

Otmar Biebel

List of Publications by Year in descending order

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Version: 2024-02-01

191
papers

30,136
citations

28274

55
h-index

4432

172
g-index

197
all docs

197
docs citations

197
times ranked

15896
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 716, 1-29. | 4.1 | 6,386 |
| 2 | Review of Particle Physics. Physical Review D, 2018, 98, . | 4.7 | 5,390 |
| 3 | Review of Particle Physics. Progress of Theoretical and Experimental Physics, 2020, 2020, . | 6.6 | 3,177 |
| 4 | The ATLAS Experiment at the CERN Large Hadron Collider. Journal of Instrumentation, 2008, 3, S08003-S08003. | 1.2 | 1,752 |
| 5 | The ATLAS Simulation Infrastructure. European Physical Journal C, 2010, 70, 823-874. | 3.9 | 1,187 |
| 6 | Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS Experiments. Physical Review Letters, 2015, 114, 191803. | 7.8 | 1,062 |
| 7 | Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317. | 3.9 | 489 |
| 8 | Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 473 |
| 9 | Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 292. | 3.9 | 453 |
| 10 | Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490. | 3.9 | 325 |
| 11 | Evidence for the spin-0 nature of the Higgs boson using ATLAS data. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 120-144. | 4.1 | 307 |
| 12 | Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 581. | 3.9 | 298 |
| 13 | Luminosity determination in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653. | 3.9 | 279 |
| 14 | Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $\sqrt{s} = 7$ and 8 TeV in the ATLAS experiment. European Physical Journal C, 2016, 76, 6. | 3.9 | 274 |
| 15 | Jet energy measurement and its systematic uncertainty in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 17. | 3.9 | 268 |
| 16 | Performance of the ATLAS Trigger System in 2010. European Physical Journal C, 2012, 72, 1. | 3.9 | 259 |
| 17 | | | |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Measurement of the muon reconstruction performance of the ATLAS detector using 2011 and 2012 LHC proton-proton collision data. European Physical Journal C, 2014, 74, 3130. | 3.9 | 213 |
| 20 | Jet energy resolution in proton-proton collisions at $\sqrt{s}=7$ TeV recorded in 2010 with the ATLAS detector. European Physical Journal C, 2013, 73, 2306. | 3.9 | 209 |
| 21 | Measurement of the jet radius and transverse momentum dependence of inclusive jet suppression in lead-lead collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 342, 1195. | 4.1 | 195 |
| 22 | Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s}=13$ TeV with the ATLAS Detector at the LHC. Physical Review Letters, 2016, 117, 182002. | 7.8 | 185 |
| 23 | Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 903. | 3.9 | 181 |
| 24 | Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. European Physical Journal C, 2015, 75, 476. | 3.9 | 174 |
| 25 | Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 173-191. | 4.1 | 169 |
| 26 | Measurements of Higgs boson production and couplings in the four-lepton channel in $\sqrt{s}=7$ and 8 TeV collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector. Physical Review D, 2015, 91, 112001. | 4.7 | 158 |
| 27 | Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physical Review D, 2017, 96, 012001. | 4.7 | 157 |
| 28 | Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2011, 71, 1. | 3.9 | 146 |
| 29 | Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466. | 3.9 | 145 |
| 30 | Precision measurement and interpretation of inclusive W^+W^+ , W^+W^- . European Physical Journal C, 2017, 77, 367. | 3.9 | 145 |
| 31 | Measurement of the inclusive isolated prompt photon cross section in $\sqrt{s}=7$ TeV collisions with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 342, 1195. | 4.1 | 138 |
| 32 | Measurement of the Z/γ^* boson transverse momentum distribution in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 131 |
| 33 | Search for Invisible Decays of a Higgs Boson Produced in Association with a Z Boson in ATLAS. Physical Review Letters, 2014, 112, 112001. | 7.8 | 130 |
| 34 | ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 1. | 3.9 | 130 |
| 35 | Measurement of the inclusive isolated prompt photon cross section in $\sqrt{s}=7$ TeV collisions with the ATLAS detector. Physical Review D, 2014, 89, 012001. | 4.7 | 121 |
| 36 | Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s}=8$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538. | 3.9 | 115 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Measurement of Higgs boson properties in the diphoton decay channel with the ATLAS detector. Physical Review D, 2015, 92, . | 4.7 | 115 |
| 38 | Observation and measurement of Higgs boson decays to W and Z bosons with the ATLAS detector. Physical Review D, 2015, 92, . | 4.7 | 110 |
| 39 | Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1. | 3.9 | 93 |
| 40 | Search for the $b\bar{b}\gamma$ 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 |
| 41 | Measurement of W and Z -boson production cross sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 601-621. | 3.9 | 88 |
| 42 | 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 |
| 43 | Search for dark matter at $\sqrt{s} = 13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393. | 3.9 | 80 |
| 44 | Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1. | 3.9 | 77 |
| 45 | Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673. | 3.9 | 75 |
| 46 | Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2011, 71, 1. | 3.9 | 73 |
| 47 | 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 |
| 48 | Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 303. | 3.9 | 70 |
| 49 | Evidence for the $H \rightarrow b\bar{b}\gamma$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 64 |
| 50 | Jet energy scale and resolution measured in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 64 |
| 51 | Measurement of the Higgs boson mass in the $H \rightarrow \tau\tau$ and $H \rightarrow \tau\tau + \text{hadrons}$ channels with $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 622-641. | 3.9 | 63 |
| 52 | Cross-section measurements of the Higgs boson decaying into a pair of τ -leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physical Review D, 2019, 99, . | 4.7 | 63 |
| 53 | Prompt and non-prompt $\psi(2S)$ and $\psi(3700)$ suppression at high transverse momentum in $\sqrt{s} = 5.02$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762. | 3.9 | 61 |
| 54 | Search for direct top squark pair production in events with a Z boson, b-jets and missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2014, 74, 2883. | 3.9 | 55 |

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|----|---|-----|-----------|
| 55 | Search for pair production of Higgs bosons in the $\overline{b}\overline{b}$ 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 |
| 56 | Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. Physical Review Letters, 2018, 120, 211802. | 7.8 | 53 |
| 57 | Production of a Same-Sign W^+W^- Boson Pair in Association with Two Jets in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. Journal of High Energy Physics, 2019, 2019, 1. | 7.8 | 53 |
| 58 | 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 |
| 59 | Measurement of the top quark mass in the $t\bar{t} \rightarrow \mu^+\mu^-$ channel from pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physical Review D, 2018, 97, . | 4.1 | 52 |
| 60 | Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector. Physical Review D, 2018, 97, . | 4.7 | 51 |
| 61 | Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295. | 3.9 | 50 |
| 62 | Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898. | 3.9 | 50 |
| 63 | 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 |
| 64 | 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 |
| 65 | Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb^{-1} of $\sqrt{s}=13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 48 |
| 66 | Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\mu$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 46 |
| 67 | 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 |
| 68 | Measurements of gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow \tau\tau$ decay channel in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 508-529. | 4.1 | 46 |
| 69 | Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 46 |
| 70 | Measurement of the top quark pair production cross section in pp collisions at $\sqrt{s}=13$ TeV in dilepton final states with ATLAS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 707, 459-477. | 4.1 | 46 |
| 71 | 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 |
| 72 | 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 |

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|----|--|-----|-----------|
| 73 | Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ\gamma\gamma$, $Z\gamma\gamma$, and $ZZ\gamma\gamma$, $Z\gamma\gamma$ final states with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 223-244. | 4.1 | 43 |
| 74 | Combined measurement of differential and total cross sections in the $H\gamma\gamma$ and the $H\gamma\gamma$ decay channels at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 114-133. | 4.1 | 42 |
| 75 | Performance of top-quark and W -boson tagging with ATLAS in Run 2 of the LHC. European Physical Journal C, 2019, 79, 1. | 3.9 | 42 |
| 76 | Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 41 |
| 77 | Measurements of b-jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 40 |
| 78 | Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma\gamma$ final states using 139 fb $^{-1}$ of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 40 |
| 79 | Search for invisible decays of the Higgs boson produced in association with a hadronically decaying vector boson in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2015, 75, 337. | 3.9 | 39 |
| 80 | Combination of searches for heavy resonances decaying into bosonic and leptonic final states using proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 469-477. | 4.1 | 39 |
| 81 | Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma\gamma$ final states using 139 fb $^{-1}$ of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 469-477. | 4.1 | 38 |
| 82 | 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. European Physical Journal C, 2021, 81, 1. | 3.9 | 38 |
| 83 | 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 |
| 84 | Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb $^{-1}$ of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 37 |
| 85 | 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 |
| 86 | 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. European Physical Journal C, 2020, 80, 1. | 3.9 | 36 |
| 87 | Measurement of the inclusive jet cross-section in proton-proton collisions at $s = 7$ TeV using 4.5 fb $^{-1}$ of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 35 |
| 88 | Measurements of top-quark pair differential and double-differential cross-sections in the $t\bar{t} + \text{jets}$ channel with pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 34 |
| 89 | 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. European Physical Journal C, 2020, 80, 1. | 3.9 | 34 |
| 90 | Measurement of the Soft-Drop Jet Mass in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. Physical Review Letters, 2018, 121, 092001. | 7.8 | 33 |

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|-----|---|-----|-----------|
| 91 | Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B, Nuclear, Elementary Particle and High Energy Physics, 2019, 793, 499-519. | 3.9 | 31 |
| 92 | Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $\ell\ell$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1. | 3.9 | 32 |
| 93 | 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. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 31 |
| 94 | 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 |
| 95 | Evidence for $t\bar{t}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 30 |
| 96 | 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 |
| 97 | Study of the material of the ATLAS inner detector for Run 2 of the LHC. Journal of Instrumentation, 2017, 12, P12009-P12009. | 1.2 | 29 |
| 98 | Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 29 |
| 99 | Measurement of the Drell-Yan triple-differential cross section in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 28 |
| 100 | Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 28 |
| 101 | Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a τ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 27 |
| 102 | Measurements of electroweak W_{jj} production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474. | 3.9 | 26 |
| 103 | Search for Higgs bosons produced via vector boson fusion and decaying into bottom quark pairs in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 4.7 | 26 |
| 104 | Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ and $\ell\ell \ell\ell$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 26 |
| 105 | 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. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 106 | Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 107 | 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 |
| 108 | Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | 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. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 23 |
| 110 | AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1. | 2.9 | 23 |
| 111 | Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 22 |
| 112 | Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $s = 7$ and $8\sqrt{\text{TeV}}$ with ATLAS. Physical Review D, 2016, 94, . | 4.7 | 22 |
| 113 | Measurements of top-quark pair spin correlations in the $\mu\mu$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 22 |
| 114 | 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. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 22 |
| 115 | The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526. | 3.9 | 21 |
| 116 | Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $s = 8\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 21 |
| 117 | Measurement of k_T splitting scales in $W\bar{a}, \gamma/2$ events at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2013, 73, 2432. | 3.9 | 19 |
| 118 | Measurement of the production cross-section of a single top quark in association with a Z boson in proton-proton collisions at 13 TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 557-577. | 4.1 | 19 |
| 119 | Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb^{-1} of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 19 |
| 120 | Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb^{-1} of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 19 |
| 121 | Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}$ production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 18 |
| 122 | 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 |
| 123 | Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 18 |
| 124 | Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 18 |
| 125 | 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 |
| 126 | Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 17 |

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|-----|--|-----|-----------|
| 127 | Search for the HH $\hat{\nu}\nu$ 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 |
| 128 | Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 17 |
| 129 | Measurement of differential cross sections and W^+/\bar{W}^+ 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 |
| 130 | Measurement of the cross-section for electroweak production of dijets in association with a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 775, 206-228. | 4.7 | 16 |
| 131 | Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton-proton collisions. European Physical Journal C, 2021, 81, 1. | 3.9 | 15 |
| 132 | Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 15 |
| 133 | Measurement of VH , $H\overline{H}$ 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 |
| 134 | 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 |
| 135 | Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 1. | 3.9 | 14 |
| 136 | Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $s = 13$ TeV Using the ATLAS Detector. Physical Review Letters, 2021, 127, 141801. | 7.8 | 14 |
| 137 | Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 14 |
| 138 | Search for $\overline{t}t$ 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 |
| 139 | Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, . | 3.9 | 14 |
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