

Niall MacCrann

List of Publications by Year in descending order

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Version: 2024-02-01

75

papers

5,264

citations

94433

37

h-index

82547

72

g-index

75

all docs

75

docs citations

75

times ranked

3277

citing authors

#	ARTICLE	IF	CITATIONS
1	Dark Energy Survey year 1 results: Cosmological constraints from galaxy clustering and weak lensing. <i>Physical Review D</i> , 2018, 98, .	4.7	751
2	Dark Energy Survey Year 1 results: Cosmological constraints from cosmic shear. <i>Physical Review D</i> , 2018, 98, .	4.7	412
3	Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and weak lensing. <i>Physical Review D</i> , 2022, 105, .	4.7	398
4	Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to data calibration. <i>Physical Review D</i> , 2022, 105, .	4.7	151
5	Dark Energy Survey Year 1 Results: redshift distributions of the weak-lensing source galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 592-610.	4.4	145
6	Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to modeling uncertainty. <i>Physical Review D</i> , 2022, 105, .	4.7	145
7	Dark Energy Survey Year 1 results: weak lensing shape catalogues. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 1149-1182.	4.4	144
8	STRIDES: a 3.9 per cent measurement of the Hubble constant from the strong lens system DES J0408 \sim 5354. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 6072-6102.	4.4	140
9	Cosmic discordance: are Planck CMB and CFHTLenS weak lensing measurements out of tune?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 2877-2888.	4.4	139
10	The DES Science Verification weak lensing shear catalogues. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 2245-2281.	4.4	137
11	Dark Energy Survey Year 1 results: weak lensing mass calibration of redMaPPer galaxy clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 1352-1378.	4.4	135
12	Cosmology from cosmic shear with Dark Energy Survey Science Verification data. <i>Physical Review D</i> , 2016, 94, .	4.7	125
13	The Dark Energy Survey Data Release 2. <i>Astrophysical Journal, Supplement Series</i> , 2021, 255, 20.	7.7	120
14	Cosmology constraints from shear peak statistics in Dark Energy Survey Science Verification data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 463, 3653-3673.	4.4	119
15	Dark Energy Survey year 1 results: Galaxy clustering for combined probes. <i>Physical Review D</i> , 2018, 98, .	4.7	102
16	Beyond linear galaxy alignments. <i>Physical Review D</i> , 2019, 100, .	4.7	100
17	Cosmological Constraints from Multiple Probes in the Dark Energy Survey. <i>Physical Review Letters</i> , 2019, 122, 171301.	7.8	86
18	Dark energy survey year 3 results: weak lensing shape catalogue. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 4312-4336.	4.4	77

#	ARTICLE	IF	CITATIONS
19	No galaxy left behind: accurate measurements with the faintest objects in the Dark Energy Survey. Monthly Notices of the Royal Astronomical Society, 2016, 457, 786-808.	4.4	71
20	Dark Energy Survey year 1 results: Galaxy-galaxy lensing. Physical Review D, 2018, 98, .	4.7	71
21	The Splashback Feature around DES Galaxy Clusters: Galaxy Density and Weak Lensing Profiles. Astrophysical Journal, 2018, 864, 83.	4.5	69
22	Survey geometry and the internal consistency of recent cosmic shear measurements. Monthly Notices of the Royal Astronomical Society, 2018, 479, 4998-5004.	4.4	68
23	Dark Energy Survey Year 3 results: redshift calibration of the weak lensing source galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 505, 4249-4277.	4.4	67
24	Dark Energy Survey Year 1 results: cross-correlation redshifts – methods and systematics characterization. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1664-1682.	4.4	63
25	First cosmology results using type Ia supernovae from the Dark Energy Survey: the effect of host galaxy properties on supernova luminosity. Monthly Notices of the Royal Astronomical Society, 2020, 494, 4426-4447.	4.4	63
26	Dark Energy Survey Year 1 results: constraints on intrinsic alignments and their colour dependence from galaxy clustering and weak lensing. Monthly Notices of the Royal Astronomical Society, 2019, 489, 5453-5482.	4.4	62
27	Dark Energy Survey Year 1 results: curved-sky weak lensing mass map. Monthly Notices of the Royal Astronomical Society, 2018, 475, 3165-3190.	4.4	60
28	Beyond Limber: efficient computation of angular power spectra for galaxy clustering and weak lensing. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 010-010.	5.4	58
29	Mass and galaxy distributions of four massive galaxy clusters from Dark Energy Survey Science Verification data. Monthly Notices of the Royal Astronomical Society, 2015, 449, 2219-2238.	4.4	55
30	Dark Energy Survey Year 1 Results: Cosmological Constraints from Cluster Abundances, Weak Lensing, and Galaxy Correlations. Physical Review Letters, 2021, 126, 141301.	7.8	55
31	Dark Energy Survey Y3 results: blending shear and redshift biases in image simulations. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3371-3394.	4.4	53
32	The Dark Energy Survey and operations: Year 1. Proceedings of SPIE, 2014, , .	0.8	45
33	Dark Energy Survey Year 1 results: the impact of galaxy neighbours on weak lensing cosmology with im3shape. Monthly Notices of the Royal Astronomical Society, 2018, 475, 4524-4543.	4.4	43
34	Dark Energy Survey Year 3 results: Optimizing the lens sample in a combined galaxy clustering and galaxy-galaxy lensing analysis. Physical Review D, 2021, 103, .	4.7	42
35	Dark Energy Survey Year 3 results: Curved-sky weak lensing mass map reconstruction. Monthly Notices of the Royal Astronomical Society, 2021, 505, 4626-4645.	4.4	42
36	Dark Energy Survey year 3 results: point spread function modelling. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1282-1299.	4.4	41

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37	Galaxy-galaxy lensing in the Dark Energy Survey Science Verification data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 4204-4218.	4.4	40
38	Dark Energy Survey year 3 results: covariance modelling and its impact on parameter estimation and quality of fit. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 3125-3165.	4.4	39
39	Dark Energy Survey year 1 results: Joint analysis of galaxy clustering, galaxy lensing, and CMB lensing two-point functions. <i>Physical Review D</i> , 2019, 100, .	4.7	38
40	Assessing tension metrics with dark energy survey and Planck data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 6179-6194.	4.4	37
41	Dark Energy Survey Year 3 Results: clustering redshifts – calibration of the weak lensing source redshift distributions with <i>redMaGiC</i> and BOSS/eBOSS. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 510, 1223-1247.	4.4	36
42	Dark Energy Survey Year 3 Results: Deep Field optical+near-infrared images and catalogue. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 3547-3579.	4.4	35
43	Dark energy survey year 3 results: Cosmology with peaks using an emulator approach. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 511, 2075-2104.	4.4	34
44	Dark Energy Survey Year 3 results: galaxy clustering and systematics treatment for lens galaxy samples. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 511, 2665-2687.	4.4	31
45	Dark Energy Survey Year 3 results: cosmology with moments of weak lensing mass maps – validation on simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 498, 4060-4087.	4.4	29
46	Dark energy survey year 1 results: Constraining baryonic physics in the Universe. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 6010-6031.	4.4	27
47	Dark energy survey year 3 results: cosmological constraints from the analysis of cosmic shear in harmonic space. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 515, 1942-1972.	4.4	27
48	Cosmology with the <i>Roman Space Telescope</i> : synergies with the Rubin Observatory Legacy Survey of Space and Time. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 1514-1527.	4.4	24
49	Dark Energy Survey Year 3 results: Exploiting small-scale information with lensing shear ratios. <i>Physical Review D</i> , 2022, 105, .	4.7	23
50	Dark energy survey year 3 results: High-precision measurement and modeling of galaxy-galaxy lensing. <i>Physical Review D</i> , 2022, 105, .	4.7	22
51	Inference from the small scales of cosmic shear with current and future Dark Energy Survey data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 2567-2583.	4.4	21
52	Controlling and leveraging small-scale information in tomographic galaxy-galaxy lensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 5498-5509.	4.4	21
53	Perturbation theory for modeling galaxy bias: Validation with simulations of the Dark Energy Survey. <i>Physical Review D</i> , 2020, 102, .	4.7	21
54	Dark Energy Survey Year 3 Results: Measuring the Survey Transfer Function with Balrog. <i>Astrophysical Journal, Supplement Series</i> , 2022, 258, 15.	7.7	21

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55	Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and P_{SZ} thermal Sunyaev-Zel'dovich effect observations. II. Modeling and constraints on halo pressure profiles. <i>Physical Review D</i> , 2022, 105, .		
56	The mass and galaxy distribution around SZ-selected clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 5758-5779.	4.4	20
57	Dark Energy Survey Year 1 results: validation of weak lensing cluster member contamination estimates from P(z) decomposition. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 2511-2524.	4.4	19
58	Producing a BOSS CMASS sample with DES imaging. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 2887-2906.	4.4	19
59	Dark Energy Survey Year 3 results: Cosmology from combined galaxy clustering and lensing validation on cosmological simulations. <i>Physical Review D</i> , 2022, 105, .	4.7	19
60	Dark Energy Survey Year 3 results: galaxy-halo connection from galaxy-galaxy lensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 3119-3147.	4.4	18
61	Dark Energy Survey Year 3 results: marginalization over redshift distribution uncertainties using ranking of discrete realizations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 511, 2170-2185.	4.4	18
62	Cosmological lensing ratios with DES Y1, SPT, and Planck. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 487, 1363-1379.	4.4	16
63	Detection of Cross-Correlation between Gravitational Lensing and CDM Rays. <i>Physical Review Letters</i> , 2020, 124, 101102.	7.8	16
64	DES Y1 results: Splitting growth and geometry to test CDM . <i>Physical Review D</i> , 2021, 103, .	4.7	16
65	Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and <i>Planck</i> thermal Sunyaev-Zel'dovich effect observations. I. Measurements, systematics tests, and feedback model constraints. <i>Physical Review D</i> , 2022, 105, .	4.7	16
66	Simultaneous constraints on cosmology and photometric redshift bias from weak lensing and galaxy clustering. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 465, L20-L24.	3.3	14
67	The DES view of the Eridanus supervoid and the CMB cold spot. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 510, 216-229.	4.4	14
68	Lensing without borders I. A blind comparison of the amplitude of galaxy-galaxy lensing between independent imaging surveys. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 6150-6189.	4.4	12
69	Dark Energy Survey Year 3 Results: Three-point shear correlations and mass aperture moments. <i>Physical Review D</i> , 2022, 105, .	4.7	12
70	The challenge of blending in large sky surveys. <i>Nature Reviews Physics</i> , 2021, 3, 712-718.	26.6	9
71	Probing gravity with the DES-CMASS sample and BOSS spectroscopy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 4982-4996.	4.4	9
72	Galaxy-galaxy lensing with the DES-CMASS catalogue: measurement and constraints on the galaxy-matter cross-correlation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 2033-2047.	4.4	6

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73	Galaxy clustering in harmonic space from the dark energy survey year 1 data: compatibility with real-space results. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 5714-5724.	4.4	5
74	Understanding the extreme luminosity of DES14X2fna. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 3950-3967.	4.4	4
75	Synthetic galaxy clusters and observations based on Dark Energy Survey Year 3 Data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 4865-4885.	4.4	1