

Matteo Bauce

List of Articles by Year in descending order

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94

PR articles

2,198

PR citations

238236

25

PR h-index

264767

43

g-index

98

documents

2325

doc citations

251193

26

h-index

8525

citing authors

#	ARTICLE	IF	CITATIONS
1	Elimination of searches for singly produced vectorlike top quarks in $p\bar{p} \rightarrow p\bar{p} + \text{jet} + \text{jet}$ collisions at $s_{NN} = 5.36 \text{ TeV}$ with the ATLAS Detector at the LHC. Physical Review Letters, 2025, 134, .	4.7	2
2	Search for Magnetic Monopole Pair Production in Ultraperipheral Pb+Pb Collisions at $s_{NN} = 5.36 \text{ TeV}$ with the ATLAS Detector at the LHC. Physical Review Letters, 2025, 134, .	8.2	6
3	Measurement of photonuclear jet production in ultraperipheral Pb+Pb collisions at $s_{NN} = 5.02 \text{ TeV}$ with the ATLAS detector. Physical Review D, 2025, 111, .	4.7	4
4	Observation of $\text{tt}\bar{A}$ Production in Pb+Pb Collisions at $s_{NN} = 5.02 \text{ TeV}$ with the ATLAS Detector. Physical Review Letters, 2025, 134, .	4.7	9
5	Search for cascade decays of charged sleptons and sneutrinos in final states with three leptons and missing transverse momentum in Pb+Pb collisions at $s_{NN} = 5.02 \text{ TeV}$ with the ATLAS Detector. Physical Review Letters, 2025, 134, .	8.2	3
6	Search for new physics in final states with semivisible jets or anomalous signatures using the ATLAS detector. Physical Review D, 2025, 112, .	8.2	2
7	Search for charged Higgs bosons produced in top-quark decays or in association with top quarks and decaying via $H \rightarrow H\bar{A}^\pm$ or $H \rightarrow H\bar{A}^\pm + \text{jet}$ in 13 TeV collisions at the LHC. Physical Review Letters, 2025, 134, .	3.2	4
8	Search for heavy right-handed Majorana neutrinos in the decay of top quarks produced in proton-proton collisions at $s = 13 \text{ TeV}$ with the ATLAS detector. Physical Review D, 2024, 110, .	4.7	2
9	Disentangling Sources of Momentum Fluctuations in Xe+Xe and Pb+Pb Collisions with the ATLAS Detector. Physical Review Letters, 2024, 133, .	4.7	5
10	Simultaneous Unbinned Differential Cross-Section Measurement of Twenty-Four Z +jets Kinematic Observables with the ATLAS Detector. Physical Review Letters, 2024, 133, .	1.2	1
11	Towards a muon collider. European Physical Journal C, 2023, 83, .	1.2	1
12	ATLAS Level-0 Muon Barrel Trigger system status and integration tests for Phase-II. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2024, 1069, 169843.	1.3	1
13	Search for -parity violating supersymmetric decays of the top squark to a heavy right-handed Majorana neutrino and a top quark in proton-proton collisions at $s = 13 \text{ TeV}$ with the ATLAS detector. Physical Review D, 2024, 110, .	4.7	1
14	Search for heavy right-handed Majorana neutrinos in the decay of top quarks produced in proton-proton collisions at $s = 13 \text{ TeV}$ with the ATLAS detector. Physical Review D, 2024, 110, .	4.7	4
15	Disentangling Sources of Momentum Fluctuations in Xe+Xe and Pb+Pb Collisions with the ATLAS Detector. Physical Review Letters, 2024, 133, .	8.2	13
16	Simultaneous Unbinned Differential Cross-Section Measurement of Twenty-Four Z +jets Kinematic Observables with the ATLAS Detector. Physical Review Letters, 2024, 133, .	8.2	14
17	Towards a muon collider. European Physical Journal C, 2023, 83, .	4.3	151

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19	Muon detection in electron-positron annihilation for muon collider studies. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1024, 166129.	1.3	1
20	Performance of the ATLAS Level-1 topological trigger in Run-2. European Physical Journal C, 2022, 82, .	4.3	16
21	Measurement of the c-jet mistagging efficiency in $\sqrt{s} = 13$ TeV events using pp collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, .	4.3	51
22	Operation and performance of the ATLAS semiconductor tracker in LHC Run-2. Journal of Instrumentation, 2022, 17, P01013.	1.2	4
23	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, .	4.9	2
24	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, .	4.3	17
25	Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with 139 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	4.9	15
26	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, .	3.6	68
27	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, .	4.3	14
28	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, .	4.3	6
29	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, .	4.3	34
30	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, .	4.9	70
31	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, .	4.3	20
32	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s} = 13, 8$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, .	4.3	70
33	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, .	4.9	31
34	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, .	4.3	26
35	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, .	4.9	40
36	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, .	4.9	10

#	ARTICLE	IF	CITATIONS
37	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, .	4.9	29
38	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, .	4.9	31
39	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, .	4.3	24
40	Measurement of the CP-violating phase ϕ_s in $B_s^0 \rightarrow J/\psi \phi$ decays in ATLAS at 13 TeV. European Physical Journal C, 2021, 81, .	4.3	26
41	Search for heavy resonances decaying into a pair of Z bosons in the $e^+e^- \rightarrow e^+e^- Z Z$ and $e^+e^- \rightarrow e^+e^- \gamma Z$ 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, .	4.3	63
42	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, .	4.9	30
43	Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $e^+e^- \rightarrow e^+e^- \gamma Z$ and $e^+e^- \rightarrow e^+e^- W W$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, .	4.3	38
44	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, .	4.9	39
45	Measurements of $W+W\gamma$ + 1 jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, .	4.9	15
46	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, .	4.9	81
47	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, .	4.3	29
48	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, .	4.9	36
49	Search for supersymmetry in events with four or more charged leptons in 139 fb ⁻¹ of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, .	4.9	25
50	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, .	4.9	16
51	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, .	4.9	18
52	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, .	4.9	8
53	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, .	4.3	172
54	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, .	4.3	21

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55	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, .	4.3	7
56	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, .	4.3	154
57	Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. Journal of Instrumentation, 2021, 16, P08025.	1.2	9
58	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, .	4.3	21
59	Theoretical Modeling for the Thermal Stability of Solid Targets in a Positron-Driven Muon Collider. International Journal of Thermophysics, 2021, 42, .	2.0	6
60	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, .	4.3	6
61	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, .	4.9	23
62	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, .	4.3	20
63	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, .	4.9	17
64	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, .	4.9	20
65	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, .	4.9	12
66	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, .	4.9	11
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, .	4.3	72
68	Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, .	4.3	15
69	Measurement of b-quark fragmentation properties in jets using the decay $B \rightarrow J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, .	4.9	7
70	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, .	4.9	27
71	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow b\bar{b}$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, .	4.3	40
72	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, .	4.3	53

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73	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, .	4.3	38
74	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, .	4.3	63
75	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, .	4.9	49
76	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, .	4.9	27
77	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, .	4.9	12
78	Study of muon pair production from positron annihilation at threshold energy. Journal of Instrumentation, 2020, 15, P01036-P01036.	1.2	12
79	Search for top squarks in events with a Higgs or Z boson using 139fb^{-1} of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, .	4.3	8
80	Evidence for $\text{star}t\text{tar}t$ 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, .	4.3	41
81	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, .	4.3	45
82	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, .	4.3	60
83	Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, .	4.3	23
84	Graphics Processing Units for HEP trigger systems. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 307-310.	1.3	0
85	Triggering events with GPUs at ATLAS. Journal of Physics: Conference Series, 2015, 664, 092014.	0.3	1
86	GPUs for real-time processing in HEP trigger systems. Journal of Physics: Conference Series, 2014, 513, 012017.	0.3	1
87	Performance Study of GPUs in Real-Time Trigger Applications for HEP Experiments. Physics Procedia, 2012, 37, 1965-1972.	1.1	3
88	LcgCAF: CDF access method to LCG resources. Journal of Physics: Conference Series, 2011, 331, 072009.	0.3	0
89	Design and Evaluation in a Real Use-case of Closed-loop Scheduling Algorithms for the gLite Workload Management System. Journal of Physics: Conference Series, 2011, 331, 062029.	0.3	1
90	Evidence for Longitudinally Polarized W Bosons in the Electroweak Production of Same-Sign W	8.2	3

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91	<p>Unsupervised anomaly detection for resonant new physics in the dijet final state using proton-proton collisions at</p> \sqrt{s} <p>Search for decays of the Higgs boson into scalar particles decaying into four or six</p>	4.7	1
92	<p>Search for decays of the Higgs boson into scalar particles decaying into four or six quarks using</p> b <p>Analysis with the ATLAS detector in</p>	4.7	0
93	<p>Evidence for the Dimuon Decay of the Higgs Boson in</p> 132	4.7	0
94	<p>Collisions with the ATLAS Detector. Physical Review Letters, 0, 135, .</p>	8.2	0