Matthew Becker

List of Publications by Year
in descending order

58 papers	4,723 citations	81900 39 h-index	144013 57 g-index
58 all docs	58 docs citations	58 times ranked	4120 citing authors

#	ARTICLE	IF	CITATIONS
1	Dark Energy Survey Year 3 Results: Measuring the Survey Transfer Function with Balrog. Astrophysical Journal, Supplement Series, 2022, 258, 15.	7.7	21
2	ADDGALS: Simulated Sky Catalogs for Wide Field Galaxy Surveys. Astrophysical Journal, 2022, 931, 145.	4.5	15
3	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
4	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
5	Dark energy survey year 3 results: weak lensing shape catalogue. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4312-4336.	4.4	77
6	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
7	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
8	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
9	Dark Energy Survey Year 3 Results: Photometric Data Set for Cosmology. Astrophysical Journal, Supplement Series, 2021, 254, 24.	7.7	93
10	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
11	The Dark Energy Survey Data Release 2. Astrophysical Journal, Supplement Series, 2021, 255, 20.	7.7	120
12	The mass and galaxy distribution around SZ-selected clusters. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5758-5779.	4.4	20
13	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
14	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
15	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
16	Mitigating Shear-dependent Object Detection Biases with Metacalibration. Astrophysical Journal, 2020, 902, 138.	4.5	42
17	The Aemulus Project. II. Emulating the Halo Mass Function. Astrophysical Journal, 2019, 872, 53.	4.5	102
18	The Aemulus Project. III. Emulation of the Galaxy Correlation Function. Astrophysical Journal, 2019, 874, 95.	4.5	93

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19	The Aemulus Project. I. Numerical Simulations for Precision Cosmology. Astrophysical Journal, 2019, 875, 69.	4.5	94
20	Cosmological Constraints from Multiple Probes in the Dark Energy Survey. Physical Review Letters, 2019, 122, 171301.	7.8	86
21	Dark Energy Survey Year 1 Results: The Photometric Data Set for Cosmology. Astrophysical Journal, Supplement Series, 2018, 235, 33.	7.7	192
22	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
23	The Dark Energy Survey: Data Release 1. Astrophysical Journal, Supplement Series, 2018, 239, 18.	7.7	455
24	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
25	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
26	Galaxyâ€"galaxy lensing in the Dark Energy Survey Science Verification data. Monthly Notices of the Royal Astronomical Society, 2017, 465, 4204-4218.	4.4	40
27	THE CONCENTRATION DEPENDENCE OF THE GALAXYâ€"HALO CONNECTION: MODELING ASSEMBLY BIAS WITH ABUNDANCE MATCHING. Astrophysical Journal, 2017, 834, 37.	4.5	104
28	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
29	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
30	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
31	Cross-correlation of gravitational lensing from DES Science Verification data with SPT and<i>Planck</i>lensing. Monthly Notices of the Royal Astronomical Society, 2016, 459, 21-34.	4.4	46
32	Cosmic shear as a probe of galaxy formation physics. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3326-3338.	4.4	19
33	The DES Science Verification weak lensing shear catalogues. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2245-2281.	4.4	137
34	Weak lensing by galaxy troughs in DES Science Verification data. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3367-3380.	4.4	71
35	Fourier band-power E/B-mode estimators for cosmic shear. Monthly Notices of the Royal Astronomical Society, 2016, 457, 304-312.	4.4	17
36	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

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37	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
38	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
39	Wide-Field Lensing Mass Maps from Dark Energy Survey Science Verification Data. Physical Review Letters, 2015, 115, 051301.	7.8	40
40	Cosmic variance of the galaxy cluster weak lensing signal. Monthly Notices of the Royal Astronomical Society, 2015, 449, 4264-4276.	4.4	39
41	MODELING THE TRANSFER FUNCTION FOR THE DARK ENERGY SURVEY. Astrophysical Journal, 2015, 801, 73.	4.5	32
42	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
43	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
44	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
45	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
46	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
47	Enabling dark energy survey science analysis with simulations on XSEDE resources. , 2013, , .		3
48	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
49	COSMOLOGICAL CONSTRAINTS FROM GALAXY CLUSTERING AND THE MASS-TO-NUMBER RATIO OF GALAXY CLUSTERS. Astrophysical Journal, 2012, 745, 16.	4.5	114
50	ON THE ACCURACY OF WEAK-LENSING CLUSTER MASS RECONSTRUCTIONS. Astrophysical Journal, 2011, 740, 25.	4.5	231
51	COSMOLOGICAL CONSTRAINTS FROM THE SLOAN DIGITAL SKY SURVEY MaxBCG CLUSTER CATALOG. Astrophysical Journal, 2010, 708, 645-660.	4.5	382
52	A GMBCG GALAXY CLUSTER CATALOG OF 55,424 RICH CLUSTERS FROM SDSS DR7. Astrophysical Journal, Supplement Series, 2010, 191, 254-274.	7.7	231
53	PRECISION MEASUREMENTS OF THE CLUSTER RED SEQUENCE USING AN ERROR-CORRECTED GAUSSIAN MIXTURE MODEL. Astrophysical Journal, 2009, 702, 745-758.	4.5	42
54	IMPROVEMENT OF THE RICHNESS ESTIMATES OF maxBCG CLUSTERS. Astrophysical Journal, 2009, 703, 601-613.	4.5	77

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55	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
56	The <i>L</i>X–<i>M</i> relation of clusters of galaxies. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 387, L28-L32.	3.3	88
57	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
58	The Mean and Scatter of the Velocity Dispersion–Optical Richness Relation for maxBCG Galaxy Clusters. Astrophysical Journal, 2007, 669, 905-928.	4.5	101