Ian Brock

List of Publications by Year in descending order

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| | | 47006 | 33894 |
|----------|----------------|--------------|----------------|
| 148 | 10,300 | 47 | 99 |
| papers | citations | h-index | g-index |
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| | | | |
| 154 | 154 | 154 | 7688 |
| all docs | docs citations | times ranked | citing authors |
| | | | J |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 1 | The ATLAS Simulation Infrastructure. European Physical Journal C, 2010, 70, 823-874. | 3.9 | 1,187 |
| 2 | Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317. | 3.9 | 489 |
| 3 | Combined measurement and QCD analysis of the inclusive e $\hat{A}\pm$ p scattering cross sections at HERA. Journal of High Energy Physics, 2010, 2010, 1. | 4.7 | 458 |
| 4 | Muon reconstruction performance of the ATLAS detector in proton–proton collision data at \$\$sqrt{s}\$\$ s =13ÂTeV. European Physical Journal C, 2016, 76, 292. | 3.9 | 453 |
| 5 | Combination of measurements of inclusive deep inelastic $fe^{pm} = \hat{A} \pm p$ scattering cross sections and QCD analysis of HERA data. European Physical Journal C, 2015, 75, 1. | 3.9 | 383 |
| 6 | Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490. | 3.9 | 325 |
| 7 | Performance of pile-up mitigation techniques for jets in \$\$pp\$\$ p p collisions at \$\$sqrt{s}=8\$\$. European Physical Journal C, 2016, 76, 581. | 3.9 | 298 |
| 8 | Luminosity determination in pp collisions at $\$$ sqrt $\{s\}$ \$\$ s = 8 TeV using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653. | 3.9 | 279 |
| 9 | Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $s=7$ and $\hat{s}=7$ in the ATLAS experiment. European Physical Journal C, 2016, 76, 6. | 3.9 | 274 |
| 10 | Jet energy measurement and its systematic uncertainty in protonâ \in "proton collisions at \$\$sqrt{s}=7\$\$ s = 7 ÂTeV with the ATLAS detector. European Physical Journal C, 2015, 75, 17. | 3.9 | 268 |
| 11 | Performance of the ATLAS Trigger System in 2010. European Physical Journal C, 2012, 72, 1. | 3.9 | 259 |
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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466. | 3.9 | 145 |
| 20 | Precision measurement and interpretation of inclusive W^+ W^+ , $W^ W^-$. European Physical Journal C, 2017, 77, 367. | 3.9 | 145 |
| 21 | ZEUS next-to-leading-order QCD analysis of data on deep inelastic scattering. Physical Review D, 2003, 67, . | 4.7 | 139 |
| 22 | ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. European Physical Journal C, 2015, 75, 510. | 3.9 | 138 |
| 23 | Measurement of the $Z\hat{I}^3$ * boson transverse momentum distribution in pp collisions at s = 7 \$\$ sqrt{s}=7 \$\$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 131 |
| 24 | ATLAS b-jet identification performance and efficiency measurement with $f(x) = 13$ events in pp collisions at $f(x) = 13$ for European Physical Journal C, 2019, 79, 1. | 3.9 | 130 |
| 25 | Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\$$ sqrt $\{s\}=8, -\{mathrm \{TeV\}\}$ \$\$ s = 8 TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538. | 3.9 | 115 |
| 26 | Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1. | 3.9 | 93 |
| 27 | Search for the b b \hat{A}^- \$\$ boverline{b} \$\$ decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 89 |
| 28 | Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\$sqrt\{s\}=13\$$ TeV. European Physical Journal C, 2021, 81, 1. | 3.9 | 82 |
| 29 | Search for dark matter at $\frac{s}=13~mathrm{TeV}$ s = 13 TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393. | 3.9 | 80 |
| 30 | Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton \hat{s} proton collision data at $\frac{s}{r} = 13\$\hat{s}$ European Physical Journal C, 2019, 79, 1. | 3.9 | 77 |
| 31 | Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673. | 3.9 | 75 |
| 32 | Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at \$sqrt{s}=7mbox{~TeV}\$ with the ATLAS detector. European Physical Journal C, 2011, 71, 1. | 3.9 | 73 |
| 33 | Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton–proton collisions at the LHC. European Physical Journal C, 2017, 77, 332. | 3.9 | 71 |
| 34 | Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\$$ qrt $\{s\}$ =8 $\$$ s = 8 $\$$,hbox $\{TeV\}$ \$\$ TeV. European Physical Journal C, 2015, 75, 303. | 3.9 | 70 |
| 35 | Evidence for the H \hat{a} †' b b \hat{A}^- \$\$ Ho boverline{b} \$\$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 64 |
| 36 | Jet energy scale and resolution measured in proton–proton collisions at \$\$sqrt{s}=13\$\$ÂTeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 64 |

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|----|--|-------------|-----------|
| 37 | Measurement of the longitudinal proton structure function at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 682, 8-22. | 4.1 | 62 |
| 38 | Prompt and non-prompt \$\$J/psi \$\$ J / $\ddot{\Gamma}$ and \$\$psi (2mathrm {S})\$\$ $\ddot{\Gamma}$ (2 S) suppression at high transverse momentum in \$\$5.02~mathrm {TeV}\$\$ 5.02 TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762. | 3.9 | 61 |
| 39 | Search for direct top squark pair production in events with a $$Z$ \$ Z boson, 5 \$ b -jets and missing transverse momentum in $$\sqrt{s}=8$ \$ s = 8 TeV $$pp$ \$ p collisions with the ATLAS detector. European Physical Journal C, 2014, 74, 2883. | 3.9 | 55 |
| 40 | Search for pair production of Higgs bosons in the $\$\$$ boverline $\{b\}$ boverline $\{b\}$ $\$\$$ final state using proton-proton collisions at $\$\$$ sqrt $\{s\}=13$ $\$\$$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 55 |
| 41 | Performance of jet substructure techniques for large-R jets in proton-proton collisions at \$ sqrt{s}=7 \$ TeV using the ATLAS detector. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 52 |
| 42 | Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295. | 3.9 | 50 |
| 43 | Search for direct top squark pair production in final states with two leptons in $\$$ sqrt $\{s\}$ = 13 $\$$ s = 13 TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898. | 3.9 | 50 |
| 44 | Combination and QCD analysis of charm and beauty production cross-section measurements in deep inelastic ep scattering at HERA. European Physical Journal C, 2018, 78, 1. | 3.9 | 49 |
| 45 | Constraints on mediator-based dark matter and scalar dark energy models using \$\$ sqrt{s} \$\$ = 13 TeV pp collision data collected by the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 49 |
| 46 | Test of CP invariance in vector-boson fusion production of the Higgs boson using the Optimal Observable method in the ditau decay channel with the ATLAS detector. European Physical Journal C, 2016, 76, 658. | 3.9 | 48 |
| 47 | Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fbâ^1 of \$\$ sqrt{s}=13 \$\$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 48 |
| 48 | Measurement of the Higgs boson coupling properties in the H \hat{a}^{\dagger} ZZ \hat{a}^{-} \hat{a}^{\dagger} 4 \hat{a}^{\dagger} , decay channel at \$\$ sqrt{s}=13 TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | \$\$ 4.7 | 46 |
| 49 | Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. European Physical Journal C, 2019, 79, 1. | 3.9 | 46 |
| 50 | Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\$$ sqrt{mathrm{s}} $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 46 |
| 51 | Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 1. | 3.9 | 45 |
| 52 | Search for supersymmetry at \sqrt{s} = 8 TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 45 |
| 53 | Performance of top-quark and \$\$varvec{W}\$\$ W -boson tagging with ATLAS in Run 2 of the LHC. European Physical Journal C, 2019, 79, 1. | 3.9 | 42 |
| 54 | Higgs boson production cross-section measurements and their EFT interpretation in the $\$\$4ell \$\$$ decay channel at $\$\$qrt\{s\}=\$\$13ÂTeV$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 41 |

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|----|---|-----|-----------|
| 55 | Measurements of b-jet tagging efficiency with the ATLAS detector using $\$$ toverline{t} $\$$ events at $\$$ sqrt{s}=13 $\$$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 40 |
| 56 | Search for heavy resonances decaying into a pair of Z bosons in the \$\$ell $^+$ ell $^-$ ell $^-$ +ell $^-$ \$ and \$\$ell $^+$ ell $^-$ u {{ar{u }}}\$\$ final states using 139 \$\$mathrm {fb}^{-1}\$\$ of protonâ \in "proton collisions at \$\$sqrt{s} = 13,\$\$TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 40 |
| 57 | Measurements of WH and ZH production in the $\$$ H ightarrow bar{b}\$\$ decay channel in pp collisions at $\$$13$,ext {Te}ext {V}\$\$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 38 |
| 58 | Electron and photon energy calibration with the ATLAS detector using 2015–2016 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P03017-P03017. | 1.2 | 37 |
| 59 | Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fbâ°'1 of $\$$ sqrt $\{s\}$ $\$$ = 13 TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 37 |
| 60 | Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\$\$ $ sqrt $\{s\}$ $\$\$ = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 36 |
| 61 | Search for a scalar partner of the top quark in the all-hadronic $f(x)$ plus missing transverse momentum final state at $f(x)$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 36 |
| 62 | Measurement of the inclusive jet cross-section in proton-proton collisions at $s=7$ \$\$ sqrt{s}=7 \$\$ TeV using 4.5 fba^1 of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 35 |
| 63 | Measurements of top-quark pair differential and double-differential cross-sections in the $\$$ ell $\$$ +jets channel with pp collisions at $\$$ sqrt $\{s\}$ =13 $\$$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 34 |
| 64 | 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 $protect$ collisions at $protect$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 34 |
| 65 | Measurements of the Higgs boson inclusive and differential fiducial cross sections in the 4 \$ell \$\$ decay channel at \$\$sqrt{s}\$\$ = 13 TeV. European Physical Journal C, 2020, 80, 1. | 3.9 | 32 |
| 66 | Measurement of inclusive and differential cross sections in the H \hat{a} †' ZZ * \hat{a} †' 4 \hat{a} ," decay channel in pp collisions at s = 13 \$\$ sqrt{s}=13 \$\$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 31 |
| 67 | 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. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 30 |
| 68 | Evidence for \$\$tar{t}\$tar{t}\$\$ production in the multilepton final state in proton–proton collisions at \$\$sqrt{s}=13\$\$Â\$\$ext {TeV}\$\$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 30 |
| 69 | A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp-collision data with the ATLAS detector. European Physical Journal C, 2017, 77, 26. | 3.9 | 29 |
| 70 | Search for heavy diboson resonances in semileptonic final states in pp collisions at $\$sqrt\{s\}=13\$$ ATeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 29 |
| 71 | Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8 $ \$\$ sqrt s =8\$\$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 28 |
| 72 | Search for charginoâ€"neutralino pair production in final states with three leptons and missing transverse momentum in \$\$sqrt{s} = 13\$\$ÂTeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 28 |

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|----|--|-----|-----------|
| 73 | Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\ddot{\text{I}}_{\text{N}}$ -lepton in pp collisions at \$\$ sqrt{s} \$\$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 27 |
| 74 | Measurements of electroweak \$\$Wjj \$\$ W j j production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474. | 3.9 | 26 |
| 75 | 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 $\$\$qrt{s}=13\$\$\$\$vart{TeV}$$$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 26 |
| 76 | Measurement of the cross-section and charge asymmetry of W bosons produced in proton–proton collisions at \$\$sqrt{s}=8~ext {TeV}\$\$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 77 | Measurement of fiducial and differential W^+W^- production cross-sections at $$$ sqrt $s=13$ \$\$ÂTeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 78 | Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 24 |
| 79 | Measurement of the inclusive jet cross-sections in proton-proton collisions at $s=8$ \$\$ sqrt{s}=8 \$\$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 80 | 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{mathrm{s}} $\$$ = 13 TeV. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 23 |
| 81 | AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1. | 2.9 | 23 |
| 82 | Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at sqrts = 8 TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 22 |
| 83 | Searches for scalar leptoquarks and differential cross-section measurements in dilepton–dijet events in proton–proton collisions at a centre-of-mass energy of \$\$varvec{sqrt{s}}\$\$ = 13ÂTeV with the ATLAS experiment. European Physical Journal C, 2019, 79, 1. | 3.9 | 22 |
| 84 | Measurements of top-quark pair spin correlations in the $\$$ emu $\$$ channel at $\$$ sqrt $\{s\}$ = 13 $\$$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 22 |
| 85 | Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\$$ sqrt{mathrm{s}} $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 22 |
| 86 | The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526. | 3.9 | 21 |
| 87 | Search for the Standard Model Higgs boson decaying into b b \hat{A}^- \$\$ boverline{b} \$\$ produced in association with top quarks decaying hadronically in pp collisions at s = 8 \$\$ sqrt{s}=8 \$\$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 21 |
| 88 | Measurement of k T splitting scales in Wâ†'â,," $\hat{1}$ ½ events at \$sqrt{s} = 7 mathrm{TeV}\$ with the ATLAS detector. European Physical Journal C, 2013, 73, 2432. | 3.9 | 19 |
| 89 | Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fbâ^'1 of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 19 |
| 90 | Measurement of light-by-light scattering and search for axion-like particles with 2.2 nbâ^1 of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 19 |

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|-----|---|-----|-----------|
| 91 | Search for dark matter in association with an energetic photon in pp collisions at $\$$ sqrt $\{s\}$ $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 18 |
| 92 | Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton–proton collisions at \$\$sqrt{s}\$\$ = 13ÂTeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 18 |
| 93 | Search for new phenomena in final states with b-jets and missing transverse momentum in $\$\$$ sqrt{mathrm{s}} $\$\$ = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 18 |
| 94 | Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\$\$$ sqrt $\{s\}=13$ $\$\$$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 17 |
| 95 | Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 17 |
| 96 | Search for the HH \hat{a} †' \$\$ boverline{b}boverline{b} \$\$ process via vector-boson fusion production using proton-proton collisions at \$\$ sqrt{s} \$\$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 17 |
| 97 | Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\$\$ $ sqrt $\$$ = 13, $\$$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 17 |
| 98 | Measurement of differential cross sections and W+/W \hat{a} ° cross-section ratios for W boson production in association with jets at \$\$ sqrt{s}=8 \$\$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 16 |
| 99 | Optimisation of large-radius jet reconstruction for the ATLAS detector in 13ÂTeV proton–proton collisions. European Physical Journal C, 2021, 81, 1. | 3.9 | 15 |
| 100 | Determination of jet calibration and energy resolution in proton–proton collisions at \$\$sqrt{s} = 8~hbox {TeV}\$\$ using the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 15 |
| 101 | Measurement of VH, \$\$ mathrm{H}o mathrm{b}overline{mathrm{b}} \$\$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 14 |
| 102 | Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $$$ sqrt ${s}$ $$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 14 |
| 103 | Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at \$\$sqrt{s}=13,ext {TeV}\$\$. European Physical Journal C, 2021, 81, 1. | 3.9 | 14 |
| 104 | Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\$$ sqrt{mathrm{s}} $\$$ = 13 TeV using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 14 |
| 105 | Search for $\$$ toverline{t} $\$$ resonances in fully hadronic final states in pp collisions at $\$$ sqrt{s} $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 14 |
| 106 | Measurement of the c-jet mistagging efficiency in $\frac{t}{\$\hat{a}}$ events using pp collision data at $\frac{1}{\$}$ collected with the ATLAS detector. European Physical Journal C, 2022, 82, . | 3.9 | 14 |
| 107 | Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at \$\$sqrt{s}=13\$\$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 13 |
| 108 | Observation of the associated production of a top quark and a Z boson in pp collisions at \$\$ sqrt{s} \$\$= 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 12 |

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|-----|---|-----|-----------|
| 109 | Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton–proton collisions at ATLAS. European Physical Journal C, 2021, 81, 1. | 3.9 | 12 |
| 110 | Search for supersymmetry in events with four or more charged leptons in 139 fba^'1 of $\$$ sqrt $\{s\}$ = 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 12 |
| 111 | Measurements of the inclusive and differential production cross sections of a top-quark–antiquark pair in association with a ZÂboson at \$\$sqrt{s} = 13\$\$ÂTeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 12 |
| 112 | Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\$$ sqrt $\{s\}$ $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 12 |
| 113 | Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1. | 3.9 | 12 |
| 114 | Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\$$ sqrt $\{s\}$ = 7\$\$, 8 and 13ÂTeV. European Physical Journal C, 2022, 82, 1. | 3.9 | 12 |
| 115 | Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\$$ sqrt $\{s\}$ $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 11 |
| 116 | Determination of the parton distribution functions of the proton from ATLAS measurements of differential W \hat{A} ± and Z boson production in association with jets. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 10 |
| 117 | Measurement of the t\$\$ overline{t} $$$t$$ overline{t} \$\$ production cross section in pp collisions at \$\$ sqrt{s} \$\$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 10 |
| 118 | Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with 139 fba $^{\circ}$ 1 of pp collision data at \$\$ sqrt{s} \$\$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 10 |
| 119 | Search for dark matter produced in association with a Standard Model Higgs boson decaying into b-quarks using the full Run 2 dataset from the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 10 |
| 120 | Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton–proton collisions at 8ÂTeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 9 |
| 121 | Search for dark matter produced in association with a single top quark in \$\$sqrt{s}=13\$\$ÂTeV \$\$pp\$\$ collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 9 |
| 122 | Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $s = 13 $ sqrt{ s }=13 \$\$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 8 |
| 123 | Measurements of W+W \hat{a} + \hat{a} %¥ 1 jet production cross-sections in pp collisions at \$\$ sqrt{s} \$\$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 8 |
| 124 | Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 8 |
| 125 | Reconstruction and identification of boosted di-ï,, systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 8 |
| 126 | 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 13Â\$\$ext {TeV}\$\$ with the ATLAS detector. European Physical Journal C, 2022, 82, 1. | 3.9 | 8 |

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|-----|--|-----|-----------|
| 127 | Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using \$\$sqrt{s} = 13hbox { TeV}\$\$ proton–proton collision data. European Physical Journal C, 2021, 81, 1. | 3.9 | 7 |
| 128 | Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1. | 3.9 | 7 |
| 129 | Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\$$ sqrt $\{s\}=13$ \$ÂTeV with the ATLAS detector. European Physical Journal C, 2022, 82, . | 3.9 | 7 |
| 130 | Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\$$ sqrt $\{s\}$ $\$$ = 13 and 8 TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 6 |
| 131 | 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. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 6 |
| 132 | Performance of the ATLAS Level-1 topological trigger in RunÂ2. European Physical Journal C, 2022, 82, 1. | 3.9 | 6 |
| 133 | A search for the decays of stopped long-lived particles at $\$$ sqrt{mathrm{s}} $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 5 |
| 134 | Search for phenomena beyond the Standard Model in events with large b-jet multiplicity using the ATLAS detector at the LHC. European Physical Journal C, 2021, 81, 1. | 3.9 | 5 |
| 135 | The ATLAS inner detector trigger performance in pp collisions at 13ÂTeV during LHC Run 2. European Physical Journal C, 2022, 82, 1. | 3.9 | 5 |
| 136 | Measurement of hadronic event shapes in high-pT multijet final states at $\$$ sqrt $\{s\}$ $\$$ = 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 4 |
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