

# Chihway Chang

## List of Publications by Year in descending order

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Version: 2024-02-01

81  
papers

5,731  
citations

81900

39  
h-index

74163

75  
g-index

82  
all docs

82  
docs citations

82  
times ranked

4302  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dark Energy Survey year 1 results: Cosmological constraints from galaxy clustering and weak lensing. Physical Review D, 2018, 98, .	4.7	751
2	The Dark Energy Survey: Data Release 1. Astrophysical Journal, Supplement Series, 2018, 239, 18.	7.7	455
3	Dark Energy Survey Year 1 results: Cosmological constraints from cosmic shear. Physical Review D, 2018, 98, .	4.7	412
4	Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and weak lensing. Physical Review D, 2022, 105, .	4.7	398
5	Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to data calibration. Physical Review D, 2022, 105, .	4.7	151
6	Dark Energy Survey Year 1 Results: redshift distributions of the weak-lensing source galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 478, 592-610.	4.4	145
7	Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to modeling uncertainty. Physical Review D, 2022, 105, .	4.7	145
8	The DES Science Verification weak lensing shear catalogues. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2245-2281.	4.4	137
9	Dark Energy Survey year 1 results: Constraints on extended cosmological models from galaxy clustering and weak lensing. Physical Review D, 2019, 99, .	4.7	130
10	THE THIRD GRAVITATIONAL LENSING ACCURACY TESTING (GREAT3) CHALLENGE HANDBOOK. Astrophysical Journal, Supplement Series, 2014, 212, 5.	7.7	125
11	Cosmology from cosmic shear with Dark Energy Survey Science Verification data. Physical Review D, 2016, 94, .	4.7	125
12	Radio frequency interference mitigation using deep convolutional neural networks. Astronomy and Computing, 2017, 18, 35-39.	1.7	125
13	The Dark Energy Survey Data Release 2. Astrophysical Journal, Supplement Series, 2021, 255, 20.	7.7	120
14	Cosmology constraints from shear peak statistics in Dark Energy Survey Science Verification data. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3653-3673.	4.4	119
15	The effective number density of galaxies for weak lensing measurements in the LSST project. Monthly Notices of the Royal Astronomical Society, 2013, 434, 2121-2135.	4.4	118
16	Redshift distributions of galaxies in the Dark Energy Survey Science Verification shear catalogue and implications for weak lensing. Physical Review D, 2016, 94, .	4.7	105
17	Dark Energy Survey Year 3 Results: Photometric Data Set for Cosmology. Astrophysical Journal, Supplement Series, 2021, 254, 24.	7.7	93
18	Cosmological Constraints from Multiple Probes in the Dark Energy Survey. Physical Review Letters, 2019, 122, 171301.	7.8	86

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19	Cosmic shear measurements with Dark Energy Survey Science Verification data. <i>Physical Review D</i> , 2016, 94, .	4.7	81
20	The Halo Boundary of Galaxy Clusters in the SDSS. <i>Astrophysical Journal</i> , 2017, 841, 18.	4.5	78
21	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
22	Dark Energy Survey year 1 results: Galaxy-galaxy lensing. <i>Physical Review D</i> , 2018, 98, .	4.7	71
23	The Splashback Feature around DES Galaxy Clusters: Galaxy Density and Weak Lensing Profiles. <i>Astrophysical Journal</i> , 2018, 864, 83.	4.5	69
24	Survey geometry and the internal consistency of recent cosmic shear measurements. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 4998-5004.	4.4	68
25	CosmoDC2: A Synthetic Sky Catalog for Dark Energy Science with LSST. <i>Astrophysical Journal, Supplement Series</i> , 2019, 245, 26.	7.7	67
26	Dark Energy Survey Year 1 results: cross-correlation redshifts “ methods and systematics characterization. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 1664-1682.	4.4	63
27	Dark Energy Survey Year 1 results: curved-sky weak lensing mass map. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 3165-3190.	4.4	60
28	Density split statistics: Joint model of counts and lensing in cells. <i>Physical Review D</i> , 2018, 98, .	4.7	59
29	Shadows in the Dark: Low-surface-brightness Galaxies Discovered in the Dark Energy Survey. <i>Astrophysical Journal, Supplement Series</i> , 2021, 252, 18.	7.7	56
30	Dark Energy Survey Year 1 Results: Cosmological Constraints from Cluster Abundances, Weak Lensing, and Galaxy Correlations. <i>Physical Review Letters</i> , 2021, 126, 141301.	7.8	55
31	Measurement of the splashback feature around SZ-selected Galaxy clusters with DES, SPT, and ACT. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 487, 2900-2918.	4.4	52
32	Testing the lognormality of the galaxy and weak lensing convergence distributions from Dark Energy Survey maps. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 1444-1461.	4.4	48
33	Wide-field lensing mass maps from Dark Energy Survey science verification data: Methodology and detailed analysis. <i>Physical Review D</i> , 2015, 92, .	4.7	47
34	MAPPING AND SIMULATING SYSTEMATICS DUE TO SPATIALLY VARYING OBSERVING CONDITIONS IN DES SCIENCE VERIFICATION DATA. <i>Astrophysical Journal, Supplement Series</i> , 2016, 226, 24.	7.7	47
35	Dark Energy Survey Year 3 results: Curved-sky weak lensing mass map reconstruction. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 4626-4645.	4.4	42
36	Dark Energy Survey year 3 results: point spread function modelling. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 501, 1282-1299.	4.4	41

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37	Wide-Field Lensing Mass Maps from Dark Energy Survey Science Verification Data. <i>Physical Review Letters</i> , 2015, 115, 051301.	7.8	40
38	Beam Calibration of Radio Telescopes with Drones. <i>Publications of the Astronomical Society of the Pacific</i> , 2015, 127, 1131-1143.	3.1	39
39	Dark Energy Survey Year 1 Results: calibration of redMaGiC redshift distributions in DES and SDSS from cross-correlations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 2427-2443.	4.4	39
40	A unified analysis of four cosmic shear surveys. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3696-3717.	4.4	39
41	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
42	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
43	Improving weak lensing mass map reconstructions using Gaussian and sparsity priors: application to DES SV. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 2871-2888.	4.4	34
44	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
45	MODELING THE TRANSFER FUNCTION FOR THE DARK ENERGY SURVEY. <i>Astrophysical Journal</i> , 2015, 801, 73.	4.5	32
46	CALIBRATED ULTRA FAST IMAGE SIMULATIONS FOR THE DARK ENERGY SURVEY. <i>Astrophysical Journal</i> , 2016, 817, 25.	4.5	31
47	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
48	Simulating the LSST system. <i>Proceedings of SPIE</i> , 2010, , .	0.8	27
49	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
50	Is diffuse intracluster light a good tracer of the galaxy cluster matter distribution?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 501, 1300-1315.	4.4	24
51	Galaxy bias from the Dark Energy Survey Science Verification data: combining galaxy density maps and weak lensing maps. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 3203-3216.	4.4	23
52	Dark Energy Survey Year 3 results: Exploiting small-scale information with lensing shear ratios. <i>Physical Review D</i> , 2022, 105, .	4.7	23
53	Atmospheric point spread function interpolation for weak lensing in short exposure imaging data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 427, 2572-2587.	4.4	22
54	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

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55	Inference from the small scales of cosmic shear with current and future Dark Energy Survey data. Monthly Notices of the Royal Astronomical Society, 2017, 465, 2567-2583.	4.4	21
56	Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and $\langle \text{Planck} \rangle$ thermal Sunyaev-Zel'dovich effect observations. II. Modeling and constraints on halo pressure profiles. Physical Review D, 2022, 105, .	4.7	12
57	The impact of spectroscopic incompleteness in direct calibration of redshift distributions for weak lensing surveys. Monthly Notices of the Royal Astronomical Society, 2020, 496, 4769-4786.	4.4	20
58	Dark energy survey internal consistency tests of the joint cosmological probes analysis with posterior predictive distributions. Monthly Notices of the Royal Astronomical Society, 2021, 503, 2688-2705.	4.4	20
59	The mass and galaxy distribution around SZ-selected clusters. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5758-5779.	4.4	20
60	Probing Galaxy Evolution in Massive Clusters Using ACT and DES: Splashback as a Cosmic Clock. Astrophysical Journal, 2021, 923, 37.	4.5	20
61	Shocks in the stacked Sunyaev-Zel'dovich profiles of clusters I. Analysis with the Three Hundred simulations. Monthly Notices of the Royal Astronomical Society, 2021, 508, 1777-1787.	4.4	19
62	Dark Energy Survey Year 3 results: Cosmology from combined galaxy clustering and lensing validation on cosmological simulations. Physical Review D, 2022, 105, .	4.7	19
63	HIDE & SEEK: End-to-end packages to simulate and process radio survey data. Astronomy and Computing, 2017, 18, 8-17.	1.7	18
64	Dark Energy Survey Year 3 results: galaxy halo connection from galaxy galaxy lensing. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3119-3147.	4.4	18
65	Cosmological lensing ratios with DES Y1, SPT, and Planck. Monthly Notices of the Royal Astronomical Society, 2019, 487, 1363-1379.	4.4	16
66	Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and $\langle \text{Planck} \rangle$ thermal Sunyaev-Zel'dovich effect observations. I. Measurements, systematics tests, and feedback model constraints. Physical Review D, 2022, 105, .	4.7	16
67	A new method to measure galaxy bias by combining the density and weak lensing fields. Monthly Notices of the Royal Astronomical Society, 2016, 462, 35-47.	4.4	15
68	Shocks in the stacked Sunyaev-Zel'dovich profiles of clusters II: Measurements from SPT-SZ + $\langle \text{Planck} \rangle$ Compton- $y$ map. Monthly Notices of the Royal Astronomical Society, 2022, 514, 1645-1663.	4.4	15
69	Consistency of cosmic shear analyses in harmonic and real space. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3796-3817.	4.4	14
70	The DES view of the Eridanus supervoid and the CMB cold spot. Monthly Notices of the Royal Astronomical Society, 2021, 510, 216-229.	4.4	14
71	Dark Energy Survey Year 3 Results: Three-point shear correlations and mass aperture moments. Physical Review D, 2022, 105, .	4.7	12
72	Dark Energy Survey Year 1 Results: Wide-field mass maps via forward fitting in harmonic space. Monthly Notices of the Royal Astronomical Society, 2020, 493, 5662-5679.	4.4	8

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73	Forward modeling of spectroscopic galaxy surveys: application to SDSS. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 015-015.	5.4	7
74	Optimizing galaxy samples for clustering measurements in photometric surveys. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 3535-3552.	4.4	6
75	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
76	KaRMMA $\kappa$ reconstruction for mass mapping. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 73-85.	4.4	6
77	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
78	SPOKES: An end-to-end simulation facility for spectroscopic cosmological surveys. <i>Astronomy and Computing</i> , 2016, 15, 1-15.	1.7	4
79	An integrated system at the Bleien Observatory for mapping the Galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 1727-1737.	4.4	4
80	Transitioning from Stage-III to Stage-IV: cosmology from galaxy-CMB lensing and shear-CMB lensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 514, 2181-2197.	4.4	4
81	A multichamber system for analyzing the outgassing, deposition, and associated optical degradation properties of materials in a vacuum. <i>Review of Scientific Instruments</i> , 2010, 81, 025101.	1.3	2