Matthew Becker

List of Publications by Year
in descending order

58	4,723	81900	144013
papers	citations	39	57
		h-index	g-index

58	58	58	4120
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Dark Energy Survey: Data Release 1. Astrophysical Journal, Supplement Series, 2018, 239, 18.	7.7	455
2	COSMOLOGICAL CONSTRAINTS FROM THE SLOAN DIGITAL SKY SURVEY MaxBCG CLUSTER CATALOG. Astrophysical Journal, 2010, 708, 645-660.	4.5	382
3	A GMBCG GALAXY CLUSTER CATALOG OF 55,424 RICH CLUSTERS FROM SDSS DR7. Astrophysical Journal, Supplement Series, 2010, 191, 254-274.	7.7	231
4	ON THE ACCURACY OF WEAK-LENSING CLUSTER MASS RECONSTRUCTIONS. Astrophysical Journal, 2011, 740, 25.	4.5	231
5	Dark Energy Survey Year 1 Results: The Photometric Data Set for Cosmology. Astrophysical Journal, Supplement Series, 2018, 235, 33.	7.7	192
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	Cosmic discordance: are Planck CMB and CFHTLenS weak lensing measurements out of tune?. Monthly Notices of the Royal Astronomical Society, 2015, 451, 2877-2888.	4.4	139
8	The DES Science Verification weak lensing shear catalogues. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2245-2281.	4.4	137
9	CONSTRAINING THE SCATTER IN THE MASS-RICHNESS RELATION OF maxBCG CLUSTERS WITH WEAK LENSING AND X-RAY DATA. Astrophysical Journal, 2009, 699, 768-781.	4.5	130
10	The Dark Energy Survey Data Release 2. Astrophysical Journal, Supplement Series, 2021, 255, 20.	7.7	120
11	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
12	COSMOLOGICAL CONSTRAINTS FROM GALAXY CLUSTERING AND THE MASS-TO-NUMBER RATIO OF GALAXY CLUSTERS. Astrophysical Journal, 2012, 745, 16.	4.5	114
13	THE CONCENTRATION DEPENDENCE OF THE GALAXY–HALO CONNECTION: MODELING ASSEMBLY BIAS WITH ABUNDANCE MATCHING. Astrophysical Journal, 2017, 834, 37.	4.5	104
14	The Aemulus Project. II. Emulating the Halo Mass Function. Astrophysical Journal, 2019, 872, 53.	4.5	102
15	The Mean and Scatter of the Velocity Dispersion–Optical Richness Relation for maxBCG Galaxy Clusters. Astrophysical Journal, 2007, 669, 905-928.	4.5	101
16	The Aemulus Project. I. Numerical Simulations for Precision Cosmology. Astrophysical Journal, 2019, 875, 69.	4.5	94
17	The Aemulus Project. III. Emulation of the Galaxy Correlation Function. Astrophysical Journal, 2019, 874, 95.	4.5	93
18	Dark Energy Survey Year 3 Results: Photometric Data Set for Cosmology. Astrophysical Journal, Supplement Series, 2021, 254, 24.	7.7	93

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19	The L_X–M relation of clusters of galaxies. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 387, L28-L32.	3.3	88
20	The dark side of galaxy colour: evidence from new SDSS measurements of galaxy clustering and lensing. Monthly Notices of the Royal Astronomical Society, 2014, 444, 729-743.	4.4	88
21	Weak-lensing mass calibration of redMaPPer galaxy clusters in Dark Energy Survey Science Verification data. Monthly Notices of the Royal Astronomical Society, 2017, 469, 4899-4920.	4.4	87
22	Cosmological Constraints from Multiple Probes in the Dark Energy Survey. Physical Review Letters, 2019, 122, 171301.	7.8	86
23	IMPROVEMENT OF THE RICHNESS ESTIMATES OF maxBCG CLUSTERS. Astrophysical Journal, 2009, 703, 601-613.	4.5	77
24	Dark energy survey year 3 results: weak lensing shape catalogue. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4312-4336.	4.4	77
25	A MEASUREMENT OF THE CORRELATION OF GALAXY SURVEYS WITH CMB LENSING CONVERGENCE MAPS FROM THE SOUTH POLE TELESCOPE. Astrophysical Journal Letters, 2012, 753, L9.	8.3	76
26	Weak lensing by galaxy troughs in DES Science Verification data. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3367-3380.	4.4	71
27	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
28	Measuring the Mean and Scatter of the X-Ray Luminosity–Optical Richness Relation for maxBCG Galaxy Clusters. Astrophysical Journal, 2008, 675, 1106-1124.	4.5	66
29	calclens: weak lensing simulations for large-area sky surveys and second-order effects in cosmic shear power spectra. Monthly Notices of the Royal Astronomical Society, 2013, 435, 115-132.	4.4	63
30	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
31	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
32	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
33	Orientation bias of optically selected galaxy clusters and its impact on stacked weak-lensing analyses. Monthly Notices of the Royal Astronomical Society, 2014, 443, 1713-1722.	4.4	49
34	Predicting galaxy star formation rates via the co-evolution of galaxies and haloes. Monthly Notices of the Royal Astronomical Society, 2015, 446, 651-662.	4.4	47
35	MAPPING AND SIMULATING SYSTEMATICS DUE TO SPATIALLY VARYING OBSERVING CONDITIONS IN DES SCIENCE VERIFICATION DATA. Astrophysical Journal, Supplement Series, 2016, 226, 24.	7.7	47
36	Cross-correlation of gravitational lensing from DES Science Verification data with SPT and $Planck$ lensing. Monthly Notices of the Royal Astronomical Society, 2016, 459, 21-34.	4.4	46

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37	PRECISION MEASUREMENTS OF THE CLUSTER RED SEQUENCE USING AN ERROR-CORRECTED GAUSSIAN MIXTURE MODEL. Astrophysical Journal, 2009, 702, 745-758.	4.5	42
38	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
39	Mitigating Shear-dependent Object Detection Biases with Metacalibration. Astrophysical Journal, 2020, 902, 138.	4.5	42
40	Wide-Field Lensing Mass Maps from Dark Energy Survey Science Verification Data. Physical Review Letters, 2015, 115, 051301.	7.8	40
41	Galaxy–galaxy lensing in the Dark Energy Survey Science Verification data. Monthly Notices of the Royal Astronomical Society, 2017, 465, 4204-4218.	4.4	40
42	Cosmic variance of the galaxy cluster weak lensing signal. Monthly Notices of the Royal Astronomical Society, 2015, 449, 4264-4276.	4.4	39
43	MODELING THE TRANSFER FUNCTION FOR THE DARK ENERGY SURVEY. Astrophysical Journal, 2015, 801, 73.	4.5	32
44	DES Y1 Results: validating cosmological parameter estimation using simulated Dark Energy Surveys. Monthly Notices of the Royal Astronomical Society, 2018, 480, 4614-4635.	4.4	31
45	Dark energy survey year 1 results: Constraining baryonic physics in the Universe. Monthly Notices of the Royal Astronomical Society, 2021, 502, 6010-6031.	4.4	27
46	Cosmological constraints from the large-scale weak lensing of SDSS MaxBCG clusters. Monthly Notices of the Royal Astronomical Society, 2014, 439, 1628-1647.	4.4	23
47	Galaxy bias from the Dark Energy Survey Science Verification data: combining galaxy density maps and weak lensing maps. Monthly Notices of the Royal Astronomical Society, 2016, 459, 3203-3216.	4.4	23
48	A redefinition of the halo boundary leads to a simple yet accurate halo model of large-scale structure. Monthly Notices of the Royal Astronomical Society, 2021, 505, 1195-1205.	4.4	23
49	Dark Energy Survey Year 3 Results: Measuring the Survey Transfer Function with Balrog. Astrophysical Journal, Supplement Series, 2022, 258, 15.	7.7	21
50	The mass and galaxy distribution around SZ-selected clusters. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5758-5779.	4.4	20
51	Cosmic shear as a probe of galaxy formation physics. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3326-3338.	4.4	19
52	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
53	Fourier band-power E/B-mode estimators for cosmic shear. Monthly Notices of the Royal Astronomical Society, 2016, 457, 304-312.	4.4	17
54	ADDGALS: Simulated Sky Catalogs for Wide Field Galaxy Surveys. Astrophysical Journal, 2022, 931, 145.	4.5	15

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55	Combination of cluster number counts and two-point correlations: validation on mock Dark Energy Survey. Monthly Notices of the Royal Astronomical Society, 2021, 502, 4093-4111.	4.4	14
56	Cosmic shear E/B-mode estimation with binned correlation function data. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1547-1562.	4.4	6
57	Enabling dark energy survey science analysis with simulations on XSEDE resources. , 2013, , .		3
58	Synthetic galaxy clusters and observations based on Dark Energy Survey Year 3 Data. Monthly Notices of the Royal Astronomical Society, 2021, 509, 4865-4885.	4.4	1