

# Irena Nikolic-Audit

## List of Publications by Year in descending order

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Version: 2024-02-01

139  
papers

8,915  
citations

57758

44  
h-index

42399

92  
g-index

145  
all docs

145  
docs citations

145  
times ranked

7046  
citing authors

| # | 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 | 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       |
| 4 | Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.  | 3.9 | 325       |
| 5 | 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       |
| 6 | 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       |
| 7 | 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       |
| 8 | 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       |
| 9 | 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 | 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       |
| 20 | Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s}=8, \sqrt{s}=13$ TeV using the ATLAS detector. European Physical Journal C, 2016, 76, 538.         | 3.9 | 115       |
| 21 | Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1.  | 3.9 | 93        |
| 22 | 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        |
| 23 | 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        |
| 24 | 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        |
| 25 | 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        |
| 26 | Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673.  | 3.9 | 75        |
| 27 | 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        |
| 28 | 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        |
| 29 | 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        |
| 30 | 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        |
| 31 | 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        |
| 32 | Prompt and non-prompt $J/\psi$ and $\psi(2S)$ suppression at high transverse momentum in $5.02 < \sqrt{s} < 8.06$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762.         | 3.9 | 61        |
| 33 | 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        |
| 34 | Search for pair production of Higgs bosons in the $b\bar{b}\gamma\gamma$ 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        |
| 35 | 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        |
| 36 | Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.   | 3.9 | 50        |

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|----|---|-----|-----------|
| 37 | 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        |
| 38 | 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        |
| 39 | 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        |
| 40 | 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. Journal of High Energy Physics, 2018, 2018, 1.   | 4.7 | 48        |
| 41 | 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. Journal of High Energy Physics, 2018, 2018, 1.   | 4.7 | 46        |
| 42 | 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        |
| 43 | 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        |
| 44 | 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        |
| 45 | 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        |
| 46 | 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        |
| 47 | Higgs boson production cross-section measurements and their EFT interpretation in the $4\ell$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.   | 3.9 | 41        |
| 48 | Measurements of b-jet tagging efficiency with the ATLAS detector using $t$ events at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.  | 4.7 | 40        |
| 49 | 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 <sup>-1</sup> of proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 40        |
| 50 | 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        |
| 51 | 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        |
| 52 | Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb <sup>-1</sup> of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.  | 4.7 | 37        |
| 53 | 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        |
| 54 | 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        |

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|----|---|-----|-----------|
| 55 | Performance of the electronic readout of the ATLAS liquid argon calorimeters. Journal of Instrumentation, 2010, 5, P09003-P09003.   | 1.2 | 35        |
| 56 | Measurement of the inclusive jet cross-section in proton-proton collisions at $\sqrt{s} = 7$ TeV using 4.5 fb <sup>-1</sup> of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.   | 4.7 | 35        |
| 57 | Study of energy response and resolution of the ATLAS barrel calorimeter to hadrons of energies from 20 to 350 GeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 621, 134-150. | 1.6 | 34        |
| 58 | Measurements of top-quark pair differential and double-differential cross-sections in the $\ell\ell + \text{jets}$ channel with pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1.                                | 3.9 | 34        |
| 59 | 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        |
| 60 | 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        |
| 61 | 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        |
| 62 | 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        |
| 63 | 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        |
| 64 | 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        |
| 65 | 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        |
| 66 | 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        |
| 67 | 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        |
| 68 | Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a $\tau$ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.  | 4.7 | 27        |
| 69 | 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        |
| 70 | Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ and $\ell\ell W W$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.              | 3.9 | 26        |
| 71 | 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        |
| 72 | 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        |

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|----|---|-----|-----------|
| 73 | 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        |
| 74 | 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        |
| 75 | 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        |
| 76 | AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.  | 2.9 | 23        |
| 77 | 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        |
| 78 | 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        |
| 79 | 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        |
| 80 | The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526.  | 3.9 | 21        |
| 81 | Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1.                 | 4.7 | 21        |
| 82 | Measurement of $k_T$ splitting scales in $W\tau^+\tau^-$ events at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2013, 73, 2432.   | 3.9 | 19        |
| 83 | Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb <sup>-1</sup> of data collected with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.   | 4.7 | 19        |
| 84 | Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb <sup>-1</sup> of Pb+Pb data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.  | 4.7 | 19        |
| 85 | 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        |
| 86 | 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        |
| 87 | 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        |
| 88 | 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        |
| 89 | 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        |
| 90 | Search for the $HH \rightarrow b\bar{b}b\bar{b}$ 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        |

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|-----|--|-----|-----------|
| 91  | Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1.                                     | 3.9 | 17        |
| 92  | Measurement of differential cross sections and $W+/W\hat{a}^{\prime}$ 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        |
| 93  | 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        |
| 94  | Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8\text{-}13$ TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1.   | 3.9 | 15        |
| 95  | 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. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 14        |
| 96  | 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        |
| 97  | Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s}=13, \text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 1.                            | 3.9 | 14        |
| 98  | 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        |
| 99  | Search for $\text{Z}\overline{\text{t}}$ 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        |
| 100 | Measurement of the c-jet mistagging efficiency in $\text{t}\overline{\text{t}}$ events using pp collision data at $\sqrt{s}=13, \text{ext}\{\text{TeV}\}$ collected with the ATLAS detector. European Physical Journal C, 2022, 82, .  | 3.9 | 14        |
| 101 | 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        |
| 102 | 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        |
| 103 | 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        |
| 104 | Search for supersymmetry in events with four or more charged leptons in $139 \text{ fb}^{-1}$ of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.                             | 4.7 | 12        |
| 105 | Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.         | 3.9 | 12        |
| 106 | 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        |
| 107 | Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1.  | 3.9 | 12        |
| 108 | Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. European Physical Journal C, 2022, 82, 1.  | 3.9 | 12        |

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|-----|--|-----|-----------|
| 109 | 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        |
| 110 | Determination of the parton distribution functions of the proton from ATLAS measurements of differential $W^{\pm}$ and Z boson production in association with jets. Journal of High Energy Physics, 2021, 2021, 1.   | 4.7 | 10        |
| 111 | Measurement of the $t\bar{t}$ 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        |
| 112 | Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with $139 \text{ fb}^{-1}$ of pp collision data at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.                                    | 4.7 | 10        |
| 113 | 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        |
| 114 | Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1.  | 3.9 | 9         |
| 115 | Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1.   | 3.9 | 9         |
| 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. Journal of High Energy Physics, 2017, 2017, 1.   | 4.7 | 8         |
| 117 | Measurements of $W+W^{\pm} + \geq 1$ 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         |
| 118 | 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         |
| 119 | Reconstruction and identification of boosted $di\bar{l}$ 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         |
| 120 | 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 $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, 1. | 3.9 | 8         |
| 121 | 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. European Physical Journal C, 2021, 81, 1.  | 3.9 | 7         |
| 122 | Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1.  | 3.9 | 7         |
| 123 | Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, 1.   | 3.9 | 7         |
| 124 | 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         |
| 125 | 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         |
| 126 | Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1.   | 3.9 | 6         |



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|-----|---|-----|-----------|
| 127 | A search for the decays of stopped long-lived particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.  | 4.7 | 5         |
| 128 | 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         |
| 129 | The ATLAS inner detector trigger performance in pp collisions at 13 TeV during LHC Run 2. European Physical Journal C, 2022, 82, 1.   | 3.9 | 5         |
| 130 | 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         |
| 131 | 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. European Physical Journal C, 2020, 80, 1.                            | 3.9 | 4         |
| 132 | Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow u^{\pm} \bar{u}^{\pm} \rightarrow \pi^{\pm} u \bar{u}$ events in Run 2 data. European Physical Journal C, 2022, 82, 1. | 3.9 | 4         |
| 133 | Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.   | 4.7 | 4         |
| 134 | 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. Journal of High Energy Physics, 2021, 2021, 1.            | 4.7 | 4         |
| 135 | Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8, \sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.                 | 3.9 | 3         |
| 136 | Measurement of the inclusive jet cross-section in proton-proton collisions at $\sqrt{s} = 7$ TeV using 4.5 fb <sup>-1</sup> of data with the ATLAS detector. , 2015, 2015, 1.   |     | 3         |
| 137 | Measurement of b-quark fragmentation properties in jets using the decay $B^{\pm} \rightarrow J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.  | 4.7 | 3         |
| 138 | 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. Journal of High Energy Physics, 2022, 2022, 1.                   | 4.7 | 2         |
| 139 | Measurement of the energy asymmetry in $t\bar{t}$ production at $\sqrt{s} = 13, \sqrt{s} = 13$ TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, .              | 3.9 | 2         |