

# Murdo Trail

## List of Publications by Year in descending order

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Version: 2024-02-01

110  
papers

2,452  
citations

279798

23  
h-index

243625

44  
g-index

120  
all docs

120  
docs citations

120  
times ranked

6029  
citing authors

#	ARTICLE	IF	CITATIONS
1	Test of lepton universality with $B^0 \rightarrow K^* \ell^+ \ell^-$ decays. Journal of High Energy Physics, 2017, 2017, 1.	4.7	425
2	Angular analysis of the $B^0 \rightarrow K^* \ell^+ \ell^-$ decay using 3 fb <sup>-1</sup> of integrated luminosity. Journal of High Energy Physics, 2016, 2016, 1.	4.7	304
3	Measurements of the S-wave fraction in $B^0 \rightarrow K^* \ell^+ \ell^-$ decays and the $B^0 \rightarrow K^* \ell^+ \ell^-$ differential branching. Journal of High Energy Physics, 2016, 2016, 1.	4.7	75
4	Study of the $D^0 \rightarrow p \bar{p}$ amplitude in $B^0 \rightarrow D^0 p \bar{p}$ decays. Journal of High Energy Physics, 2017, 2017, 14.7	4.7	54
5	Search for massive long-lived particles decaying semileptonically in the LHCb detector. European Physical Journal C, 2017, 77, 224.	3.9	54
6	Measurement of the phase difference between short- and long-distance amplitudes in the $B^+ \rightarrow K^+ \mu^+ \mu^-$ decay. European Physical Journal C, 2017, 77, 161.	3.9	51
7	Design and performance of the LHCb trigger and full real-time reconstruction in Run 2 of the LHC. Journal of Instrumentation, 2019, 14, P04013-P04013.	1.2	47
8	Study of prompt $D^0$ meson production in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	45
9	Study of the $\psi(3823)$ and $\psi(3872)$ states in $B^+ \rightarrow J/\psi K^+$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	42
10	Updated search for long-lived particles decaying to jet pairs. European Physical Journal C, 2017, 77, 812.	3.9	41
11	Search for beautiful tetraquarks in the $\psi(1S) \ell^+ \ell^-$ invariant-mass spectrum. Journal of High Energy Physics, 2018, 2018, 1.	4.7	39
12	Search for the doubly charmed baryon $\Xi_{cc}^{++}$ . Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	35
13	Measurement of the $J/\psi$ pair production cross-section in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	34
14	Angular moments of the decay $B^0 \rightarrow \bar{D}^* \ell^+ \ell^-$ at low hadronic recoil. Journal of High Energy Physics, 2018, 2018, 1.	4.7	34
15	Precision measurement of the $\chi_{cc}^{++}$ mass. Journal of High Energy Physics, 2020, 2020, 1.	4.7	33
16	Test of lepton universality with $\Lambda_b \rightarrow p K^* \ell^+ \ell^-$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	31
17	Measurement of the CKM angle $\beta^3$ from a combination of LHCb results. Journal of High Energy Physics, 2016, 2016, 1.	4.7	29
18	Near-threshold $D \bar{D}$ spectroscopy and observation of a new charmonium state. Journal of High Energy Physics, 2019, 2019, 1.	4.7	29

#	ARTICLE	IF	CITATIONS
19	Studies of the resonance structure in $D^0 \rightarrow K^+ \pi^- \pi^+ \pi^- \pi^0$ decays. European Physical Journal C, 2018, 78, 443.	3.9	28
20	Search for Higgs-like bosons decaying into long-lived exotic particles. European Physical Journal C, 2016, 76, 664.	3.9	26
21	Observations of $B^0 \rightarrow K^+ K^- \pi^0$ and $B^0 \rightarrow K^+ K^- \pi^0$ decays and searches for other $B^0$ and $B^+$ decays to final states. Journal of High Energy Physics, 2016, 2016, 1.	4.7	24
22	Observation of a new baryon state in the $\Lambda_b^0 \rightarrow \pi^+ \pi^- \pi^0$ mass spectrum. Journal of High Energy Physics, 2020, 2020, 1.	4.7	24
23	Searches for low-mass dimuon resonances. Journal of High Energy Physics, 2020, 2020, 1.	4.7	24
24	Measurement of the forward Z boson production cross-section in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	23
25	Search for the lepton-flavour violating decays $B^0 \rightarrow s \tau^+ \tau^- \mu^+ \mu^-$ . Journal of High Energy Physics, 2018, 2018, 1.	4.7	21
26	Evidence for the decay $B^0 \rightarrow \overline{K}^* \mu^+ \mu^-$ . Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
27	Updated measurement of time-dependent CP-violating observables in $B^0 \rightarrow \psi K^+ K^-$ decays. European Physical Journal C, 2019, 79, 1.	3.9	20
28	Resonances and CP violation in $B^0 \rightarrow \overline{B}^0 \psi K^+ K^-$ decays in the mass region above the $\psi(1020)$ . Journal of High Energy Physics, 2017, 2017, 1.	4.7	19
29	Strong constraints on the $B^0 \rightarrow K^* \pi^0 \pi^0$ photon polarisation from $B^0 \rightarrow K^* \pi^0 \pi^0$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	19
30	Measurement of forward W and Z production in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	18
31	Observation of $B^0 \rightarrow (2S) \rho^+ K^-$ and $B^0 \rightarrow \overline{B}^0 \rho^+ K^-$ decays and a measurement of the $B^0$ baryon. Journal of High Energy Physics, 2016, 2016, 1.	4.7	17
32	Study of charmonium production in $B^0 \rightarrow \psi \psi \psi$ b-hadron decays and first evidence for the decay $B^0 \rightarrow \psi \psi \psi$ . European Physical Journal C, 2017, 77, 609.	3.9	17
33	Improved limit on the branching fraction of the rare decay $B^0 \rightarrow \mu^+ \mu^- K^+ K^-$ . European Physical Journal C, 2017, 77, 678.	3.9	17
34	Measurement of the $\eta_c(1S)$ production cross-section in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	17
35	Measurement of forward W and Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	16
36	Study of $\eta'$ production in pPb collisions at $\sqrt{s_{NN}} = 8.16$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	16

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37	Differential branching fraction and angular moments analysis of the decay $B^0 \rightarrow K^+ K^- \pi^+ \pi^-$ in the $K^0, 2 \pi^+ \pi^-$ region. Journal of High Energy Physics, 2016, 2016, 1.	4.7	15
38	Observation of the suppressed decay $B^0 \rightarrow b^0 \pi^+ \pi^- \pi^+ \pi^-$ . Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
39	Search for excited $B_c^+$ states. Journal of High Energy Physics, 2018, 2018, 1.	4.7	15
40	Search for heavy neutral leptons in $W^+ \rightarrow \mu^+ \mu^+ \mu^-$ , $W^+ \rightarrow \mu^+ \mu^- \mu^-$ , $W^+ \rightarrow \mu^+ \mu^- \mu^0$ decays. European Physical Journal C, 2021, 81, 1.	3.9	15
41	Study of $\bar{\Lambda}(2S)$ production and cold nuclear matter effects in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	14
42	Measurement of the CKM angle $\hat{\beta}^3$ using $B_{d,s}^{\pm} \rightarrow DK_{\pm}^*$ with $D \rightarrow K^* \pi^0, K^* \pi^{\pm}, K^* K^{\pm}$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
43	Prompt $b \rightarrow c$ production in pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
44	Search for CP violation in $\chi_{c0}^+ \rightarrow p \bar{K}^0 \pi^+$ decays using model-independent techniques. European Physical Journal C, 2020, 80, 1.	3.9	14
45	Measurement of the ratio of branching fractions $\mathcal{B}(B_c^+ \rightarrow \bar{K}^0 \pi^+) / \mathcal{B}(B_c^+ \rightarrow \bar{K}^+ \pi^0)$ . Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
46	Study of $D_{s1}^*$ mesons decaying to $D^* K^0$ and $D^* K^+$ final states. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
47	Measurement of CP asymmetry in $B^0 \rightarrow D^* K^{\pm}$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
48	Measurement of $\bar{\Lambda}^0$ production in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
49	Search for the lepton flavour violating decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ using $B_{s2}^0$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	13
50	Search for the doubly heavy $\chi_{bc}^0$ baryon via decays to $D^0 p K^+$ . Journal of High Energy Physics, 2020, 2020, 1.	4.7	13
51	Search for decays of neutral beauty mesons into four muons. Journal of High Energy Physics, 2017, 2017, 1.	4.7	12
52	Measurement of the inelastic pp cross-section at a centre-of-mass energy of 13 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
53	Amplitude analysis of $B^0 \rightarrow K^0 K^* K^*$ decays. Journal of High Energy Physics, 2019, 2019, 1.	4.7	12
54	New algorithms for identifying the flavour of $B^0$ mesons using pions and protons. European Physical Journal C, 2017, 77, 238.	3.9	11

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55	First measurement of the CP-violating phase $\phi_{\overline{D}^0 \rightarrow K^+ K^0}$ in $B^0 \rightarrow \overline{D}^0 (K^+ K^0)$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
56	Search for CP violation using triple product asymmetries in $B^0 \rightarrow \overline{D}^0 p \overline{K}^+ K^+$ , $B^0 \rightarrow \overline{D}^0 p \overline{K}^+ K^0$ and $B^0 \rightarrow \overline{D}^0 p \overline{K}^+ K^+$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
57	First observation of $B^0 \rightarrow \overline{D}^0 s^+ K^+ K^0$ decays and a search for $B^0 \rightarrow \overline{D}^0 s^+ \pi^+$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
58	Amplitude analysis of the $B_{(s)}^0 \rightarrow K^{\ast 0} \overline{K}^{\ast 0}$ decays and measurement of the branching fraction of the $B^0 \rightarrow K^{\ast 0} \overline{K}^{\ast 0}$ decay. Journal of High Energy Physics, 2019, 2019, 1.	4.7	11
59	Measurements of CP asymmetries in charmless four-body $\Lambda_b^0 \rightarrow \Lambda^0 \Xi^0 \Xi^0$ and $\Lambda_b^0 \rightarrow \Lambda^0 \Xi^0 \Xi^+$ decays. European Physical Journal C, 2019, 79, 1.	3.9	11
60	Search for the rare decay $B^+ \rightarrow \mu^+ \mu^- \mu^+ \mu^-$ . European Physical Journal C, 2019, 79, 1.	3.9	11
61	A search for $\Xi_{cc}^{++} \rightarrow D^+ p \overline{K}^+ K^+$ decays. Journal of High Energy Physics, 2019, 2019, 1.	4.7	11
62	Measurement of the $\Lambda_b^0 \rightarrow p \overline{K}^+ K^0$ angular distribution and the $\Lambda_b^0 \rightarrow p \overline{K}^+ K^0$ polarisation in pp collisions. Journal of High Energy Physics, 2020, 2020, 1.	4.7	11
63	Evidence for the two-body charmless baryonic decay $B^+ \rightarrow p \overline{\Lambda}^0$ . Journal of High Energy Physics, 2017, 2017, 1.	4.7	10
64	Study of $\overline{B}^0 \rightarrow \overline{B}^0$ correlations in high energy proton-proton collisions. Journal of High Energy Physics, 2017, 2017, 1.	4.7	10
65	Search for a dimuon resonance in the $\overline{D}^0$ mass region. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
66	Measurement of branching fractions of charmless four-body $B^0 \rightarrow \overline{D}^0 \pi^+ \pi^-$ and $B^0 \rightarrow \overline{D}^0 \pi^+ \pi^0$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
67	Dalitz plot analysis of the $D^+ \rightarrow \overline{K}^+ K^+ K^0$ decay. Journal of High Energy Physics, 2019, 2019, 1.	4.7	10
68	Observation of CP violation in two-body $B_{(s)}^0 \rightarrow \pi^+ \pi^-$ meson decays to charged pions and kaons. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
69	Model-independent measurement of the CKM angle $\beta^3$ using $B^0 \rightarrow \overline{D}^0 K^+ K^0$ decays with $B^0 \rightarrow \overline{D}^0 K^+ K^0$ and $B^0 \rightarrow \overline{D}^0 K^+ K^0$ . Journal of High Energy Physics, 2016, 2016, 1.	4.7	9
70	Bose-Einstein correlations of same-sign charged pions in the forward region in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
71	Measurement of the $\Upsilon(nS)$ polarizations in pp collisions at $\sqrt{s} = 7$ TeV and 8 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
72	Search for lepton-flavour-violating decays of Higgs-like bosons. European Physical Journal C, 2018, 78, 1008.	3.9	9

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73	Study of $B_{\text{s}}^0 \rightarrow \bar{B}^0 \rightarrow \bar{K}^0 \pi^0$ decays. Journal of High Energy Physics, 2021, 2021, 1.	4.7	9
74	Search for long-lived particles decaying to $e^+ \mu^+ \nu_e \nu_\mu$ . European Physical Journal C, 2021, 81, 1.	3.9	9
75	Measurement of CP observables in $B_{\text{s}}^0 \rightarrow D^{(*)} K_{\text{s}}^0$ and $B_{\text{s}}^0 \rightarrow D^{(*)} \bar{K}_{\text{s}}^0$ decays using two-body D final states. Journal of High Energy Physics, 2021, 2021, 1.	4.7	9
76	Observation of the decay $B_{\text{s}}^0 \rightarrow \bar{K}_{\text{s}}^0 \pi^0$ . Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
77	Precision measurement of the $B_{\text{c}}^+$ meson mass. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
78	Search for the doubly charmed baryon $\Xi_{\text{cc}}^+$ in the $\Xi_{\text{cc}}^+ \rightarrow \pi^+ \pi^0$ final state. Journal of High Energy Physics, 2021, 2021, 1.	4.7	8
79	Measurement of CP observables in $B_{\text{s}}^0 \rightarrow D K_{\text{s}}^0$ decays using two- and four-body D final states. Journal of High Energy Physics, 2017, 2017, 1.	4.7	7
80	Measurement of the time-integrated CP asymmetry in $D^0 \rightarrow K^0 K^0 S$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	7
81	Study of the $B^0 \rightarrow \bar{K}^{*0} \pi^0$ decay with an amplitude analysis of $B^0 \rightarrow (\bar{K}^{*0}) (K^+ \pi^-)$ decays. Journal of High Energy Physics, 2019, 2019, 1.	4.7	7
82	Observation of the $\Lambda_{\text{b}}^0 \rightarrow \chi_{\text{c}1}$ ( $3872$ ) $\rho^+$ decay. Journal of High Energy Physics, 2019, 2019, 1.	4.7	7
83	Search for CP violation through an amplitude analysis of $D^0 \rightarrow K^+ K^- \pi^+$ decays. Journal of High Energy Physics, 2019, 2019, 1.	4.7	7
84	Measurement of the shape of the $B_{\text{s}}^0 \rightarrow D_{\text{s}}^* \mu^+ \mu^-$ differential decay rate. Journal of High Energy Physics, 2020, 2020, 1.	4.7	7
85	Measurement of $Z \rightarrow \bar{l}, l, \nu$ production in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	6
86	Measurement of CP violation in the $B_{\text{s}}^0 \rightarrow \phi \phi$ decay and search for the $B^0 \rightarrow \bar{l} l$ decay. Journal of High Energy Physics, 2019, 2019, 1.	4.7	6
87	Measurement of the CKM angle $\hat{\beta}$ in $B_{\text{s}}^0 \rightarrow D K_{\text{s}}^0$ and $B_{\text{s}}^0 \rightarrow \bar{D} \bar{K}_{\text{s}}^0$ decays with $D^+ \rightarrow K_{\text{s}}^0 \pi^+$ . Journal of High Energy Physics, 2021, 2021, 1.	4.7	6
88	Measurement of the branching fraction of the $B^0 \rightarrow D^+ \pi^-$ decay. European Physical Journal C, 2021, 81, 1.	3.9	6
89	Measurement of $D_{\text{s}}^{\pm}$ production asymmetry in pp collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	5
90	Measurement of the ratio of branching fractions of the decays $B^0 \rightarrow \bar{K}_{\text{s}}^0 \pi^0$ and $B^0 \rightarrow \bar{K}_{\text{s}}^0 \pi^+$ . Journal of High Energy Physics, 2019, 2019, 1.	4.7	5

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91	Measurement of CP observables in the process $B_0 \rightarrow DK^0$ with two- and four-body D decays. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
92	Measurement of forward top pair production in the dilepton channel in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	4
93	Measurement of CP violation in $B_0 \rightarrow D^{\pm} \bar{K}^{\pm}$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	4
94	Measurement of CP observables in $B_{\pm} \rightarrow DK_{\pm}$ and $B_{\pm} \rightarrow D \bar{K}_{\pm}$ with $D \rightarrow K_{\pm} \pi^{\pm}$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
95	Measurement of differential $b \bar{b}$ - and $c \bar{c}$ -dijet cross-sections in the forward region of pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
96	Measurement of the CKM angle $\hat{\beta}$ and $B_{\pm} \rightarrow D_{\pm} \pi^{\pm}$ mixing frequency with $B_{\pm} \rightarrow D_{\pm} \pi^{\pm} \pi^{\pm}$ decays. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
97	Observation of the semileptonic decay $B^+ \rightarrow \rho^+ \mu^+ \mu^-$ . Journal of High Energy Physics, 2020, 2020, .	4.7	4
98	Search for the $B_s \rightarrow 0 \hat{a}^{\pm} \hat{a}^{\pm}$ decay. Journal of High Energy Physics, 2017, 2017, 1.	4.7	3
99	Measurement of the ratio of branching fractions and difference in CP asymmetries of the decays $B^+ \rightarrow \bar{K}^0 \pi^+$ and $B^+ \rightarrow \bar{K}^0 K^+$ . Journal of High Energy Physics, 2017, 2017, 1.	4.7	3
100	Measurement of the branching fraction and CP asymmetry in $B^+ \rightarrow \rho^+ \psi$ decays. European Physical Journal C, 2019, 79, 1.	3.9	3
101	Searches for 25 rare and forbidden decays of $D^+$ and $D^0$ mesons. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3
102	Measurement of the CP asymmetry in $B^{\pm} \rightarrow D^{\pm} \pi^0$ and $B^{\pm} \rightarrow D^{\pm} \pi^{\pm}$ decays. Journal of High Energy Physics, 2018, 2018, 1.	4.7	2
103	Observation of the doubly Cabibbo-suppressed decay $\bar{B}^0 \rightarrow \pi^+ \pi^-$ . Journal of High Energy Physics, 2019, 2019, 1.	4.7	2
104	Observation of the $B^0 \rightarrow D^{\pm} D^{\mp}$ decay. Journal of High Energy Physics, 2021, 2021, 1.	4.7	2
105	Search for the rare decay $B_0 \rightarrow \bar{K}^0 \pi^0$ . Chinese Physics C, 2021, 45, 043001.	3.7	2
106	Measurements of the S-wave fraction in $B_0 \rightarrow K^+ K^- \pi^0$ and $B_0 \rightarrow K^+ K^- \pi^{\pm}$ decays and the $B_0 \rightarrow K^+ K^- \pi^0$ differential branching fraction. , 2016, 2016, 1.	4.7	2
107	Measurement of CP violation in $B_0 \rightarrow D^{\pm} \bar{K}^{\mp}$ decays. Journal of High Energy Physics, 2020, 2020, 1.	4.7	2
108	First measurement of the CP-violating phase in $B^0 \rightarrow \rho^0 \psi$ ( $B^0 \rightarrow \rho^0 \psi$ ) decays. Journal of High Energy Physics, 2021, 2021, 1.	3.9	2

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109	Observation of the decay $\overline{B}_s^0 \rightarrow \chi_{c2}^+ K^-$ in the $\overline{B}$ -mass region. Journal of High Energy Physics, 2018, 2018, 1.	4.7	1
110	Measurement of branching fraction ratios for $B^+ \rightarrow D^{*+} D^+ K^+$ , $B^+ \rightarrow D^{*+} D^0 K^+$ , and $B^0 \rightarrow D^{*+} D^0 K^+$ decays. Journal of High Energy Physics, 2020, 2020, .	4.7	1