

# Nicolin Govender

## List of Publications by Citations

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366  
papers

8,274  
citations

46  
h-index

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g-index

393  
ext. papers

10,486  
ext. citations

4.6  
avg, IF

4.38  
L-index

#	Paper	IF	Citations
366	Performance of the ATLAS trigger system in 2015. <i>European Physical Journal C</i> , <b>2017</b> , 77, 317	4.2	272
365	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
364	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
363	Measurements of the Higgs boson production and decay rates and coupling strengths using collision data at $\sqrt{s}=13$ TeV and 8 TeV in the ATLAS experiment. <i>European Physical Journal C</i> , <b>2016</b> , 76, 6	4.2	185
362	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
361	Search for an additional, heavy Higgs boson in the $h \rightarrow b\bar{b}$ decay channel at $\sqrt{s}=13$ TeV in $\sqrt{s}=13$ TeV collision data with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 45	4.2	152
360	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> , <b>2016</b> , 76, 581	4.2	148
359	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
358	ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. <i>European Physical Journal C</i> , <b>2015</b> , 75, 510	4.2	109
357	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
356	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
355	Search for the Standard Model Higgs boson produced in association with top quarks and decaying into $h \rightarrow b\bar{b}$ in $\sqrt{s}=13$ TeV collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 349	4.2	94
354	Constraints on new phenomena via Higgs boson couplings and invisible decays with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	91
353	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
352	Development of a convex polyhedral discrete element simulation framework for NVIDIA Kepler based GPUs. <i>Journal of Computational and Applied Mathematics</i> , <b>2014</b> , 270, 386-400	2.4	72
351	Searches for scalar leptoquarks in collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 5	4.2	68
350	Search for Higgs boson pair production in the $h \rightarrow b\bar{b}$ final state from collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 412	4.2	66

349	Search for high-mass diboson resonances with boson-tagged jets in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-39	5.4	66
348	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
347	Measurement of the transverse momentum and [Formula: see text] distributions of Drell-Yan lepton pairs in proton-proton collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 291	4.2	63
346	Electron efficiency measurements with the ATLAS detector using 2012 LHC proton-proton collision data. <i>European Physical Journal C</i> , <b>2017</b> , 77, 195	4.2	61
345	Measurement of the $W$ -boson mass in pp collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 110	4.2	59
344	Search for a high-mass Higgs boson decaying to a $W$ boson pair 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	59
343	A search for ( $\overline{t}$ ) resonances using lepton-plus-jets events in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	57
342	Constraints on the off-shell Higgs boson signal strength in the high-mass and final states with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 335	4.2	56
341	Precision measurement and interpretation of inclusive $W$ , and production cross sections with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 367	4.2	56
340	Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at. <i>European Physical Journal C</i> , <b>2018</b> , 78, 199	4.2	55
339	Summary of the searches for squarks and gluinos using ( $\sqrt{s}=8$ ) TeV pp collisions with the ATLAS experiment at the LHC. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	55
338	Discrete element simulation of mill charge in 3D using the BLAZE-DEM GPU framework. <i>Minerals Engineering</i> , <b>2015</b> , 79, 152-168	4.9	54
337	Search for production of vector-like quark pairs and of four top quarks in the lepton-plus-jets final state in pp collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	54
336	Search for squarks and gluinos in final states with jets and missing transverse momentum at [Formula: see text] = 13 [Formula: see text] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 392	4.2	53
335	Search for new phenomena in events with at least three photons collected in collisions at [Formula: see text] = 8 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 210	4.2	53
334	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data. <i>European Physical Journal C</i> , <b>2016</b> , 76, 666	4.2	53
333	Search for lepton-flavour-violating decays of the Higgs and bosons with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 70	4.2	52
332	Search for dark matter at [Formula: see text] in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 393	4.2	52

331	Evidence for the ( $H \rightarrow b\bar{b}$ ) decay with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	50
330	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> , <b>2020</b> , 80, 1	4.2	50
329	Search for resonances in diphoton events at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	49
328	Search for electroweak production of supersymmetric particles in final states with two or three leptons at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 995	4.2	49
327	Measurements of top-quark pair differential cross-sections in the lepton+jets channel in collisions at [Formula: see text] using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 538	4.2	48
326	Search for supersymmetry at [Formula: see text] TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 259	4.2	48
325	Measurement of multi-particle azimuthal correlations in pp, p $\bar{p}$ -Pb and low-multiplicity Pb $\bar{p}$ -Pb collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 428	4.2	48
324	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
323	Measurement of the prompt / [Formula: see text] pair production cross-section in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 76	4.2	47
322	Search for heavy resonances decaying into in the final state in collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 24	4.2	47
321	Search for a new resonance decaying to a or boson and a Higgs boson in the [Formula: see text] final states with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 263	4.2	46
320	Search for lepton-flavour-violating $H \rightarrow \tau\mu$ decays of the Higgs boson with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	46
319	Search for invisible decays of a Higgs boson using vector-boson fusion 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	45
318	Search for supersymmetry in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in [Formula: see text] TeV collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 318	4.2	44
317	Blaze-DEMGPU: Modular high performance DEM framework for the GPU architecture. <i>SoftwareX</i> , <b>2016</b> , 5, 62-66	2.7	44
316	Identification of boosted, hadronically decaying bosons and comparisons with ATLAS data taken at [Formula: see text] TeV. <i>European Physical Journal C</i> , <b>2016</b> , 76, 154	4.2	44
315	Angular analysis of $B \rightarrow d \rightarrow \mu\mu$ 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
314	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

313	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
312	A study of shape non-uniformity and poly-dispersity in hopper discharge of spherical and polyhedral particle systems using the Blaze-DEM GPU code. <i>Applied Mathematics and Computation</i> , <b>2018</b> , 319, 318-336	2.7	42
311	Measurement of the differential cross-sections of prompt and non-prompt production of [Formula: see text] and [Formula: see text] in collisions at [Formula: see text] and 8 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 283	4.2	42
310	Large-scale GPU based DEM modeling of mixing using irregularly shaped particles. <i>Advanced Powder Technology</i> , <b>2018</b> , 29, 2476-2490	4.6	42
309	Summary of the ATLAS experiment's sensitivity to supersymmetry after LHC Run 1 interpreted in the phenomenological MSSM. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	42
308	Search for heavy resonances in the and final states using proton-proton collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 293	4.2	41
307	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
306	Performance of algorithms that reconstruct missing transverse momentum in [Formula: see text]= 8 TeV proton-proton collisions in the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 241	4.2	38
305	Collision detection of convex polyhedra on the NVIDIA GPU architecture for the discrete element method. <i>Applied Mathematics and Computation</i> , <b>2015</b> , 267, 810-829	2.7	38
304	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
303	Charged-particle distributions at low transverse momentum in [Formula: see text] TeV interactions measured with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2016</b> , 76, 502	4.2	37
302	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
301	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
300	Measurement of quarkonium production in proton-lead and proton-proton collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 171	4.2	35
299	Measurement of the charged-particle multiplicity inside jets from [Formula: see text][Formula: see text] collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 322	4.2	35
298	Measurement of jet fragmentation in Pb+Pb and collisions at TeV with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2017</b> , 77, 379	4.2	35
297	Search for heavy particles decaying into top-quark pairs using lepton-plus-jets events in proton-proton collisions at with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 565	4.2	34
296	Industrial scale simulations of tablet coating using GPU based DEM: A validation study. <i>Chemical Engineering Science</i> , <b>2019</b> , 202, 462-480	4.4	33

295	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
294	Search for charged Higgs bosons in the $H \rightarrow \tau b$ decay channel in pp collisions at ( $\sqrt{s}=8$ ) TeV using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	33
293	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
292	Search for charged Higgs bosons decaying via $H \rightarrow \tau \nu$ in the $b$ -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
291	Measurement of the top quark mass in the [Formula: see text] and [Formula: see text] channels using [Formula: see text][Formula: see text] ATLAS data. <i>European Physical Journal C</i> , <b>2015</b> , 75, 330	4.2	32
290	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
289	Search for pair production of Higgs bosons in the ( $\overline{b}b$ ) final state using proton-proton collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	31
288	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
287	Measurements of b-jet tagging efficiency with the ATLAS detector using ( $\overline{t}t$ ) events at ( $\sqrt{s}=13$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	31
286	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
285	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
284	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
283	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
282	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
281	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
280	Search for single top-quark production via flavour-changing neutral currents at 8 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 55	4.2	28
279	Search for minimal supersymmetric standard model Higgs Bosons $H_{\pm}$ and for a [Formula: see text] boson in the [Formula: see text] final state produced in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 585	4.2	28
278	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

277	Hopper flow of irregularly shaped particles (non-convex polyhedra): GPU-based DEM simulation and experimental validation. <i>Chemical Engineering Science</i> , <b>2018</b> , 188, 34-51	4.4	28
276	Fiducial, total and differential cross-section measurements of $\gamma$ -channel single top-quark production in collisions at 8 TeV using data collected by the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 531	4.2	27
275	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
274	Study of the rare decays of $[Formula: see text]$ and $[Formula: see text]$ into muon pairs from data collected during the LHC Run 1 with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 513	4.2	27
273	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
272	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. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	26
271	Measurements of the production cross section of a $[Formula: see text]$ boson in association with jets in collisions at $[Formula: see text]$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 361	4.2	26
270	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
269	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
268	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
267	Search for bottom squark pair production in proton-proton collisions at $[Formula: see text]$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 547	4.2	25
266	Measurement of the inclusive isolated prompt photon cross section 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	25
265	Measurement of the top quark mass in the $(\bar{t} \rightarrow \ell \nu)$ 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
264	Measurement of the double-differential high-mass Drell-Yan cross section 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	24
263	Search for single production of vector-like quarks decaying into in collisions at $[Formula: see text]$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 442	4.2	24
262	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
261	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
260	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

259	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
258	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
257	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
256	Measurement of the inclusive cross-sections of single top-quark and top-antiquark t-channel production 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	22
255	Search for heavy long-lived multi-charged particles in collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 362	4.2	22
254	Search for $W$ $W/Z$ 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
253	A search for prompt lepton-jets 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	22
252	Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb $^{-1}$ 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
251	Search for heavy lepton resonances decaying to a Z boson and a lepton in pp collisions at $(\sqrt{s}=8)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	22
250	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
249	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
248	A numerical investigation into the effect of angular particle shape on blast furnace burden topography and percolation using a GPU solved discrete element model. <i>Chemical Engineering Science</i> , <b>2019</b> , 204, 9-26	4.4	21
247	Measurements of fiducial cross-sections for $t\bar{t}$ production with one or two additional jets in collisions at $\sqrt{s}=8$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 11	4.2	21
246	Study of hard double-parton scattering in four-jet events in pp collisions at $(\sqrt{s}=7)$ TeV with the ATLAS experiment. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	21
245	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
244	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
243	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
242	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



241	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
240	Measurement of the angular coefficients in Z-boson events using electron and muon pairs from data taken at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	20
239	Searches for heavy diboson resonances in pp collisions at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	20
238	Measurement of ( $W^{\pm}Z$ ) production cross sections and gauge boson polarisation 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	20
237	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
236	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
235	Search for gluinos in events with an isolated lepton, jets and missing transverse momentum at [ $\sqrt{s} = 13$ TeV] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 565	4.2	20
234	Measurement of the boson polarisation in [ $\sqrt{s} = 8$ TeV] events from collisions at [ $\sqrt{s} = 8$ TeV] in the lepton+jet channel with ATLAS. <i>European Physical Journal C</i> , <b>2017</b> , 77, 264	4.2	19
233	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
232	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
231	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
230	Charged-particle distributions in interactions at [ $\sqrt{s} = 13$ TeV] measured with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 403	4.2	19
229	Search for long-lived neutral particles in pp collisions at ( $\sqrt{s} = 13$ 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
228	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
227	Search for flavour-changing neutral current top quark decays $t \rightarrow Hq$ in pp collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-65	5.4	18
226	Search for metastable heavy charged particles with large ionisation energy loss in collisions at [ $\sqrt{s} = 13$ TeV] using the ATLAS experiment. <i>European Physical Journal C</i> , <b>2015</b> , 75, 407	4.2	18
225	Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in collision data at [ $\sqrt{s} = 13$ TeV] with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 87	4.2	18
224	Searches for heavy ZZ and ZW resonances in the $\bar{q}q$ and $q\bar{q}$ 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

223	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
222	Search for supersymmetry in a final state containing two photons and missing transverse momentum in $[Formula: see text] \sqrt{s} = 13$ TeV $[Formula: see text]$ collisions at the LHC using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 517	4.2	17
221	Effect of particle shape in grinding mills using a GPU based DEM code. <i>Minerals Engineering</i> , <b>2018</b> , 129, 71-84	4.9	17
220	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
219	Dark matter interpretations of ATLAS searches for the electroweak production of supersymmetric particles in ( $\sqrt{s}=8$ ) TeV proton-proton collisions. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	16
218	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
217	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
216	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
215	Measurement of the ( $\overline{t}W$ ) and ( $\overline{t}Z$ ) production cross sections in pp collisions at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	16
214	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
213	Search for the Higgs boson produced in association with a boson and decaying to four $c$ -quarks via two spin-zero particles in collisions at 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 605	4.2	16
212	Search for flavour-changing neutral current top-quark decays to $[Formula: see text]$ in $[Formula: see text]$ collision data collected with the ATLAS detector at $[Formula: see text]$ TeV. <i>European Physical Journal C</i> , <b>2016</b> , 76, 12	4.2	16
211	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
210	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at ( $\sqrt{s_{NN}} = 5.02 \sim 8$ TeV) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	16
209	Study on the particle breakage of ballast based on a GPU accelerated discrete element method. <i>Geoscience Frontiers</i> , <b>2020</b> , 11, 461-471	6	16
208	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
207	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> , <b>2019</b> , 79, 1	4.2	15
206	Determination of spin and parity of the Higgs boson in the $[Formula: see text]$ decay channel with the ATLAS detector. <i>European Physical Journal C</i> , <b>2015</b> , 75, 231	4.2	15

205	The effect of particle shape on the packed bed effective thermal conductivity based on DEM with polyhedral particles on the GPU. <i>Chemical Engineering Science</i> , <b>2020</b> , 219, 115584	4.4	15
204	Measurements of $ZS$ and $X(3872) \rightarrow J/\psi \chi_{c0}$ production 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	15
203	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
202	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
201	Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\chi\chi$ collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2018</b> , 78, 625	4.2	15
200	Measurement of the $[Formula: see text]$ and $[Formula: see text]$ production cross sections in multilepton final states using 3.2 fb $[Formula: see text]$ of $[Formula: see text]$ collisions at $[Formula: see text] = 13$ TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 40	4.2	14
199	Measurements of electroweak $[Formula: see text]$ 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
198	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
197	Search for the production of single vector-like and excited quarks in the $Wt$ final state 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	14
196	Study of $(W/Z)H$ production and Higgs boson couplings using $H \rightarrow W^* W^*$ decays with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	14
195	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
194	Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow aa \rightarrow 4b$ 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
193	Measurements of top-quark pair differential cross-sections in the $[Formula: see text]$ channel in collisions at $[Formula: see text]$ TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 292	4.2	13
192	Search for triboson $[Formula: see text]$ production in collisions at $[Formula: see text]$ $[Formula: see text]$ with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 141	4.2	13
191	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> , <b>2019</b> , 2019, 1	5.4	13
190	Measurement of fiducial differential cross sections of gluon-fusion production of Higgs bosons decaying to $WW^* \rightarrow e\mu$ with the ATLAS detector at $(\sqrt{s}=8)$ TeV. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
189	Search for new phenomena in events with a photon and missing transverse momentum in pp collisions at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	13
188	Identification of high transverse momentum top quarks 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	13

187	Study of the $[Formula: see text]$ and $[Formula: see text]$ decays with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 4	4.2	13
186	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
185	Fluctuations of anisotropic flow in Pb+Pb collisions at $(\sqrt{\langle s \rangle_{NN}}) = 5.02$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	13
184	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
183	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
182	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
181	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
180	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
179	Higgs boson production cross-section measurements and their EFT interpretation in the $(4\ell\ell)$ 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
178	Search for new phenomena with photon+jet events in proton-proton collisions at $(\sqrt{s}=13)$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	12
177	Measurement of the production cross-section of a single top quark in association with a W boson at 8 TeV with the ATLAS experiment. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	12
176	Search for strong gravity in multijet final states produced in pp collisions at $(\sqrt{s}=13)$ TeV using the ATLAS detector at the LHC. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	12
175	Probing lepton flavour violation via neutrinoless $[Formula: see text]$ decays with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 232	4.2	12
174	Search for anomalous couplings in the W tb vertex from the measurement of double differential angular decay rates of single top quarks produced in the t-channel with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1-46	5.4	12
173	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
172	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> , <b>2019</b> , 2019, 1	5.4	12
171	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
170	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

169	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
168	Measurements of top quark spin observables in ( $\overline{t}$ ) events using dilepton final states in ( $\sqrt{s}=8$ ) TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	12
167	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> , <b>2019</b> , 2019, 1	5.4	12
166	A cohesive fracture model for discrete element method based on polyhedral blocks. <i>Powder Technology</i> , <b>2020</b> , 359, 190-204	5.2	12
165	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
164	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
163	Identification of boosted Higgs bosons decaying into b-quark pairs with the ATLAS detector at 13 TeV. <i>European Physical Journal C</i> , <b>2019</b> , 79,	4.2	11
162	Measurement of lepton differential distributions and the top quark mass in production in collisions at 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 804	4.2	11
161	Probing the W tb vertex structure in t-channel single-top-quark production and decay 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	11
160	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
159	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
158	Measurement of the cross-section for producing a W boson in association with a single top quark in pp collisions at ( $\sqrt{s}=13$ ) TeV with ATLAS. <i>Journal of High Energy Physics</i> , <b>2018</b> , 2018, 1	5.4	10
157	A search for top squarks with R-parity-violating decays to all-hadronic final states with the ATLAS detector in ( $\sqrt{s}=8$ ) TeV proton-proton collisions. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	10
156	Measurement of the CP-violating phase $\phi_s$ and the $B^0_s$ meson decay width difference with $B^0_s \rightarrow J/\psi$ decays in ATLAS. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	10
155	Search for diboson resonances in hadronic final states in 139 fb <sup>-1</sup> 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
154	Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in collisions at 13 TeV using the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 765	4.2	10
153	Measurement of the ZZ production cross section in proton-proton collisions at ( $\sqrt{s}=8$ ) TeV using the ZZ $\rightarrow \tau\tau$ and (ZZto $\{e\ell\}^+\{e\ell\}^+\nu$ ) decay channels with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9
152	Measurement of charged-particle distributions sensitive to the underlying event in ( $\sqrt{s}=13$ ) TeV proton-proton collisions with the ATLAS detector at the LHC. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	9

151	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
150	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
149	3D gradient corrected SPH for fully resolved particle-fluid interactions. <i>Applied Mathematical Modelling</i> , <b>2020</b> , 78, 816-840	4.5	9
148	DEM analysis of residence time distribution during twin screw granulation. <i>Powder Technology</i> , <b>2021</b> , 377, 924-938	5.2	9
147	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
146	Benefits of virtual calibration for discrete element parameter estimation from bulk experiments. <i>Granular Matter</i> , <b>2019</b> , 21, 1	2.6	8
145	Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $(\sqrt{s}) = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2019</b> , 2019, 1	5.4	8
144	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> , <b>2019</b> , 2019, 1	5.4	8
143	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
142	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> , <b>2020</b> , 2020, 1	5.4	8
141	Beam-induced and cosmic-ray backgrounds observed in the ATLAS detector during the LHC 2012 proton-proton running period. <i>Journal of Instrumentation</i> , <b>2016</b> , 11, P05013-P05013	1	8
140	Search for scalar resonances decaying into $\mu\mu$ 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
139	Search for new phenomena in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $[\text{Formula: see text}][\text{Formula: see text}][\text{Formula: see text}]$ collisions with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 144	4.2	8
138	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
137	Evidence for $(\text{t}\bar{\text{t}}\text{t}\bar{\text{t}})$ production in the multilepton final state in proton-proton collisions at $(\sqrt{s}=13)$ (text {TeV}) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	8
136	Search for light long-lived neutral particles produced in pp collisions at $(\sqrt{s} = 13\text{-}\text{TeV})$ 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
135	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
134	Measurements of top-quark pair spin correlations in the $(\text{e}\mu)$ channel at $(\sqrt{s} = 13)$ TeV using pp collisions in the ATLAS detector. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	8

133	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
132	Search for heavy resonances decaying into a pair of Z bosons in the ( $e^+e^-e^+e^-$ ) and ( $e^+e^-e^+\nu_{\bar{\nu}}$ ) final states using 139 ( $\text{fb}^{-1}$ ) of proton-proton collisions at ( $\sqrt{s}$ ) = 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	8
131	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
130	Search for the Standard Model Higgs boson produced by vector-boson fusion and decaying to bottom quarks in ( $\sqrt{s}$ ) = 8 TeV pp collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	8
129	Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 $\text{fb}^{-1}$ of ( $\sqrt{s}$ ) = 13 TeV pp collision data with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	8
128	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
127	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
126	Measurements of inclusive and differential fiducial cross-sections of ( $\bar{t}\gamma$ ) 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
125	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
124	Analysis of parallel spatial partitioning algorithms for GPU based DEM. <i>Computers and Geotechnics</i> , <b>2020</b> , 125, 103708	4.4	7
123	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
122	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
121	Search for squarks and gluinos in events with hadronically decaying tau leptons, jets and missing transverse momentum in proton-proton collisions at [Formula: see text] TeV recorded with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 683	4.2	7
120	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
119	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
118	Measurement of the ( $\bar{t}\gamma$ ) 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
117	Measurements of top-quark pair to Z-boson cross-section ratios at ( $\sqrt{s}$ ) = 13, 8, 7 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	7
116	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

115	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
114	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
113	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
112	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
111	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
110	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the ( $\ell\ell b\bar{b}$ ) and ( $\ell\ell WW$ ) final states in pp collisions at ( $\sqrt{s}=13$ ) (TeV) with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	7
109	Measurement of the [Formula: see text] dijet cross section in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 670	4.2	7
108	Search for new phenomena in different-flavour high-mass dilepton final states in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 541	4.2	7
107	Search for direct top squark pair production in final states with two tau leptons in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 81	4.2	7
106	Measurement of ( $W^{\pm}p_{\perp}$ ) boson production in Pb+Pb collisions at ( $\sqrt{s_{\text{NN}}} = 5.02\text{--}8.76$ ) TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2019</b> , 79, 1	4.2	7
105	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
104	Measurements of WH and ZH production in the ( $H \rightarrow b\bar{b}$ ) decay channel 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
103	A new method to distinguish hadronically decaying boosted bosons from bosons using the ATLAS detector. <i>European Physical Journal C</i> , <b>2016</b> , 76, 238	4.2	6
102	Measurements of charge and CP asymmetries in b-hadron decays using top-quark events collected by the ATLAS detector in pp collisions at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	6
101	Top-quark mass measurement in the all-hadronic ( $\bar{t}t$ ) decay channel at ( $\sqrt{s}=8$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2017</b> , 2017, 1	5.4	6
100	Search for ( $\bar{t}t$ ) 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
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> , <b>2021</b> , 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> , <b>2021</b> , 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> , <b>2021</b> , 2021, 1	5.4	6
96	Measurement of the ( $Z \rightarrow \nu \bar{\nu}$ ) 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
95	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
94	Measurement of jet activity produced in top-quark events with an electron, a muon and two -tagged jets in the final state in collisions at [Formula: see text] TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2017</b> , 77, 220	4.2	5
93	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
92	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
91	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
90	DEM GPU studies of industrial scale particle simulations for granular flow civil engineering applications. <i>EPJ Web of Conferences</i> , <b>2017</b> , 140, 03071	0.3	5
89	Measurement of four-jet differential cross sections in ( $\sqrt{s}$ ) = 8 TeV proton-proton collisions using the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1-76	5.4	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> , <b>2020</b> , 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> , <b>2020</b> , 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> , <b>2020</b> , 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> , <b>2021</b> , 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> , <b>2021</b> , 81, 1	4.2	5
83	Measurement of event-shape observables in [Formula: see text] events in collisions at [Formula: see text] with the ATLAS detector at the LHC. <i>European Physical Journal C</i> , <b>2016</b> , 76, 375	4.2	5
82	Measurement of the relative width difference of the ( $B^0 \rightarrow \bar{B}^0$ ) system with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2016</b> , 2016, 1	5.4	5
81	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
80	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

79	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
78	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
77	Measurement of jet activity in top quark events using the eFinal state with two b-tagged jets 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	4
76	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
75	Alignment of the ATLAS Inner Detector in Run 2. <i>European Physical Journal C</i> , <b>2020</b> , 80, 1	4.2	4
74	Computing with Non-convex Polyhedra on the GPU. <i>Springer Proceedings in Physics</i> , <b>2017</b> , 1371-1377	0.2	4
73	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
72	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
71	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
70	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
69	The influence of faceted particle shapes on material dynamics in screw conveying. <i>Chemical Engineering Science</i> , <b>2021</b> , 243, 116654	4.4	4
68	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
67	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
66	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
65	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
64	Measurement of the $k_t$ splitting scales in Z 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
63	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
62	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

61	GPU DEM Simulations and Experimental Studies of Ball Milling Process for Various Particle Shapes. <i>Springer Proceedings in Physics</i> , <b>2017</b> , 1345-1352	0.2	3
60	Industrial Scale Particle Simulations on the GPU Using the Blaze-DEM Code. <i>Springer Proceedings in Physics</i> , <b>2017</b> , 1379-1388	0.2	3
59	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
58	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
57	Simulation of rock fracture process based on GPU-accelerated discrete element method. <i>Powder Technology</i> , <b>2021</b> , 377, 640-656	5.2	3
56	Measurement of hadronic event shapes in high- $p_T$ 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
55	Discrete element model study into effects of particle shape on backfill response to cyclic loading behind an integral bridge abutment. <i>Granular Matter</i> , <b>2018</b> , 20, 1	2.6	3
54	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
53	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> , <b>2020</b> , 2020, 1	5.4	2
52	BlazeDEM3D-GPU A Large Scale DEM simulation code for GPUs. <i>EPJ Web of Conferences</i> , <b>2017</b> , 140, 06025	5.3	2
51	Towards reproducible experimental studies for non-convex polyhedral shaped particles. <i>EPJ Web of Conferences</i> , <b>2017</b> , 140, 06028	0.3	2
50	Search for low-scale gravity signatures in multi-jet final states with the ATLAS detector at ( $\sqrt{s}=8$ ) TeV. <i>Journal of High Energy Physics</i> , <b>2015</b> , 2015, 1	5.4	2
49	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
48	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
47	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> , <b>2019</b> , 2019, 1	5.4	2
46	Measurements of inclusive and differential cross-sections of combined ( $\overline{t}\gamma$ ) and $tW$ production in the $e\tau$ channel at 13 TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2020</b> , 2020, 1	5.4	2
45	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
44	GPU-enhanced DEM analysis of flow behaviour of irregularly shaped particles in a full-scale twin screw granulator. <i>Particuology</i> , <b>2021</b> , 61, 30-30	2.8	2

43	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
42	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
41	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
40	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
39	Boundary condition enforcement for renormalised weakly compressible meshless Lagrangian methods. <i>Engineering Analysis With Boundary Elements</i> , <b>2021</b> , 130, 332-351	2.6	2
38	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
37	A search for an excited muon decaying to a muon and two jets in pp collisions at ( $\sqrt{s}$ )=8 TeV with the ATLAS detector. <i>New Journal of Physics</i> , <b>2016</b> , 18, 073021	2.9	1
36	Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in pp collision data at ( $\sqrt{s}$ )=8 TeV with the ATLAS detector <b>2016</b> , 76, 1		1
35	Measurement of the W-boson mass in pp collisions at ( $\sqrt{s}$ )=7 TeV with the ATLAS detector <b>2018</b> , 78, 1		1
34	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
33	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
32	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
31	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
30	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
29	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
28	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
27	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
26	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

25	Measurements of the inclusive and differential production cross sections of a top-quark $\bar{t}$ quark 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
24	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
23	Search for chargino $\bar{\chi}$ 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
22	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
21	Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	1
20	A meshless Lagrangian particle-based porosity formulation for under-resolved generalised finite difference-DEM coupling in fluidised beds. <i>Powder Technology</i> , <b>2022</b> , 398, 117079	5.2	0
19	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
18	Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2022</b> , 2022, 1	5.4	0
17	Observation of electroweak production of two jets in association with an isolated photon and missing transverse momentum, and search for a Higgs boson decaying into invisible particles at 13 TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2022</b> , 82, 1	4.2	0
16	A DEM study on the thermal conduction of granular material in a rotating drum using polyhedral particles on GPUs. <i>Chemical Engineering Science</i> , <b>2022</b> , 252, 117491	4.4	0
15	Measurement of the $t\bar{t}$ production cross section in pp collisions at ( $\sqrt{s} = 13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
14	Measurements of $W+W\bar{W}$ jet production cross-sections in pp collisions at ( $\sqrt{s} = 13$ ) TeV with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
13	Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at ( $\sqrt{s}=13$ , TeV). <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	0
12	Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. <i>Journal of High Energy Physics</i> , <b>2021</b> , 2021, 1	5.4	0
11	Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at ( $\sqrt{s}=13$ ) TeV with the ATLAS detector. <i>European Physical Journal C</i> , <b>2021</b> , 81, 1	4.2	0
10	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> , <b>2022</b> , 2022, 1	5.4	0
9	AtlFast3: The Next Generation of Fast Simulation in ATLAS. <i>Computing and Software for Big Science</i> , <b>2022</b> , 6, 1	6	0
8	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

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	○
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> , <b>2021</b> , 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> , <b>2021</b> , 2021, 1	5.4	○
4	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	○
3	The Evolution of Grinding Mill Power Models. <i>Mining, Metallurgy and Exploration</i> , <b>2019</b> , 36, 151-157	1.1	
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