

Alexei Soloshenko

List of Publications by Year in descending order

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134
docs citations

134
times ranked

6919
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317. | 3.9 | 489 |
| 2 | 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 |
| 3 | Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490. | 3.9 | 325 |
| 4 | 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 |
| 5 | 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 |
| 6 | 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 |
| 7 | 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 |
| 8 | Search for an additional, heavy Higgs boson in the $H \rightarrow ZZ$ decay channel at $\sqrt{s} = 8$ TeV in pp collision data with the ATLAS detector. European Physical Journal C, 2016, 76, 45. | 3.9 | 197 |
| 9 | 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 |
| 10 | 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 |
| 11 | Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466. | 3.9 | 145 |
| 12 | Precision measurement and interpretation of inclusive W^+W^- , W^+W^0 . European Physical Journal C, 2017, 77, 367. | 3.9 | 145 |
| 13 | 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 |
| 14 | Measurement of the $Z/\tilde{\chi}^0$ 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1. | 3.9 | 93 |
| 18 | Search for the $b\bar{b} \rightarrow \gamma\gamma$ 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673. | 3.9 | 75 |
| 23 | 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 |
| 24 | 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 |
| 25 | Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 64 |
| 26 | 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 |
| 27 | Prompt and non-prompt J/ψ and $\psi(2S)$ suppression at high transverse momentum in 5.02 TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762. | 3.9 | 61 |
| 28 | Search for pair production of Higgs bosons in the $\gamma\gamma$ 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 |
| 29 | Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295. | 3.9 | 50 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | 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 |
| 34 | Measurement of the Higgs boson coupling properties in the $H \rightarrow Z\gamma^* \rightarrow 4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 46 |
| 35 | 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 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | 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 |
| 38 | Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 41 |
| 39 | Measurements of b-jet tagging efficiency with the ATLAS detector using t events at $\sqrt{s}=13\text{TeV}$. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 40 |
| 40 | Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow u \bar{u} \gamma \gamma$ final states using 139 fb^{-1} of proton-proton collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 40 |
| 41 | Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 38 |
| 42 | 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 |
| 43 | Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb^{-1} of $\sqrt{s}=13\text{TeV}$ pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 37 |
| 44 | Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\sqrt{s}=13\text{TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 36 |
| 45 | Search for a scalar partner of the top quark in the all-hadronic $t\bar{t}$ plus missing transverse momentum final state at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 36 |
| 46 | Measurement of the inclusive jet cross-section in proton-proton collisions at $s=7\sqrt{s}=7\text{TeV}$ using 4.5fb^{-1} of data with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 35 |
| 47 | Measurements of top-quark pair differential and double-differential cross-sections in the $t\bar{t} + \text{jets}$ channel with pp collisions at $\sqrt{s}=13\text{TeV}$ using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 34 |
| 48 | 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 $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 34 |
| 49 | Measurements of the Higgs boson inclusive and differential fiducial cross sections in the 4ℓ decay channel at $\sqrt{s}=13\text{TeV}$. European Physical Journal C, 2020, 80, 1. | 3.9 | 32 |
| 50 | Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $s=13\sqrt{s}=13\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 31 |
| 51 | Search for new phenomena in events with same-charge leptons and b-jets in pp collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 30 |
| 52 | Evidence for $\text{t}\bar{\text{t}}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 30 |
| 53 | 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 |
| 54 | Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 29 |

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|----|---|-----|-----------|
| 55 | Measurement of the Drell-Yan triple-differential cross section in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 28 |
| 56 | Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 28 |
| 57 | Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a τ -lepton in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 27 |
| 58 | Measurements of electroweak $W_j j$ production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474. | 3.9 | 26 |
| 59 | Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $ell b\bar{b}$ and $ell WW$ final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 26 |
| 60 | Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 61 | Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 3.9 | 24 |
| 62 | 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 |
| 63 | Measurement of the inclusive jet cross-sections in proton-proton collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 64 | 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 $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 23 |
| 65 | AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1. | 2.9 | 23 |
| 66 | Measurements of top-quark pair spin correlations in the $semu$ channel at $\sqrt{s} = 13 \text{ TeV}$ using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 22 |
| 67 | Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 22 |
| 68 | The performance of the jet trigger for the ATLAS detector during 2011 data taking. European Physical Journal C, 2016, 76, 526. | 3.9 | 21 |
| 69 | Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 21 |
| 70 | 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 |
| 71 | 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 |
| 72 | Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 18 |

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|----|---|-----|-----------|
| 73 | Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 18 |
| 74 | Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 18 |
| 75 | Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 17 |
| 76 | 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 |
| 77 | Search for the $HH \rightarrow b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 17 |
| 78 | Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 17 |
| 79 | Measurement of differential cross sections and W^+/\bar{W}^+ cross-section ratios for W boson production in association with jets at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 16 |
| 80 | 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 |
| 81 | Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ using the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 15 |
| 82 | Measurement of VH , $H \rightarrow b\bar{b}$ 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 |
| 83 | Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 14 |
| 84 | Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2021, 81, 1. | 3.9 | 14 |
| 85 | Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 14 |
| 86 | Search for $t\bar{t}$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 14 |
| 87 | Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 13 \text{ TeV}$ collected with the ATLAS detector. European Physical Journal C, 2022, 82, . | 3.9 | 14 |
| 88 | Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 13 |
| 89 | Observation of the associated production of a top quark and a Z boson in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 12 |
| 90 | 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 |

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|-----|---|-----|-----------|
| 91 | Search for supersymmetry in events with four or more charged leptons in 139 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 12 |
| 92 | Measurements of the inclusive and differential production cross sections of a top-quark-antiquark pair in association with a Z boson at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 12 |
| 93 | Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 12 |
| 94 | Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1. | 3.9 | 12 |
| 95 | 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 |
| 96 | Measurements of the production cross-section for a Z boson in association with b-jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 11 |
| 97 | 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 |
| 98 | Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 10 |
| 99 | 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 $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 10 |
| 100 | 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 |
| 101 | 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. European Physical Journal C, 2019, 79, 1. | 3.9 | 9 |
| 102 | Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 3.9 | 9 |
| 103 | Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 8 |
| 104 | Measurements of $W+W^{\pm} + \text{1 jet}$ production cross-sections in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 8 |
| 105 | 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 |
| 106 | Reconstruction and identification of boosted $d\bar{t}$ 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 |
| 107 | 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. European Physical Journal C, 2022, 82, 1. | 3.9 | 8 |
| 108 | Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using 13 TeV proton-proton collision data. European Physical Journal C, 2021, 81, 1. | 3.9 | 7 |

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|-----|--|-----|-----------|
| 109 | Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1. | 3.9 | 7 |
| 110 | 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, . | 3.9 | 7 |
| 111 | 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 |
| 112 | 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 |
| 113 | Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1. | 3.9 | 6 |
| 114 | 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 |
| 115 | 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 |
| 116 | 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 |
| 117 | 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 |
| 118 | Search for top squarks in events with a Higgs or Z boson using 139 fb ⁻¹ of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 3.9 | 4 |
| 119 | Measurement of the energy response of the ATLAS calorimeter to charged pions from $W \rightarrow \mu \nu$ events in Run 2 data. European Physical Journal C, 2022, 82, 1. | 3.9 | 4 |
| 120 | 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 |
| 121 | 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 |
| 122 | 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 |
| 123 | Measurement of the inclusive jet cross-section in proton-proton collisions at ($\sqrt{s}=7$) TeV using 4.5 fb ⁻¹ of data with the ATLAS detector. , 2015, 2015, 1. | | 3 |
| 124 | Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. , 2015, 75, 1. | | 3 |
| 125 | ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. , 2015, 75, 1. | | 3 |
| 126 | Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow J/\psi K$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 4.7 | 3 |

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|-----|---|-----|-----------|
| 127 | 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 |
| 128 | Measurement of the energy asymmetry in $t\bar{t}$ production at $\sqrt{s} = 13$ TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, . | 3.9 | 2 |