

Mohamad Kassem Ayoub

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268 papers	6,331 citations	35 h-index	69 g-index
287 ext. papers	8,440 ext. citations	4.9 avg, IF	1.92 L-index

#	Paper	IF	Citations
268	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> , 2015 , 114, 191803	7.4	709
267	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> , 2016 , 2016, 1	5.4	364
266	Performance of the ATLAS trigger system in 2015. <i>European Physical Journal C</i> , 2017 , 77, 317	4.2	272
265	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s}=13$ TeV. <i>European Physical Journal C</i> , 2016 , 76, 292	4.2	263
264	Luminosity determination in collisions at $\sqrt{s}=8$ TeV using the ATLAS detector at the LHC. <i>European Physical Journal C</i> , 2016 , 76, 653	4.2	188
263	Measurements of the Higgs boson production and decay rates and coupling strengths using collision data at $\sqrt{s}=8$ TeV in the ATLAS experiment. <i>European Physical Journal C</i> , 2016 , 76, 6	4.2	185
262	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. <i>European Physical Journal C</i> , 2017 , 77, 490	4.2	177
261	Performance of pile-up mitigation techniques for jets in $\sqrt{s}=13$ TeV collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , 2016 , 76, 581	4.2	148
260	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> , 2018 , 784, 173-191	4.2	118
259	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. <i>European Physical Journal C</i> , 2015 , 75, 476	4.2	104
258	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> , 2018 , 2018, 1	5.4	101
257	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> , 2016 , 117, 182002	7.4	92
256	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> , 2018 , 786, 59-86	4.2	87
255	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. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	81
254	Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at. <i>European Physical Journal C</i> , 2018 , 78, 903	4.2	66
253	Measurement of $W\bar{b}$ and Z-boson production cross sections in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016 , 759, 601-621	4.2	64
252	Precision measurement and interpretation of inclusive τ and production cross sections with the ATLAS detector. <i>European Physical Journal C</i> , 2017 , 77, 367	4.2	56

251	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> , 2018 , 78, 199	4.2	55
250	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> , 2017 , 77, 393	4.2	52
249	Electron and photon performance measurements with the ATLAS detector using the 2015-2017 LHC proton-proton collision data. <i>Journal of Instrumentation</i> , 2019 , 14, P12006-P12006	1	51
248	Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	50
247	Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s}=13$ (text {TeV}) pp collisions using the ATLAS detector. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	50
246	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> , 2016 , 76, 538	4.2	48
245	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> , 2018 , 121, 211801	7.4	48
244	Search for heavy resonances decaying into WZ in the final state in collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2018 , 78, 24	4.2	47
243	Combination of Searches for Invisible Higgs Boson Decays with the ATLAS Experiment. <i>Physical Review Letters</i> , 2019 , 122, 231801	7.4	45
242	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> , 2019 , 79, 1	4.2	43
241	Jet reconstruction and performance using particle flow with the ATLAS Detector. <i>European Physical Journal C</i> , 2017 , 77, 466	4.2	42
240	Measurement of the top quark mass in the $t\bar{t}\ell\ell$ dilepton channel from $\sqrt{s}=8$ TeV ATLAS data. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016 , 761, 350-371	4.2	42
239	Search for heavy resonances in the WZ and ZZ final states using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2018 , 78, 293	4.2	41
238	Observation of Light-by-Light Scattering in Ultraperipheral Pb+Pb Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , 2019 , 123, 052001	7.4	41
237	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> , 2018 , 784, 345-366	4.2	41
236	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> , 2018 , 2018, 1	5.4	39
235	Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s}=13$ (text {TeV}). <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	37
234	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> , 2018 , 2018, 1	5.4	36

233	Measurement of longitudinal flow decorrelations in Pb+Pb collisions at and 5.02 TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2018 , 78, 142	4.2	35
232	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> , 2018 , 78, 565	4.2	34
231	Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. <i>European Physical Journal C</i> , 2017 , 77, 673	4.2	33
230	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. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	33
229	Search for charged Higgs bosons decaying via $H^\pm \rightarrow \tau^\pm \nu_\tau$ in the $b\bar{b}$ jets and τ lepton final states with 36 fb ⁻¹ of pp collision data recorded at ($\sqrt{s}=13$) TeV with the ATLAS experiment. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	33
228	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> , 2018 , 78, 18	4.2	32
227	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> , 2019 , 2019, 1	5.4	31
226	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> , 2019 , 2019, 1	5.4	31
225	Measurements of b-jet tagging efficiency with the ATLAS detector using ($t\bar{t}$) events at ($\sqrt{s}=13$) TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	31
224	Performance of electron and photon triggers in ATLAS during LHC Run 2. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	30
223	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> , 2020 , 125, 051801	7.4	30
222	Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. <i>European Physical Journal C</i> , 2017 , 77, 332	4.2	29
221	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> , 2018 , 121, 081801	7.4	29
220	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. <i>European Physical Journal C</i> , 2016 , 76, 295	4.2	28
219	Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ \rightarrow 4\ell$ and $ZZ \rightarrow 2\ell 2\nu$ final states with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018 , 786, 223-244	4.2	28
218	Search for a Structure in the $B_{s^0} \rightarrow \mu^+ \mu^-$ Invariant Mass Spectrum with the ATLAS Experiment. <i>Physical Review Letters</i> , 2018 , 120, 202007	7.4	28
217	Search for invisible decays of the Higgs boson produced in association with a hadronically decaying vector boson in collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2015 , 75, 337	4.2	27
216	Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow WW^* \rightarrow \ell^+ \ell^-$ decay channel 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> , 2019 , 789, 508-529	4.2	27

215	Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. <i>Physical Review Letters</i> , 2018 , 120, 211802	7.4	27
214	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> , 2019 , 123, 161801	7.4	26
213	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> , 2019 , 79, 1	4.2	26
212	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> , 2018 , 2018, 1	5.4	26
211	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> , 2016 , 76, 658	4.2	26
210	Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data. <i>Journal of Instrumentation</i> , 2019 , 14, P03017-P03017	1	25
209	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> , 2017 , 2017, 1	5.4	25
208	Measurement of the top quark mass in the $(t\bar{t} \rightarrow \text{lepton} + \text{jets})$ channel from ($\sqrt{s}=8$) TeV ATLAS data and combination with previous results. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	24
207	Measurement of the Soft-Drop Jet Mass in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , 2018 , 121, 092001	7.4	24
206	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> , 2018 , 2018, 1	5.4	23
205	Search for Resonant and Nonresonant Higgs Boson Pair Production in the $b\bar{b} \rightarrow \gamma\gamma \rightarrow \ell\bar{\ell}$ Decay Channel in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , 2018 , 121, 191801	7.4	23
204	Search for Higgs boson pair production in the $(\gamma\gamma \gamma\gamma b\bar{b})$ final state with 13 TeV pp collision data collected by the ATLAS experiment. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	23
203	Prompt and non-prompt and suppression at high transverse momentum in Pb+Pb collisions with the ATLAS experiment. <i>European Physical Journal C</i> , 2018 , 78, 762	4.2	23
202	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> , 2017 , 77, 26	4.2	22
201	Observation of electroweak $W\bar{W}Z$ boson pair production in association with two jets in pp collisions at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019 , 793, 469-492	4.2	22
200	Search for W W/W Z resonance production in $\ell\bar{\ell}q$ final states in pp collisions at ($\sqrt{s}=13$) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	22
199	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> , 2018 , 2018, 1	5.4	22
198	Search for invisible Higgs boson decays in vector boson fusion at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019 , 793, 499-519	4.2	21

197	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> , 2019 , 2019, 1	5.4	21
196	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> , 2019 , 2019, 1	5.4	21
195	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> , 2021 , 812, 135980	4.2	21
194	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> , 2018 , 78, 1007	4.2	21
193	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> , 2018 , 2018, 1	5.4	21
192	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> , 2018 , 78, 997	4.2	21
191	Search for doubly charged scalar bosons decaying into same-sign boson pairs with the ATLAS detector. <i>European Physical Journal C</i> , 2019 , 79, 58	4.2	20
190	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> , 2019 , 79, 1	4.2	20
189	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> , 2020 , 2020, 1	5.4	20
188	Performance of top-quark and (W)-boson tagging with ATLAS in Run 2 of the LHC. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	19
187	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> , 2017 , 77, 898	4.2	19
186	Study of the material of the ATLAS inner detector for Run 2 of the LHC. <i>Journal of Instrumentation</i> , 2017 , 12, P12009-P12009	1	19
185	Search for High-Mass Resonances Decaying to $\mu\mu$ in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , 2018 , 120, 161802	7.4	18
184	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> , 2019 , 79, 1	4.2	18
183	Searches for third-generation scalar leptoquarks in ($\sqrt{s} = 13$ TeV) pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	18
182	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> , 2016 , 76, 87	4.2	18
181	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> , 2018 , 121, 212301	7.4	18
180	Searches for heavy ZZ and ZW resonances in the $\bar{t}q$ and $\bar{b}q$ final states in pp collisions at ($\sqrt{s}=13$) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	17

179	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> , 2020 , 80, 1	4.2	17
178	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> , 2019 , 79, 1	4.2	16
177	ATLAS data quality operations and performance for 2015-2018 data-taking. <i>Journal of Instrumentation</i> , 2020 , 15, P04003-P04003	1	16
176	Search for the Standard Model Higgs boson decaying into ($\gamma\gamma$) 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> , 2016 , 2016, 1	5.4	16
175	Measurement of the Drell-Yan triple-differential cross section in pp collisions at ($\sqrt{s}=8$) TeV. <i>Journal of High Energy Physics</i> , 2017 , 2017, 1	5.4	16
174	The performance of the jet trigger for the ATLAS detector during 2011 data taking. <i>European Physical Journal C</i> , 2016 , 76, 526	4.2	16
173	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> , 2019 , 79, 1	4.2	16
172	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at ($\sqrt{s_{\mathrm{NN}}}=5.02$ TeV) with the ATLAS detector. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	16
171	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> , 2018 , 2018, 1	5.4	16
170	Searches for scalar leptoquarks and differential cross-section measurements in dilepton-dijet events in proton-proton collisions at a centre-of-mass energy of ($\sqrt{s}=13$) TeV with the ATLAS experiment. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	15
169	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> , 2020 , 124, 031802	7.4	15
168	Dijet Resonance Search with Weak Supervision Using $\sqrt{s}=13$ TeV pp Collisions in the ATLAS Detector. <i>Physical Review Letters</i> , 2020 , 125, 131801	7.4	15
167	CP Properties of Higgs Boson Interactions with Top Quarks in the $t\bar{t}H$ and tH Processes Using $H\rightarrow b\bar{b}$ with the ATLAS Detector. <i>Physical Review Letters</i> , 2020 , 125, 061802	7.4	15
166	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> , 2018 , 2018, 1	5.4	15
165	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> , 2018 , 78, 625	4.2	15
164	Measurements of electroweak [WZ] production and constraints on anomalous gauge couplings with the ATLAS detector. <i>European Physical Journal C</i> , 2017 , 77, 474	4.2	14
163	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> , 2019 , 2019, 1	5.4	14
162	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> , 2018 , 780, 557-577	4.2	14

161	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> , 2019 , 79, 1	4.2	14
160	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> , 2018 , 2018, 1	5.4	14
159	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 $\sqrt{s}=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018 , 786, 114-133	4.2	14
158	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. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	13
157	Fluctuations of anisotropic flow in Pb+Pb collisions at ($\sqrt{\langle s \rangle_{\mathrm{NN}}} \rangle = 5.02$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	13
156	Performance of the ATLAS muon triggers in Run 2. <i>Journal of Instrumentation</i> , 2020 , 15, P09015-P09015	1	13
155	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> , 2020 , 80, 1	4.2	13
154	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> , 2021 , 81, 1	4.2	13
153	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> , 2019 , 79, 1	4.2	13
152	Operation and performance of the ATLAS Tile Calorimeter in Run 2. <i>European Physical Journal C</i> , 2018 , 78, 987	4.2	13
151	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> , 2019 , 79, 1	4.2	12
150	Higgs boson production cross-section measurements and their EFT interpretation in the $(\ell\ell)$ decay channel at ($\sqrt{s}=13$) TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	12
149	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> , 2018 , 2018, 1	5.4	12
148	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> , 2019 , 123, 042001	7.4	12
147	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	12
146	Measurement of the cross-section for electroweak production of dijets in association with a Z boson 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> , 2017 , 775, 206-228	4.2	12
145	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> , 2017 , 2017, 1	5.4	12
144	Measurement of the top-quark mass in $(\overline{t}) + 1$ -jet events collected with the ATLAS detector in pp collisions at (\sqrt{s}) = 8 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	12

143	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. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	11
142	Direct top-quark decay width measurement in the lepton+jets channel at with the ATLAS experiment. <i>European Physical Journal C</i> , 2018 , 78, 129	4.2	11
141	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at 13 $\sqrt{s}\text{~TeV}$. <i>European Physical Journal C</i> , 2019 , 79,	4.2	11
140	Measurement of lepton differential distributions and the top quark mass in production in collisions at $\sqrt{s}\text{~TeV}$ with the ATLAS detector. <i>European Physical Journal C</i> , 2017 , 77, 804	4.2	11
139	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> , 2021 , 81, 1	4.2	11
138	. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	10
137	Search for diboson resonances in hadronic final states in 139 fb $^{-1}$ of pp collisions at (\sqrt{s}) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	10
136	. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	9
135	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	9
134	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the 4(ℓ) decay channel at (\sqrt{s}) = 13 TeV. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	9
133	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> , 2018 , 2018, 1	5.4	9
132	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> , 2018 , 121, 152002	7.4	9
131	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> , 2019 , 2019, 1	5.4	8
130	Measurement of VH , ($\text{H} \rightarrow \text{b}\overline{\text{b}}$) 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> , 2019 , 2019, 1	5.4	8
129	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> , 2020 , 2020, 1	5.4	8
128	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> , 2020 , 124, 082301	7.4	8
127	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. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	8
126	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> , 2019 , 2019, 1	5.4	8

125	Evidence for ($t\bar{t}$) production in the multilepton final state in proton-proton collisions at ($\sqrt{s}=13$) (TeV) with the ATLAS detector. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	8
124	Search for light long-lived neutral particles produced in pp collisions at ($\sqrt{s} = 13\text{-}\mathrm{TeV}$) and decaying into collimated leptons or light hadrons with the ATLAS detector. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	8
123	Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	8
122	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> , 2020 , 80, 1	4.2	8
121	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> , 2021 , 2021, 1	5.4	8
120	Search for heavy resonances decaying into a pair of Z bosons in the ($e^+e^- \rightarrow e^+e^- \gamma \gamma$) and ($e^+e^- \rightarrow e^+e^- \nu \bar{\nu}$) final states using 139 (fb^{-1}) of proton-proton collisions at ($\sqrt{s} = 13$) TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	8
119	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> , 2021 , 2021, 1	5.4	8
118	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb^{-1} of ($\sqrt{s} = 13$) TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	8
117	Prompt and non-prompt elliptic flow in Pb+Pb collisions at TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2018 , 78, 784	4.2	8
116	Measurements of inclusive and differential fiducial cross-sections of ($t\bar{t}\gamma$) production in leptonic final states at ($\sqrt{s}=13\text{-}\mathrm{TeV}$) in ATLAS. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	7
115	A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeV pp collisions. <i>Journal of Instrumentation</i> , 2016 , 11, P11020-P11020	1	7
114	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> , 2020 , 2020, 1	5.4	7
113	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> , 2020 , 80, 1	4.2	7
112	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> , 2018 , 78, 102	4.2	7
111	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> , 2018 , 2018, 1	5.4	7
110	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> , 2019 , 2019, 1	5.4	7
109	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> , 2017 , 2017, 1	5.4	7
108	Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties. <i>Journal of Instrumentation</i> , 2017 , 12, P05002-P05002	1	7

107	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> , 2020 , 80, 1	4.2	7
106	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> , 2021 , 81, 1	4.2	7
105	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 ($\sqrt{s}=13$) (TeV) with the ATLAS detector. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	7
104	Measurement of ($W^{\pm} \mu^{\pm}$) boson production in Pb+Pb collisions at ($\sqrt{s_{\mathrm{NN}}}$) = 5.02~text {TeV} with the ATLAS detector. <i>European Physical Journal C</i> , 2019 , 79, 1	4.2	7
103	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> , 2019 , 2019, 1	5.4	7
102	Measurements of WH and ZH production in the ($H \rightarrow \bar{b}b$) decay channel in pp collisions at (13,TeV) with the ATLAS detector. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	7
101	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> , 2020 , 125, 221802	7.4	6
100	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> , 2020 , 2020, 1	5.4	6
99	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> , 2021 , 2021, 1	5.4	6
98	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> , 2021 , 2021, 1	5.4	6
97	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> , 2021 , 2021, 1	5.4	6
96	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> , 2018 , 2018, 1	5.4	6
95	Search for exclusive Higgs and Z boson decays to $\tau\tau$ and $\ell\ell$ with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	6
94	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> , 2019 , 2019, 1	5.4	5
93	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> , 2019 , 122, 151801	7.4	5
92	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> , 2019 , 2019, 1	5.4	5
91	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> , 2018 , 78, 186	4.2	5
90	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> , 2020 , 125, 261801	7.4	5

89	Evidence for electroweak production of two jets in association with a $Z\ell$ pair 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> , 2020 , 803, 135341	4.2	5
88	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> , 2020 , 2020, 1	5.4	5
87	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> , 2020 , 2020, 1	5.4	5
86	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> , 2020 , 2020, 1	5.4	5
85	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> , 2021 , 2021, 1	5.4	5
84	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> , 2021 , 81, 1	4.2	5
83	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> , 2021 , 81, 1	4.2	5
82	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> , 2021 , 2021, 1	5.4	5
81	Measurement of colour flow using jet-pull observables in events with the ATLAS experiment at. <i>European Physical Journal C</i> , 2018 , 78, 847	4.2	5
80	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> , 2018 , 78, 487	4.2	5
79	Measurement of the Lund Jet Plane Using Charged Particles in 13 TeV Proton-Proton Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , 2020 , 124, 222002	7.4	4
78	Combination of inclusive and differential $(\overline{\mathcal{O}})$ charge asymmetry measurements using ATLAS and CMS data at $(\sqrt{s}=7)$ and 8 TeV. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	4
77	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> , 2020 , 80, 1	4.2	4
76	Alignment of the ATLAS Inner Detector in Run 2. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	4
75	Measurement of J/ψ production in association with a W boson with pp data at 8 TeV. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	4
74	Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. <i>Nature Physics</i> , 2021 , 17, 819-825	16.2	4
73	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> , 2019 , 79, 1	4.2	4
72	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> , 2018 , 2018, 1	5.4	4

71	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> , 2021 , 81, 1	4.2	4
70	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> , 2020 , 2020, 1	5.4	3
69	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> , 2020 , 80, 1	4.2	3
68	Measurement of polarisation in decays in proton-proton collisions at TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2018 , 78, 163	4.2	3
67	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> , 2019 , 79,	4.2	3
66	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> , 2020 , 125, 251802	7.4	3
65	Measurement of K_S^0 and Λ^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> , 2019 , 79, 1	4.2	3
64	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> , 2020 , 80, 1	4.2	3
63	Reconstruction and identification of boosted di- τ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	3
62	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> , 2021 , 2021, 1	5.4	3
61	Measurement of hadronic event shapes in high-pT multijet final states at (\sqrt{s}) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	3
60	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> , 2021 , 126, 072301	7.4	3
59	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> , 2019 , 79, 1	4.2	2
58	Performance of the upgraded PreProcessor of the ATLAS Level-1 Calorimeter Trigger. <i>Journal of Instrumentation</i> , 2020 , 15, P11016-P11016	1	2
57	Measurement of the $Z(\rightarrow \mu\mu)$ production cross-section in pp collisions at (\sqrt{s}) = 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	2
56	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> , 2021 , 81, 1	4.2	2
55	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> , 2021 , 2021, 1	5.4	2
54	Measurement of the inclusive isolated-photon cross section in pp collisions at (\sqrt{s}) = 13 TeV using 36 fb ⁻¹ of ATLAS data. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	2

53	Measurements of inclusive and differential cross-sections of combined (γ) and $t\bar{t}$ production in the e^+e^- channel at 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2020 , 2020, 1	5.4	2
52	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> , 2020 , 2020, 1	5.4	2
51	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> , 2021 , 126, 121802	7.4	2
50	Longitudinal Flow Decorrelations in Xe+Xe Collisions at $\sqrt{s_{NN}}=5.44$ TeV with the ATLAS Detector. <i>Physical Review Letters</i> , 2021 , 126, 122301	7.4	2
49	Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton-proton collisions. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	2
48	Search for Displaced Leptons in $\sqrt{s}=13$ TeV pp Collisions with the ATLAS Detector. <i>Physical Review Letters</i> , 2021 , 127, 051802	7.4	2
47	Two-particle azimuthal correlations in photonuclear ultraperipheral Pb+Pb collisions at 5.02 TeV with ATLAS. <i>Physical Review C</i> , 2021 , 104,	2.7	2
46	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. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	2
45	Measurement of ZZ production in the $\ell\ell$ final state with the ATLAS detector in pp collisions at (\sqrt{s}) = 13 TeV. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	2
44	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> , 2019 , 79, 1	4.2	2
43	Exclusive dimuon production in ultraperipheral Pb+Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV with ATLAS. <i>Physical Review C</i> , 2021 , 104,	2.7	2
42	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> , 2021 , 2021, 1	5.4	2
41	Operation and performance of the ATLAS semiconductor tracker in LHC Run2. <i>Journal of Instrumentation</i> , 2022 , 17, P01013	1	1
40	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 {TeV}) 2018 , 78, 1		1
39	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. <i>European Physical Journal C</i> , 2020 , 80, 1	4.2	1
38	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
37	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> , 2020 , 2020, 1	5.4	1
36	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> , 2020 , 2020, 1	5.4	1

35	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> , 2021 , 2021, 1	5.4	1
34	Measurement of the CP-violating phase ϕ_s in $B_{s^0} \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. <i>European Physical Journal C</i> , 2021 , 81,	4.2	1
33	Test of the universality of lepton couplings in W-boson decays with the ATLAS detector. <i>Nature Physics</i> , 2021 , 17, 813-818	16.2	1
32	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> , 2021 , 2021, 1	5.4	1
31	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> , 2021 , 2021, 1	5.4	1
30	Performance of the ATLAS RPC detector and Level-1 muon barrel trigger at $\sqrt{s}=13$ TeV. <i>Journal of Instrumentation</i> , 2021 , 16, P07029	1	1
29	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $(\sqrt{s} = 8, \text{TeV})$ with the ATLAS detector. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	1
28	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. <i>Journal of Instrumentation</i> , 2021 , 16, P08025	1	1
27	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> , 2021 , 81, 1	4.2	1
26	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> , 2021 , 127, 141801	7.4	1
25	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> , 2021 , 81, 1	4.2	1
24	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> , 2021 , 81, 1	4.2	1
23	Configuration and performance of the ATLAS b-jet triggers in Run 2. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	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 TeV. <i>European Physical Journal C</i> , 2022 , 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> , 2022 , 6, 1	6	0
20	Performance of the ATLAS Level-1 topological trigger in Run 2. <i>European Physical Journal C</i> , 2022 , 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 $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2022 , 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 TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2022 , 82, 1	4.2	0

17	Measurement of the $t(\overline{t})t(\overline{t})$ production cross section in pp collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	○
16	Measurements of $W+W\ell\ell$ jet production cross-sections in pp collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	○
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> , 2021 , 81, 1	4.2	○
14	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	○
13	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , 2021 , 81, 1	4.2	○
12	The ATLAS Fast Tracker system. <i>Journal of Instrumentation</i> , 2021 , 16, P07006	1	○
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 fb ⁻¹ of pp collision data at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2022 , 2022, 1	5.4	○
10	AtlFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , 2022 , 6, 1	6	○
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 Run2 data. <i>European Physical Journal C</i> , 2022 , 82, 1	4.2	○
8	Search for associated production of a Z boson with an invisibly decaying Higgs boson or dark matter candidates at $s=13$ TeV with the ATLAS detector. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022 , 137066	4.2	○
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> , 2021 , 2021, 1	5.4	○
6	Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	○
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> , 2021 , 2021, 1	5.4	○
4	Search for Lepton-Flavor Violation in Z-Boson Decays with ℓ Leptons with the ATLAS Detector.. <i>Physical Review Letters</i> , 2021 , 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> , 2021 , 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> , 2022 , 82, 1	4.2	
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