Michael D Niemack

List of Publications by Year
in descending order

89 papers	5,552 citations	76196 40 h-index	76769 74 g-index
89 all docs	89 docs citations	89 times ranked	3315 citing authors

#	Article	IF	Citations
1	The Atacama Cosmology Telescope: Sunyaev-Zel'dovich selected galaxy clusters at 148 GHz from three seasons of data. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 008-008.	1.9	378
2	The Atacama Cosmology Telescope: DR4 maps and cosmological parameters. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 047-047.	1.9	343
3	THE ATACAMA COSMOLOGY TELESCOPE: SUNYAEV-ZEL'DOVICH-SELECTED GALAXY CLUSTERS AT 148 GHz IN THE 2008 SURVEY. Astrophysical Journal, 2011, 737, 61.	1.6	234
4	Detection of the Power Spectrum of Cosmic Microwave Background Lensing by the Atacama Cosmology Telescope. Physical Review Letters, 2011, 107, 021301.	2.9	225
5	The Atacama Cosmology Telescope: cosmological parameters from three seasons of data. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 060-060.	1.9	215
6	The Atacama Cosmology Telescope: temperature and gravitational lensing power spectrum measurements from three seasons of data. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 014-014.	1.9	194
7	Evidence of Galaxy Cluster Motions with the Kinematic Sunyaev-Zelâ€™dovich Effect. Physical Review Letters, 2012, 109, 041101.	2.9	185
8	THE ATACAMA COSMOLOGY TELESCOPE: ACT-CL J0102â€“4915 â€œEL GORDO,â€•A MASSIVE MERGING CLUSTER AT REDSHIFT 0.87. Astrophysical Journal, 2012, 748, 7.	1.6	158
9	The Atacama Cosmology Telescope: a measurement of the Cosmic Microwave Background power spectra at 98 and 150 GHz. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 045-045.	1.9	148
10	THE ATACAMA COSMOLOGY TELESCOPE: A MEASUREMENT OF THE COSMIC MICROWAVE BACKGROUND POWER SPECTRUM AT 148 AND 218 GHz FROM THE 2008 SOUTHERN SURVEY. Astrophysical Journal, 2011, 729, 62.	1.6	144
11	THE ATACAMA COSMOLOGY TELESCOPE: COSMOLOGY FROM GALAXY CLUSTERS DETECTED VIA THE SUNYAEV-ZEL'DOVICH EFFECT. Astrophysical Journal, 2011, 732, 44.	1.6	140
12	The Atacama Cosmology Telescope: CMB polarization at 200 < â„“ < 9000. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 007-007.	1.9	121
13	The Atacama Cosmology Telescope: The Two-season ACTPol Sunyaevâ€“Zelâ€™dovich Effect Selected Cluster Catalog. Astrophysical Journal, Supplement Series, 2018, 235, 20.	3.0	121
14	The Atacama Cosmology Telescope: two-season ACTPol spectra and parameters. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 031-031.	1.9	120
15	Evidence for Dark Energy from the Cosmic Microwave Background Alone Using the Atacama Cosmology Telescope Lensing Measurements. Physical Review Letters, 2011, 107, 021302.	2.9	118
16	Two-season Atacama Cosmology Telescope polarimeter lensing power spectrum. Physical Review D, 2017, 95, .	1.6	104
17	THE ATACAMA COSMOLOGY TELESCOPE: PHYSICAL PROPERTIES AND PURITY OF A GALAXY CLUSTER SAMPLE SELECTED VIA THE SUNYAEV-ZEL'DOVICH EFFECT. Astrophysical Journal, 2010, 723, 1523-1541.	1.6	98
18	THE ATACAMA COSMOLOGY TELESCOPE: A MEASUREMENT OF THE PRIMORDIAL POWER SPECTRUM. Astrophysical Journal, 2012, 749, 90.	1.6	97

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19	THE ATACAMA COSMOLOGY TELESCOPE: DYNAMICAL MASSES AND SCALING RELATIONS FOR A SAMPLE OF MASSIVE SUNYAEV-ZEL'DOVICH EFFECT SELECTED GALAXY CLUSTERS ,. Astrophysical Journal, 2013, 772, 25.	1.6	97
20	The Atacama Cosmology Telescope: Cross-correlation of cosmic microwave background lensing and quasars. Physical Review D, 2012, 86, .	1.6	91
21	Evidence for the kinematic Sunyaev-Zelâ€™dovich effect with the Atacama Cosmology Telescope and velocity reconstruction from the Baryon Oscillation Spectroscopic Survey. Physical Review D, 2016, 93, .	1.6	90
22	Precision epoch of reionization studies with next-generation CMB experiments. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 010-010.	1.9	83
23	CMB-S4: Forecasting Constraints on Primordial Gravitational Waves. Astrophysical Journal, 2022, 926, 54.	1.6	79
24	Atacama Cosmology Telescope: Combined kinematic and thermal Sunyaev-Zelâ€™dovich measurements from BOSS CMASS and LOWZ halos. Physical Review D, 2021, 103, .	1.6	76
25	THE ATACAMA COSMOLOGY TELESCOPE: EXTRAGALACTIC SOURCES AT 148 GHz IN THE 2008 SURVEY. Astrophysical Journal, 2011, 731, 100.	1.6	75
26	Weak-lensing Mass Calibration of ACTPol Sunyaevâ€"Zelâ€™dovich Clusters with the Hyper Suprime-Cam Survey. Astrophysical Journal, 2019, 875, 63.	1.6	72
27	THE ATACAMA COSMOLOGY TELESCOPE: DATA CHARACTERIZATION AND MAPMAKING. Astrophysical Journal, 2013, 762, 10.	1.6	70
28	Evidence of Lensing of the Cosmic Microwave Background by Dark Matter Halos. Physical Review Letters, 2015, 114, 151302.	2.9	70
29	The Atacama Cosmology Telescope: a CMB lensing mass map over 2100 square degrees of sky and its cross-correlation with BOSS-CMASS galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 500, 2250-2263.	1.6	68
30	THE ATACAMA COSMOLOGY TELESCOPE: LENSING OF CMB TEMPERATURE AND POLARIZATION DERIVED FROM COSMIC INFRARED BACKGROUND CROSS-CORRELATION. Astrophysical Journal, 2015, 808, 7.	1.6	66
31	Cosmological parameters from pre-planck cosmic microwave background measurements. Physical Review D, 2013, 87, .	1.6	65
32	CONSTRAINTS ON GRAVITY AND DARK ENERGY FROM THE PAIRWISE KINEMATIC SUNYAEVâ€"ZELâ€™DOVICH EFFECT. Astrophysical Journal, 2015, 808, 47.	1.6	61
33	First measurement of the cross-correlation of CMB lensing and galaxy lensing. Physical Review D, 2015, 91, .	1.6	60
34	Atacama Cosmology Telescope: Modeling the gas thermodynamics in BOSS CMASS galaxies from kinematic and thermal Sunyaev-Zelâ€™dovich measurements. Physical Review D, 2021, 103, .	1.6	60
35	Direct Ink Writing of Silicon Carbide for Microwave Optics. Advanced Engineering Materials, 2016, 18, 39-45.	1.6	58
36	Atacama Cosmology Telescope: Component-separated maps of CMB temperature and the thermal Sunyaev-Zelâ€™dovich effect. Physical Review D, 2020, 102, .	1.6	56

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37	The Simons Observatory: instrument overview. , 2018, , .		56
38	THE ATACAMA COSMOLOGY TELESCOPE: DETECTION OF SUNYAEV-ZEL'DOVICH DECREMENT IN GROUPS AND CLUSTERS ASSOCIATED WITH LUMINOUS RED GALAXIES. Astrophysical Journal, 2011, 736, 39.	1.6	52
39	The Atacama Cosmology Telescope: arcminute-resolution maps of 18 000 square degrees of the microwave sky from ACT 2008â€"2018 data combined with Planck. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 046-046.	1.9	50
40	Constraints on massive neutrinos from the pairwise kinematic Sunyaev-Zelâ€™dovich effect. Physical Review D, 2015, 92, .	1.6	45
41	THE ATACAMA COSMOLOGY TELESCOPE: PHYSICAL PROPERTIES OF SUNYAEV-ZEL'DOVICH EFFECT CLUSTERS ON THE CELESTIAL EQUATOR[,]. Astrophysical Journal, 2013, 765, 67.	1.6	43
42	The Atacama Cosmology Telescope: measuring radio galaxy bias through cross-correlation with lensing. Monthly Notices of the Royal Astronomical Society, 2015, 451, 849-858.	1.6	41
43	THE ATACAMA COSMOLOGY TELESCOPE: RELATION BETWEEN GALAXY CLUSTER OPTICAL RICHNESS AND SUNYAEV-ZEL'DOVICH EFFECT. Astrophysical Journal, 2013, 767, 38.	1.6	40
44	The Atacama Cosmology Telescope: dynamical masses for 44 SZ-selected galaxy clusters over 755 square degrees. Monthly Notices of the Royal Astronomical Society, 2016, 461, 248-270.	1.6	38
45	Results from the Atacama B-mode Search (ABS) experiment. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 005-005.	1.9	37
46	A measurement of the millimetre emission and the Sunyaevâ€"Zel'dovich effect associated with low-frequency radio sources. Monthly Notices of the Royal Astronomical Society, 2014, 445, 460-478.	1.6	35
47	AlMn Transition Edge Sensors for Advanced ACTPol. Journal of Low Temperature Physics, 2016, 184, 66-73.	0.6	35
48	THE ATACAMA COSMOLOGY TELESCOPE: CALIBRATION WITH THE<i>WILKINSON MICROWAVE ANISOTROPY PROBE</i>USING CROSS-CORRELATIONS. Astrophysical Journal, 2011, 740, 86.	1.6	34
49	Atacama Cosmology Telescope: A measurement of the thermal Sunyaev-Zelâ€™dovich effect using the skewness of the CMB temperature distribution. Physical Review D, 2012, 86, .	1.6	34
50	Cosmological parameters from pre-Planck CMB measurements: A 2017 update. Physical Review D, 2017, 95, .	1.6	33
51	THE ATACAMA COSMOLOGY TELESCOPE: BEAM MEASUREMENTS AND THE MICROWAVE BRIGHTNESS TEMPERATURES OF URANUS AND SATURN. Astrophysical Journal, Supplement Series, 2013, 209, 17.	3.0	32
52	An 84 Pixel All-Silicon Corrugated Feedhorn for CMB Measurements. Journal of Low Temperature Physics, 2012, 167, 522-527.	0.6	28
53	CORRELATIONS IN THE (SUB)MILLIMETER BACKGROUND FROM ACT Ã— BLAST. Astrophysical Journal, 2012, 744, 40.	1.6	27
54	The Atacama Cosmology Telescope: cross correlation with<i>Planck</i>maps. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 016-016.	1.9	27

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55	The Atacama Cosmology Telescope: two-season ACTPol extragalactic point sources and their polarization properties. Monthly Notices of the Royal Astronomical Society, 2019, 486, 5239-5262.	1.6	27
56	Strong detection of the CMB lensing and galaxy weak lensing cross-correlation from ACT-DR4,<i>Planck</i>Legacy, and KiDS-1000. Astronomy and Astrophysics, 2021, 649, A146.	2.1	26
57	Designs for a large-aperture telescope to map the CMB 10Ã— faster. Applied Optics, 2016, 55, 1688.	2.1	24
58	THE ATACAMA COSMOLOGY TELESCOPE: HIGH-RESOLUTION SUNYAEV-ZEL'DOVICH ARRAY OBSERVATIONS OF ACT SZE-SELECTED CLUSTERS FROM THE EQUATORIAL STRIP. Astrophysical Journal, 2012, 751, 12.	1.6	23
59	The Atacama Cosmology Telescope: delensed power spectra and parameters. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 031-031.	1.9	23
60	The Atacama Cosmology Telescope: the stellar content of galaxy clusters selected using the Sunyaevâ€“Zel'dovich effect. Monthly Notices of the Royal Astronomical Society, 2013, 435, 3469-3480.	1.6	20
61	Probing Galaxy Evolution in Massive Clusters Using ACT and DES: Splashback as a Cosmic Clock. Astrophysical Journal, 2021, 923, 37.	1.6	20
62	Corrugated silicon platelet feed horn array for CMB polarimetry at 150 GHz. Proceedings of SPIE, 2010, , .	0.8	19
63	Subaru weak lensing measurement of a z = 0.81 cluster discovered by the Atacama Cosmology Telescope Surveyâ˜…. Monthly Notices of the Royal Astronomical Society, 2013, 429, 3627-3644.	1.6	19
64	Non-Gaussianity of secondary anisotropies from ACTPol and Planck. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 022-022.	1.9	19
65	The Atacama Cosmology Telescope: Summary of DR4 and DR5 Data Products and Data Access. Astrophysical Journal, Supplement Series, 2021, 255, 11.	3.0	19
66	Quantifying the thermal Sunyaevâ€“Zelâ€™dovich effect and excess millimetre emission in quasar environments. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2315-2335.	1.6	16
67	Atacama Cosmology Telescope: Dusty Star-forming Galaxies and Active Galactic Nuclei in the Equatorial Survey. Astrophysical Journal, 2020, 893, 104.	1.6	16
68	The Atacama Cosmology Telescope: Weighing Distant Clusters with the Most Ancient Light. Astrophysical Journal Letters, 2020, 903, L13.	3.0	15
69	The design and characterization of wideband spline-profiled feedhorns for Advanced ACTPol. Proceedings of SPIE, 2016, , .	0.8	14
70	Optimizing measurements of cluster velocities and temperatures for CCAT-prime and future surveys. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 032-032.	1.9	12
71	The Simons Observatory Large Aperture Telescope Receiver. Astrophysical Journal, Supplement Series, 2021, 256, 23.	3.0	11
72	SALT spectroscopic observations of galaxy clusters detected by ACT and a type II quasar hosted by a brightest cluster galaxy. Monthly Notices of the Royal Astronomical Society, 2015, 449, 4010-4026.	1.6	10

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73	THE ATACAMA COSMOLOGY TELESCOPE: THE LABOCA/ACT SURVEY OF CLUSTERS AT ALL REDSHIFTS. Astrophysical Journal, 2015, 803, 79.	1.6	10
74	Advanced ACTPol TES Device Parameters and Noise Performance in Fielded Arrays. Journal of Low Temperature Physics, 2018, 193, 328-336.	0.6	9
75	Visualizing probabilistic models and data with Intensive Principal Component Analysis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13762-13767.	3.3	9
76	The Atacama Cosmology Telescope: Modeling bulk atmospheric motion. Physical Review D, 2022, 105, .	1.6	9
77	Measuring two-millimeter radiation with a prototype multiplexed TES receiver for ACT. , 2006, 6275, 80.		8
78	Atacama Cosmology Telescope measurements of a large sample of candidates from the Massive and Distant Clusters of WISE Survey. Astronomy and Astrophysics, 2021, 653, A135.	2.1	8
79	CMB Telescopes and Optical Systems. , 2013, , 431-480.		8
80	Commercially Fabricated Antenna-Coupled Transition Edge Sensor Bolometer Detectors for Next-Generation Cosmic Microwave Background Polarimetry Experiment. Journal of Low Temperature Physics, 2020, 199, 1158-1166.	0.6	6
81	Characterization of Transition Edge Sensors for the Simons Observatory. Journal of Low Temperature Physics, 2020, 199, 672-680.	0.6	6
82	BFORE: The B-mode Foreground Experiment. Journal of Low Temperature Physics, 2016, 184, 746-753.	0.6	5
83	Designs for a large-aperture telescope to map the CMB 10Ã— faster. Applied Optics, 2016, 55, 1686.	2.1	5
84	The Atacama Cosmology Telescope: measurement and analysis of 1D beams for DR4. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 044.	1.9	4
85	Characterization of AlMn TES impedance, noise, and optical efficiency in the first 150 mm multichroic array for Advanced ACTPol. , 2016, , .		2
86	The cross correlation of the ABS and ACT maps. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 010-010.	1.9	2
87	In Situ Performance of the Low Frequency Array for Advanced ACTPol. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-4.	1.1	1
88	Optimization of Advanced ACTPol Transition Edge Sensor Bolometer Operation Using R(T,I) Transition Measurements. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-6.	1.1	0
89	Machine Learning, Markov Chain Monte Carlo, and Optimal Algorithms to Characterize the AdvACT Kilopixel Transition-Edge Sensor Arrays. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	0