

# Nicholas Battaglia

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/404880/publications.pdf>

Version: 2024-02-01

26  
papers

1,009  
citations

567144

15  
h-index

552653

26  
g-index

26  
all docs

26  
docs citations

26  
times ranked

1186  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Atacama Cosmology Telescope: The Two-season ACTPol Sunyaev-Zel'dovich Effect Selected Cluster Catalog. <i>Astrophysical Journal, Supplement Series</i> , 2018, 235, 20.	3.0	121
2	The CAMELS Project: Cosmology and Astrophysics with Machine-learning Simulations. <i>Astrophysical Journal</i> , 2021, 915, 71.	1.6	113
3	Evidence for the kinematic Sunyaev-Zel'dovich effect with the Atacama Cosmology Telescope and velocity reconstruction from the Baryon Oscillation Spectroscopic Survey. <i>Physical Review D</i> , 2016, 93, .	1.6	90
4	THE STACKED THERMAL SUNYAEV-ZEL'DOVICH SIGNAL OF LOCALLY BRIGHTEST GALAXIES IN PLANCK FULL MISSION DATA: EVIDENCE FOR GALAXY FEEDBACK?. <i>Astrophysical Journal</i> , 2015, 808, 151.	1.6	82
5	Atacama Cosmology Telescope: Combined kinematic and thermal Sunyaev-Zel'dovich measurements from BOSS CMASS and LOWZ halos. <i>Physical Review D</i> , 2021, 103, .	1.6	76
6	The Atacama Cosmology Telescope: a CMB lensing mass map over 2100 square degrees of sky and its cross-correlation with BOSS-CMASS galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 500, 2250-2263.	1.6	68
7	Atacama Cosmology Telescope: Modeling the gas thermodynamics in BOSS CMASS galaxies from kinematic and thermal Sunyaev-Zel'dovich measurements. <i>Physical Review D</i> , 2021, 103, .	1.6	60
8	Atacama Cosmology Telescope: Component-separated maps of CMB temperature and the thermal Sunyaev-Zel'dovich effect. <i>Physical Review D</i> , 2020, 102, .	1.6	56
9	The Websky extragalactic CMB simulations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 012-012.	1.9	51
10	Future constraints on halo thermodynamics from combined Sunyaev-Zel'dovich measurements. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 040-040.	1.9	44
11	Cosmology with the kinematic Sunyaev-Zeldovich effect: Breaking the optical depth degeneracy with fast radio bursts. <i>Physical Review D</i> , 2019, 100, .	1.6	41
12	Fundamental physics from future weak-lensing calibrated Sunyaev-Zel'dovich galaxy cluster counts. <i>Physical Review D</i> , 2017, 96, .	1.6	38
13	First Results from SMAUG: Uncovering the Origin of the Multiphase Circumgalactic Medium with a Comparative Analysis of Idealized and Cosmological Simulations. <i>Astrophysical Journal</i> , 2020, 903, 32.	1.6	38
14	The CAMELS Multifield Data Set: Learning the Universe's Fundamental Parameters with Artificial Intelligence. <i>Astrophysical Journal, Supplement Series</i> , 2022, 259, 61.	3.0	30
15	Constraining Cluster Virialization Mechanism and Cosmology Using Thermal-SZ-selected Clusters from Future CMB Surveys. <i>Astrophysical Journal</i> , 2022, 926, 172.	1.6	16
16	Microwave spectro-polarimetry of matter and radiation across space and time. <i>Experimental Astronomy</i> , 2021, 51, 1471-1514.	1.6	15
17	A high-resolution view of the filament of gas between Abell 399 and Abell 401 from the Atacama Cosmology Telescope and MUSTANG-2. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 3335-3355.	1.6	14
18	The Circumgalactic Medium from the CAMELS Simulations: Forecasting Constraints on Feedback Processes from Future Sunyaev-Zeldovich Observations. <i>Astrophysical Journal</i> , 2022, 933, 133.	1.6	11

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19	The Impacts of Modeling Choices on the Inference of Circumgalactic Medium Properties from Sunyaev-Zeldovich Observations. <i>Astrophysical Journal</i> , 2021, 919, 2.	1.6	9
20	Probing Hot Gas Components of the Circumgalactic Medium in Cosmological Simulations with the Thermal Sunyaev-Zeldovich Effect. <i>Astrophysical Journal</i> , 2022, 926, 179.	1.6	9
21	Constraining reionization with the first measurement of the cross-correlation between the CMB optical-depth fluctuations and the Compton $y$ -map. <i>Physical Review D</i> , 2021, 104, .	1.6	6
22	Percent-level constraints on baryonic feedback with spectral distortion measurements. <i>Physical Review D</i> , 2022, 105, .	1.6	6
23	Improving constraints on fundamental physics parameters with the clustering of Sunyaev-Zeldovich selected galaxy clusters. <i>Physical Review D</i> , 2019, 100, .	1.6	4
24	A space mission to map the entire observable universe using the CMB as a backlight. <i>Experimental Astronomy</i> , 2021, 51, 1555-1591.	1.6	4
25	Constraints on modified gravity model parameters with cluster abundances and galaxy clustering. <i>Physical Review D</i> , 2022, 105, .	1.6	4
26	The Atacama Cosmology Telescope: SZ-based masses and dust emission from IR-selected cluster candidates in the SHELA survey. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 4026-4038.	1.6	3