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
334	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
333	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
332	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
331	Measurement of the jet radius and transverse momentum dependence of inclusive jet suppression in lead-lead collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2013</b> , 719, 220-241	4.2	165
330	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

329	Performance of pile-up mitigation techniques for jets in [Formula: see text] collisions at [Formula: see text] TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 581	4.2	148
328	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
327	Search for new high-mass phenomena in the dilepton final state using 36 fb <sup>-1</sup> of proton-proton collision data at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	126
326	Measurements of Higgs boson production and couplings in the four-lepton channel in pp collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2015</b> , 91,	4.9	125
325	Combined measurements of Higgs boson production and decay using up to 80 fb <sup>-1</sup> of proton-proton collision data at $\sqrt{s}=13$ TeV collected with the ATLAS experiment. <i>Physical Review D</i> , <b>2020</b> , 101,	4.9	121
324	Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 784, 173-191	4.2	118
323	Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2017</b> , 96,	4.9	116
322	Search for Invisible Decays of a Higgs Boson Produced in Association with a Z Boson in ATLAS. <i>Physical Review Letters</i> , <b>2014</b> , 112,	7.4	113
321	Measurement of the inclusive isolated prompt photon cross section in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2011</b> , 83,	4.9	112
320	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
319	Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	101
318	Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s}=13$ TeV with the ATLAS Detector at the LHC. <i>Physical Review Letters</i> , <b>2016</b> , 117, 182002	7.4	92
317	Observation of $H \rightarrow b\bar{b}$ decays and $VH$ production with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 786, 59-86	4.2	87
316	Observation and measurement of Higgs boson decays to $WW^*$ with the ATLAS detector. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	86
315	Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb <sup>-1</sup> of 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	81
314	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
313	Measurements of Higgs boson properties in the diphoton decay channel with 36 fb <sup>-1</sup> of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	74
312	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

311	Search for the $(\overline{b})$ 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
310	Measurement of $W\overline{b}$ and Z-boson production cross sections in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 759, 601-621	4.2	64
309	Precision measurement and interpretation of inclusive $\overline{b}$ and production cross sections with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 367	4.2	56
308	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , <b>2018</b> , 78, 199	4.2	55
307	Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $(\sqrt{s}=7\text{ to }13\text{ TeV})$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2011</b> , 71, 1	4.2	53
306	Search for dark matter at $\sqrt{s}=13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 393	4.2	52
305	Electron and photon performance measurements with the ATLAS detector using the 2015-2017 LHC proton-proton collision data. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P12006-P12006	1	51
304	Evidence for the $(H\rightarrow\overline{b}b)$ decay with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	50
303	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. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	50
302	Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in collisions at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , <b>2015</b> , 75, 303	4.2	49
301	Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 995	4.2	49
300	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 538	4.2	48
299	Measurement of multi-particle azimuthal correlations in pp, p+Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 428	4.2	48
298	Combination of the Searches for Pair-Produced Vectorlike Partners of the Third-Generation Quarks at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 121, 211801	7.4	48
297	Search for long-lived charginos based on a disappearing-track signature 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	48
296	Search for heavy resonances decaying into $\overline{b}b$ in the final state in collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 24	4.2	47
295	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. <i>Physical Review Letters</i> , <b>2019</b> , 122, 231801	7.4	45
294	Angular analysis of $B\rightarrow D^* \overline{b}b$ decays in pp collisions at $(\sqrt{s}=8)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	44

293	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
292	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
291	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
290	Measurement of the top quark mass in the $t\bar{t}\ell\ell$ channel from $\sqrt{s}=8$ TeV ATLAS data. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2016</b> , 761, 350-371	4-2	42
289	Search for heavy resonances in the $t\bar{t}$ and final states using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 293	4-2	41
288	Observation of Light-by-Light Scattering in Ultraperipheral Pb+Pb Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2019</b> , 123, 052001	7-4	41
287	Search for direct top squark pair production in events with a $t\bar{t}$ boson, $t\bar{t}$ -jets and missing transverse momentum in $\sqrt{s}=13$ TeV collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2014</b> , 74, 2883	4-2	41
286	Measurement of the top quark pair production cross section in pp collisions at $\sqrt{s}=7$ TeV in dilepton final states with ATLAS. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2012</b> , 707, 459-477	4-2	41
285	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
284	Measurement of the Higgs boson mass in the $H\rightarrow ZZ^*\rightarrow 4\ell$ and $H\rightarrow Z\gamma$ channels with $\sqrt{s}=13$ TeV pp collisions using the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 784, 345-366	4-2	41
283	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
282	Search for charged Higgs bosons decaying into top and bottom quarks at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	39
281	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
280	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
279	Measurement of longitudinal flow decorrelations in Pb+Pb collisions at and 5.02 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 142	4-2	35
278	Measurement of quarkonium production in proton-lead and proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 171	4-2	35
277	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. <i>European Physical Journal C</i> , <b>2018</b> , 78, 565	4-2	34
276	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

275	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
274	Search for charged Higgs bosons decaying via $H_{\pm} \rightarrow \tau^{\pm} \nu_{\tau}$ in the $\tau$ jets and $\tau$ lepton final states with 36 fb <sup>-1</sup> of pp collision data recorded at ( $\sqrt{s}=13$ ) TeV with the ATLAS experiment. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	33
273	Search for dark matter produced in association with bottom or top quarks in $\sqrt{s}=13$ TeV collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 18	4.2	32
272	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. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	31
271	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
270	Measurements of b-jet tagging efficiency with the ATLAS detector using ( $t$ ) events at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	31
269	Search for Heavy Higgs Bosons A/H Decaying to a Top Quark Pair in pp Collisions at $\sqrt{s}=8$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2017</b> , 119, 191803	7.4	30
268	Search for a scalar partner of the top quark in the jets plus missing transverse momentum final state at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	30
267	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
266	Search for Heavy Higgs Bosons Decaying into Two Tau Leptons with the ATLAS Detector Using pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2020</b> , 125, 051801	7.4	30
265	Cross-section measurements of the Higgs boson decaying into a pair of $\tau$ leptons in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	29
264	Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector. <i>Physical Review D</i> , <b>2018</b> , 97,	4.9	29
263	Search for the Dimuon Decay of the Higgs Boson in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2017</b> , 119, 051802	7.4	29
262	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
261	Search for pair production of heavy vector-like quarks decaying to high-p T W bosons and b quarks in the lepton-plus-jets final state in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	29
260	Search for Low-Mass Dijet Resonances Using Trigger-Level Jets with the ATLAS Detector in pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2018</b> , 121, 081801	7.4	29
259	A search for pair-produced resonances in four-jet final states at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 250	4.2	28
258	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



257	Search for supersymmetry in final states with missing transverse momentum and multiple b-jets in proton-proton collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	28
256	Constraints on off-shell Higgs boson production and the Higgs boson total width in ZZ $\rightarrow$ 4 $\ell$ and ZZ $\rightarrow$ 2 $\ell$ final states with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 786, 223-244	4.2	28
255	Search for a Structure in the $B_{s^0} \rightarrow \mu\mu$ Invariant Mass Spectrum with the ATLAS Experiment. <i>Physical Review Letters</i> , <b>2018</b> , 120, 202007	7.4	28
254	Measurement of the inclusive jet cross-section in proton-proton collisions at ( $\sqrt{s}=7$ ) TeV using 4.5 fb $^{-1}$ of data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	27
253	Search for invisible decays of the Higgs boson produced in association with a hadronically decaying vector boson in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 337	4.2	27
252	Search for pair production of vector-like top quarks in events with one lepton, jets, and missing transverse momentum in ( $\sqrt{s}=13$ ) TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	27
251	Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the H $\rightarrow$ WW $^*$ $\rightarrow$ 4 $\ell$ decay channel in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 789, 508-529	4.2	27
250	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. <i>Physical Review Letters</i> , <b>2018</b> , 120, 211802	7.4	27
249	Observation of Electroweak Production of a Same-Sign W Boson Pair in Association with Two Jets in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2019</b> , 123, 161801	7.4	26
248	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
247	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	26
246	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
245	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
244	Search for Dark Matter Produced in Association with a Higgs Boson Decaying to $b\bar{b}$ Using 36 fb $^{-1}$ of pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2017</b> , 119, 181804	7.4	25
243	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
242	Performance of the electronic readout of the ATLAS liquid argon calorimeters. <i>Journal of Instrumentation</i> , <b>2010</b> , 5, P09003-P09003	1	25
241	Measurement of the top quark mass in the ( $t\bar{t} \rightarrow$ ) lepton+jets channel from ( $\sqrt{s}=8$ ) TeV ATLAS data and combination with previous results. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	24
240	Measurement of the Soft-Drop Jet Mass in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 121, 092001	7.4	24

239	Search for the direct production of charginos and neutralinos in final states with tau leptons in collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 154	4.2	23
238	Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b-jets with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
237	Search for a new heavy gauge-boson resonance decaying into a lepton and missing transverse momentum in 36 fb of collisions at $\sqrt{s}=13$ TeV with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2018</b> , 78, 401	4.2	23
236	Search for Resonant and Nonresonant Higgs Boson Pair Production in the $b\bar{b}$ Decay Channel in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 121, 191801	7.4	23
235	Search for Higgs boson pair production in the $(\gamma\gamma b\bar{b})$ final state with 13 TeV pp collision data collected by the ATLAS experiment. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	23
234	Combination of searches for heavy resonances decaying into bosonic and leptonic final states using 36 fb of proton-proton collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	23
233	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
232	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
231	Observation of electroweak $W\bar{W}Z$ boson pair production in association with two jets in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 793, 469-492	4.2	22
230	Search for $W^+W^-/ZZ$ resonance production in $b\bar{q}$ final states 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	22
229	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb of $(\sqrt{s}=13)$ TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	22
228	Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $(\sqrt{s}=13)$ TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	22
227	Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2019</b> , 793, 499-519	4.2	21
226	Search for heavy Majorana or Dirac neutrinos and right-handed $W$ gauge bosons in final states with two charged leptons and two jets at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	21
225	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. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	21
224	A search for the dimuon decay of the Standard Model Higgs boson with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2021</b> , 812, 135980	4.2	21
223	Search for Higgs boson pair production in the channel using collision data recorded at TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 1007	4.2	21
222	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



221	Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 997	4.2	21
220	Search for doubly charged scalar bosons decaying into same-sign boson pairs with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 58	4.2	20
219	Measurement of $(W^{\pm}Z)$ production cross sections and gauge boson polarisation in pp collisions at $(\sqrt{s} = 13 \text{ TeV})$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	20
218	Searches for the $Z\gamma$ decay mode of the Higgs boson and for new high-mass resonances in pp collisions at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	20
217	Search for new resonances in mass distributions of jet pairs using 139 fb $^{-1}$ of 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	20
216	Performance of top-quark and $(W)$ -boson tagging with ATLAS in Run 2 of the LHC. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	19
215	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
214	Study of the material of the ATLAS inner detector for Run 2 of the LHC. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P12009-P12009	1	19
213	Determination of the strong coupling constant from transverse energy-energy correlations in multijet events at using the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 872	4.2	19
212	Search for High-Mass Resonances Decaying to $\gamma\gamma$ in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 120, 161802	7.4	18
211	Search for long-lived neutral particles in pp collisions at $(\sqrt{s} = 13 \text{ TeV})$ that decay into displaced hadronic jets in the ATLAS calorimeter. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	18
210	Searches for third-generation scalar leptoquarks in $(\sqrt{s}) = 13$ TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	18
209	Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in collision data at [Formula: see text] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 87	4.2	18
208	Observation of Centrality-Dependent Acoplanarity for Muon Pairs Produced via Two-Photon Scattering in Pb+Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 121, 212301	7.4	18
207	Searches for heavy ZZ and ZW resonances in the $\bar{t}q$ and $t\bar{q}$ final states 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	17
206	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
205	In situ calibration of large-radius jet energy and mass in 13 TeV proton-proton collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	16
204	ATLAS data quality operations and performance for 2015-2018 data-taking. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P04003-P04003	1	16

203	Search for the Standard Model Higgs boson decaying into ( $\overline{b}b$ ) 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
202	Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 580	4.2	16
201	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
200	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
199	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
198	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at ( $\sqrt{s_{\text{NN}}} = 5.02 \sim 8$ TeV) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	16
197	Search for pair production of heavy vector-like quarks decaying into high-pT W bosons and top quarks in the lepton-plus-jets final state in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	16
196	Search for Magnetic Monopoles and Stable High-Electric-Charge Objects in 13 TeV Proton-Proton Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 124, 031802	7.4	15
195	Measurement of production with the hadronically decaying boson reconstructed as one or two jets in collisions at with ATLAS, and constraints on anomalous gauge couplings. <i>European Physical Journal C</i> , <b>2017</b> , 77, 563	4.2	15
194	Dijet Resonance Search with Weak Supervision Using $\sqrt{s}=13$ TeV pp Collisions in the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 125, 131801	7.4	15
193	CP Properties of Higgs Boson Interactions with Top Quarks in the $t\overline{t}H$ and $tH$ Processes Using $H\rightarrow b\overline{b}$ with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 125, 061802	7.4	15
192	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	15
191	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 collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 625	4.2	15
190	Measurements of electroweak $WZ$ 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
189	Search for single production of vector-like quarks decaying into $Wb$ in pp collisions at ( $\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	14
188	Measurement of the production cross-section of a single top quark in association with a Z boson in proton-proton collisions at 13 TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 780, 557-577	4.2	14
187	Measurement of the $t\overline{t}Z$ and $t\overline{t}W$ cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	14
186	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

185	A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	14
184	Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow \gamma\gamma \rightarrow 4b$ channel in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	14
183	Combined measurement of differential and total cross sections in the $H \rightarrow \gamma\gamma$ and the $H \rightarrow ZZ \rightarrow 4\ell$ decay channels at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2018</b> , 786, 114-133	4.2	14
182	Search for Higgs bosons produced via vector-boson fusion and decaying into bottom quark pairs in $s=13$ TeV pp collisions with the ATLAS detector. <i>Physical Review D</i> , <b>2018</b> , 98,	4.9	14
181	Search for top-quark decays $t \rightarrow Hq$ with 36 fb <sup>-1</sup> of pp collision data at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	13
180	Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $s=7$ and 8 TeV with ATLAS. <i>Physical Review D</i> , <b>2016</b> , 94,	4.9	13
179	Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	13
178	Fluctuations of anisotropic flow in Pb+Pb collisions at ( $\sqrt{\langle \mathbf{s} \rangle_{\langle \mathbf{NN} \rangle}} = 5.02$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	13
177	Performance of the ATLAS muon triggers in Run 2. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P09015-P09015	1	13
176	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
175	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
174	Measurements of top-quark pair differential and double-differential cross-sections in the $(\ell\ell)+jets$ 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
173	Operation and performance of the ATLAS Tile Calorimeter in Run 1. <i>European Physical Journal C</i> , <b>2018</b> , 78, 987	4.2	13
172	Measurements of W and Z boson production in pp collisions at ( $\sqrt{s}=5.02$ ) TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	12
171	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
170	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
169	Comparison of Fragmentation Functions for Jets Dominated by Light Quarks and Gluons from pp and Pb+Pb Collisions in ATLAS. <i>Physical Review Letters</i> , <b>2019</b> , 123, 042001	7.4	12
168	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at ( $\sqrt{\langle \mathbf{s} \rangle} = 13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	12

167	Measurement of the cross-section for electroweak production of dijets in association with a Z boson in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2017</b> , 775, 206-228	4.2	12
166	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
165	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at ( $\sqrt{s}=13$ ) TeV using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	12
164	Search for top quark decays $t \rightarrow qH$ , with $H \rightarrow \tau\tau$ in ( $\sqrt{s}=13$ ) TeV pp collisions using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	12
163	Measurement of the top-quark mass in ( $\overline{t}t$ ) + 1-jet events collected with the ATLAS detector in pp collisions at ( $\sqrt{s}$ ) = 8 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	12
162	Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at ( $\sqrt{s}=8$ TeV) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	11
161	Direct top-quark decay width measurement in the lepton+jets channel at with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2018</b> , 78, 129	4.2	11
160	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at $13\sqrt{\text{TeV}}$ . <i>European Physical Journal C</i> , <b>2019</b> , 79,	4.2	11
159	Measurement of lepton differential distributions and the top quark mass in production in collisions at TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 804	4.2	11
158	Study of and production in collisions at and search for anomalous quartic gauge couplings with the ATLAS experiment. <i>European Physical Journal C</i> , <b>2017</b> , 77, 646	4.2	11
157	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
156	. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	10
155	Search for heavy neutral Higgs bosons produced in association with b-quarks and decaying into b-quarks at $s=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2020</b> , 102,	4.9	10
154	Search for diboson resonances in hadronic final states in $139\text{ fb}^{-1}$ of pp collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	10
153	Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in collisions at TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 765	4.2	10
152	Search for new phenomena in events with an energetic jet and missing transverse momentum in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2021</b> , 103,	4.9	10
151	. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	9
150	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

149	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $4(\ell\ell)$ decay channel at $(\sqrt{s}) = 13$ TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	9
148	Search for supersymmetry in final states with charm jets and missing transverse momentum in 13 TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	9
147	Probing the Quantum Interference between Singly and Doubly Resonant Top-Quark Production in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2018</b> , 121, 152002	7.4	9
146	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. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
145	Measurement of $VH, (H \rightarrow \overline{b}b)$ 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
144	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
143	Measurement of Azimuthal Anisotropy of Muons from Charm and Bottom Hadrons in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 124, 082301	7.4	8
142	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
141	Search for scalar resonances decaying into $\mu\mu$ in events with and without b-tagged jets produced in 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	8
140	Measurement of splitting scales in $\rightarrow e\mu$ events at [Formula: see text] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2013</b> , 73, 2432	4.2	8
139	Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	8
138	Evidence for $(\overline{t}t)$ 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
137	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. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	8
136	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
135	Measurements of top-quark pair spin correlations in the $(e\mu)$ 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
134	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
133	Search for heavy resonances decaying into a pair of Z bosons in the $(\ell\ell^+\ell\ell^-)$ and $(\ell\ell^+\ell\ell^-\nu\overline{\nu})$ final states using 139 (mathrm {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
132	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



131	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb <sup>-1</sup> 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
130	Prompt and non-prompt elliptic flow in Pb+Pb collisions at Tev with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 784	4.2	8
129	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	8
128	Measurements of inclusive and differential fiducial cross-sections of ( $\bar{t}t\gamma$ ) production in leptonic final states at ( $\sqrt{s}$ ) = 13 TeV in ATLAS. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	7
127	A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeVppcollisions. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P11020-P11020	1	7
126	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. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	7
125	Transverse momentum and process dependent azimuthal anisotropies in ( $\sqrt{s}$ ) = 8.16 TeV p+Pb collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	7
124	Search for new phenomena in high-mass final states with a photon and a jet from collisions at = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 102	4.2	7
123	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
122	Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	7
121	Measurement of the ( $\bar{t}t\gamma$ ) production cross section 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	7
120	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
119	Search for new phenomena in a lepton plus high jet multiplicity final state with the ATLAS experiment using ( $\sqrt{s}$ ) = 13 TeV proton-proton collision data. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
118	Studies of $Z\bar{\nu}\nu$ production in association with a high-mass dijet system in pp collisions at ( $\sqrt{s}$ ) = 8 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
117	Analysis of the $Wtb$ vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t-channel at ( $\sqrt{s}$ ) = 8 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
116	Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P05002-P05002	1	7
115	Measurement of the transverse momentum distribution of Drell-Yan lepton pairs in proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	7
114	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



113	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the (ell ell bb) and (ell ell WW) final states in pp collisions at ( $\sqrt{s}=13$ ) (text {TeV}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
112	Measurement of ( $W^{\pm} \mu$ ) boson production in Pb+Pb collisions at ( $\sqrt{s_{\text{NN}}}$ ) = 5.02~text {TeV}text {V}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	7
111	Search for bottom-squark pair production with the ATLAS detector in final states containing Higgs bosons, b-jets and missing transverse momentum. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	7
110	Measurements of WH and ZH production in the ( $H \rightarrow \bar{b}b$ ) decay channel in pp collisions at (13,text {TeV}text {V}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
109	Search for Higgs Boson Decays into a Z Boson and a Light Hadronically Decaying Resonance Using 13 TeV pp Collision Data from the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 125, 221802	7.4	6
108	Search for ( $\overline{t}t$ ) 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
107	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
106	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
105	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
104	Measurement of the ( $Z \rightarrow \nu \overline{\nu}$ ) production cross section in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector and limits on anomalous triple gauge-boson couplings. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
103	Search for exclusive Higgs and Z boson decays to $\tau\tau$ and $\tau\nu$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	6
102	Combinations of single-top-quark production cross-section measurements and $ f_{LVVtb} $ determinations at ( $\sqrt{s}$ ) = 7 and 8 TeV with the ATLAS and CMS experiments. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	5
101	Search for the Production of a Long-Lived Neutral Particle Decaying within the ATLAS Hadronic Calorimeter in Association with a Z Boson from pp Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , <b>2019</b> , 122, 151801	7.4	5
100	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
99	Measurement of differential cross-sections of a single top quark produced in association with a boson at with ATLAS. <i>European Physical Journal C</i> , <b>2018</b> , 78, 186	4.2	5
98	Measurement of b-hadron pair production with the ATLAS detector in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	5
97	Observation and Measurement of Forward Proton Scattering in Association with Lepton Pairs Produced via the Photon Fusion Mechanism at ATLAS. <i>Physical Review Letters</i> , <b>2020</b> , 125, 261801	7.4	5
96	Evidence for electroweak production of two jets in association with a $Z\tau$ pair in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2020</b> , 803, 135341	4.2	5

95	The ABC130 barrel module prototyping programme for the ATLAS strip tracker. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P09004-P09004	1	5
94	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
93	Search for the HH $\rightarrow$ $b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	5
92	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
91	Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb of Pb+Pb data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	5
90	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
89	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
88	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
87	Measurement of colour flow using jet-pull observables in events with the ATLAS experiment at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 847	4.2	5
86	Measurement of the inclusive and fiducial production cross-sections in the lepton+jets channel in collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 487	4.2	5
85	Search for four-top-quark production in the single-lepton and opposite-sign dilepton final states in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physical Review D</i> , <b>2019</b> , 99,	4.9	4
84	Measurement of the Lund Jet Plane Using Charged Particles in 13 TeV Proton-Proton Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 124, 222002	7.4	4
83	Combination of inclusive and differential ( $\overline{\text{charge}}$ ) charge asymmetry measurements using ATLAS and CMS data at ( $\sqrt{s}=7$ ) and 8 TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	4
82	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
81	Alignment of the ATLAS Inner Detector in Run 2. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	4
80	Measurement of $J/\psi$ production in association with a $W$ boson with pp data at 8 TeV. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	4
79	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. <i>Nature Physics</i> , <b>2021</b> , 17, 819-825	16.2	4
78	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

77	Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at ( $\sqrt{s}=13$ ) TeV using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5-4	4
76	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
75	Search for dijet resonances in events with an isolated charged lepton using ( $\sqrt{s}$ ) = 13 TeV proton-proton collision data collected by the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5-4	3
74	Measurement of long-range two-particle azimuthal correlations in Z-boson tagged pp collisions at ( $\sqrt{s}=8$ ) and 13 TeV. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4-2	3
73	Measurement of polarisation in decays in proton-proton collisions at TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 163	4-2	3
72	Search for excited electrons singly produced in proton-proton collisions at $\sqrt{s} \sim 13$ TeV with the ATLAS experiment at the LHC. <i>European Physical Journal C</i> , <b>2019</b> , 79,	4-2	3
71	Measurement of the $k_t$ splitting scales in Z $\rightarrow$ $b\bar{b}$ events in pp collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5-4	3
70	Search for Heavy Resonances Decaying into a Photon and a Hadronically Decaying Higgs Boson in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2020</b> , 125, 251802	7-4	3
69	Measurement of $K_S^0$ and $\Lambda^0$ production in $t\bar{t}$ dileptonic events in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	3
68	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
67	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
66	Reconstruction and identification of boosted di- $\tau$ 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
65	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
64	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
63	Medium-Induced Modification of Z-Tagged Charged Particle Yields in Pb+Pb Collisions at 5.02 TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2021</b> , 126, 072301	7-4	3
62	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. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4-2	2
61	Performance of the upgraded PreProcessor of the ATLAS Level-1 Calorimeter Trigger. <i>Journal of Instrumentation</i> , <b>2020</b> , 15, P11016-P11016	1	2
60	Measurement of the Z( $\rightarrow$ bb) production cross-section 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	2

59	Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using ( $\sqrt{s} = 13$ TeV) proton-proton collision data. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	2
58	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
57	Measurement of the inclusive isolated-photon cross section in pp collisions at ( $\sqrt{s}$ ) = 13 TeV using 36 fb <sup>-1</sup> of ATLAS data. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
56	Measurements of inclusive and differential cross-sections of combined ( $\overline{t}\gamma$ ) and $tW$ production in the e channel at 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
55	Measurement of isolated-photon plus two-jet production 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	2
54	Search for Dark Matter Produced in Association with a Dark Higgs Boson Decaying into $W^{\pm}W^{\pm}$ or ZZ in Fully Hadronic Final States from $\sqrt{s}=13$ TeV pp Collisions Recorded with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2021</b> , 126, 121802	7.4	2
53	Longitudinal Flow Decorrelations in Xe+Xe Collisions at $\sqrt{s_{NN}}=5.44$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2021</b> , 126, 122301	7.4	2
52	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
51	Search for Displaced Leptons in $\sqrt{s}=13$ TeV pp Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , <b>2021</b> , 127, 051802	7.4	2
50	Two-particle azimuthal correlations in photonuclear ultraperipheral Pb+Pb collisions at 5.02 TeV with ATLAS. <i>Physical Review C</i> , <b>2021</b> , 104,	2.7	2
49	Search for supersymmetry in events with four or more charged leptons in 139 fb <sup>-1</sup> 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
48	Measurement of ZZ production in the final state with the ATLAS detector in pp collisions at ( $\sqrt{s}$ ) = 13 TeV. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	2
47	Measurement of ( $W^{\pm}$ )-boson and Z-boson production cross-sections in pp collisions at ( $\sqrt{s}=2.76$ ) TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	2
46	Exclusive dimuon production in ultraperipheral Pb+Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV with ATLAS. <i>Physical Review C</i> , <b>2021</b> , 104,	2.7	2
45	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
44	Search for heavy particles in the b-tagged dijet mass distribution with additional b-tagged jets in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS experiment. <i>Physical Review D</i> , <b>2022</b> , 105,	4.9	1
43	Operation and performance of the ATLAS semiconductor tracker in LHC Run-2. <i>Journal of Instrumentation</i> , <b>2022</b> , 17, P01013	1	1
42	Search for Higgs boson decays into a pair of pseudoscalar particles in the $b\bar{b}$ final state with the ATLAS detector in pp collisions at $\sqrt{s}=13$ TeV. <i>Physical Review D</i> , <b>2022</b> , 105,	4.9	1

41	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 <b>2018</b> , 78, 1		1
40	Search for top squarks in events with a Higgs or Z boson using 139 fb <sup>-1</sup> 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
39	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 <sup>-1</sup> of $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector <b>2018</b> , 2018, 1		1
38	Measurement of differential cross sections for single diffractive dissociation in $\sqrt{s} = 8$ TeV pp collisions using the ATLAS ALFA spectrometer. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
37	Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	1
36	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
35	Measurement of the CP-violating phase $\phi_{-s}$ in $B_{s^0} \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. <i>European Physical Journal C</i> , <b>2021</b> , 81,	4.2	1
34	Test of the universality of quark and lepton couplings in W-boson decays with the ATLAS detector. <i>Nature Physics</i> , <b>2021</b> , 17, 813-818	16.2	1
33	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
32	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
31	Performance of the ATLAS RPC detector and Level-1 muon barrel trigger at $\sqrt{s}=13$ TeV. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P07029	1	1
30	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	1
29	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P08025	1	1
28	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
27	Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $\sqrt{s}=13$ TeV Using the ATLAS Detector. <i>Physical Review Letters</i> , <b>2021</b> , 127, 141801	7.4	1
26	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
25	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
24	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



23	Search for new phenomena in pp collisions in final states with tau leptons, b-jets, and missing transverse momentum with the ATLAS detector. <i>Physical Review D</i> , <b>2021</b> , 104,	4.9	1
22	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and $13 \text{ TeV}$ . <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	1
21	Emulating the impact of additional proton-proton interactions in the ATLAS simulation by presampling sets of inelastic Monte Carlo events. <i>Computing and Software for Big Science</i> , <b>2022</b> , 6, 1	6	0
20	Performance of the ATLAS Level-1 topological trigger in Run 2. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	0
19	Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
18	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 $13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	0
17	Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
16	Measurements of $W+W\bar{W}$ jet production cross-sections in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
15	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	0
14	Measurements of differential cross-sections in four-lepton events in $13 \text{ TeV}$ proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
13	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	0
12	The ATLAS Fast Tracker system. <i>Journal of Instrumentation</i> , <b>2021</b> , 16, P07006	1	0
11	Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with $139 \text{ fb}^{-1}$ of pp collision data at $\sqrt{s} = 13 \text{ TeV}$ . <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
10	AtlFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , <b>2022</b> , 6, 1	6	0
9	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	0
8	Search for associated production of a Z boson with an invisibly decaying Higgs boson or dark matter candidates at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2022</b> , 137066	4.2	0
7	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	0
6	Measurement of the production cross section of pairs of isolated photons in pp collisions at $13 \text{ TeV}$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0



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| 5 | 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 | ○ |
| 4 | Search for Lepton-Flavor Violation in Z-Boson Decays with $\tau$ Leptons with the ATLAS Detector.. <i>Physical Review Letters</i> , <b>2021</b> , 127, 271801   | 7.4 | ○ |
| 3 | 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 | ○ |
| 2 | 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 |   |
| 1 | A search for an unexpected asymmetry in the production of $e^+e^-$ and $e\mu$ pairs in proton-proton collisions recorded by the ATLAS detector at $\sqrt{s}=13$ TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2022</b> , 137106 | 4.2 |   |