

Andrew Wetzel

List of Publications by Year in descending order

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102
papers

6,619
citations

61945

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64755

79
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104
all docs

104
docs citations

104
times ranked

4436
citing authors

#	ARTICLE	IF	CITATIONS
1	FIRE-2 simulations: physics versus numerics in galaxy formation. Monthly Notices of the Royal Astronomical Society, 2018, 480, 800-863.	1.6	676
2	RECONCILING DWARF GALAXIES WITH Λ CDM COSMOLOGY: SIMULATING A REALISTIC POPULATION OF SATELLITES AROUND A MILKY WAY-MASS GALAXY. Astrophysical Journal Letters, 2016, 827, L23.	3.0	430
3	MERGERS AND BULGE FORMATION IN Λ CDM: WHICH MERGERS MATTER?. Astrophysical Journal, 2010, 715, 202-229.	1.6	344
4	Not so lumpy after all: modelling the depletion of dark matter subhaloes by Milky Way-like galaxies. Monthly Notices of the Royal Astronomical Society, 2017, 471, 1709-1727.	1.6	242
5	BREATHING FIRE: HOW STELLAR FEEDBACK DRIVES RADIAL MIGRATION, RAPID SIZE FLUCTUATIONS, AND POPULATION GRADIENTS IN LOW-MASS GALAXIES. Astrophysical Journal, 2016, 820, 131.	1.6	205
6	MERGERS IN Λ CDM: UNCERTAINTIES IN THEORETICAL PREDICTIONS AND INTERPRETATIONS OF THE MERGER RATE. Astrophysical Journal, 2010, 724, 915-945.	1.6	183
7	Black holes on FIRE: stellar feedback limits early feeding of galactic nuclei. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 472, L109-L114.	1.2	176
8	fire in the field: simulating the threshold of galaxy formation. Monthly Notices of the Royal Astronomical Society, 2017, 471, 3547-3562.	1.6	173
9	Gaia Reveals a Metal-rich, in situ Component of the Local Stellar Halo. Astrophysical Journal, 2017, 845, 101.	1.6	142
10	How to model supernovae in simulations of star and galaxy formation. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1578-1603.	1.6	140
11	Be it therefore resolved: cosmological simulations of dwarf galaxies with 30 solar mass resolution. Monthly Notices of the Royal Astronomical Society, 2019, 490, 4447-4463.	1.6	139
12	The Local Group on FIRE: dwarf galaxy populations across a suite of hydrodynamic simulations. Monthly Notices of the Royal Astronomical Society, 2019, 487, 1380-1399.	1.6	137
13	The origins of the circumgalactic medium in the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2019, 488, 1248-1272.	1.6	132
14	Gas kinematics, morphology and angular momentum in the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2018, 473, 1930-1955.	1.6	131
15	The structure and dynamical evolution of the stellar disc of a simulated Milky Way-mass galaxy. Monthly Notices of the Royal Astronomical Society, 2017, 467, 2430-2444.	1.6	125
16	The origin of ultra diffuse galaxies: stellar feedback and quenching. Monthly Notices of the Royal Astronomical Society, 2018, 478, 906-925.	1.6	125
17	SATELLITE DWARF GALAXIES IN A HIERARCHICAL UNIVERSE: INFALL HISTORIES, GROUP PREPROCESSING, AND REIONIZATION. Astrophysical Journal, 2015, 807, 49.	1.6	111
18	Modelling chemical abundance distributions for dwarf galaxies in the Local Group: the impact of turbulent metal diffusion. Monthly Notices of the Royal Astronomical Society, 2018, 474, 2194-2211.	1.6	111

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19	Where are the most ancient stars in the Milky Way?. Monthly Notices of the Royal Astronomical Society, 2018, 480, 652-668.	1.6	96
20	The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: the low-redshift sample. Monthly Notices of the Royal Astronomical Society, 2013, 429, 98-112.	1.6	93
21	The origin of the diverse morphologies and kinematics of Milky Way-mass galaxies in the FIRE-2 simulations. Monthly Notices of the Royal Astronomical Society, 2018, 481, 4133-4157.	1.6	91
22	SATELLITE DWARF GALAXIES IN A HIERARCHICAL UNIVERSE: THE PREVALENCE OF DWARF-DWARF MAJOR MERGERS. Astrophysical Journal, 2014, 794, 115.	1.6	83
23	Star formation histories of dwarf galaxies in the FIRE simulations: dependence on mass and Local Group environment. Monthly Notices of the Royal Astronomical Society, 2019, 489, 4574-4588.	1.6	83
24	Formation of globular cluster candidates in merging proto-galaxies at high redshift: a view from the FIRE cosmological simulations. Monthly Notices of the Royal Astronomical Society, 2018, 474, 4232-4244.	1.6	79
25	Synthetic Gaia Surveys from the FIRE Cosmological Simulations of Milky Way-mass Galaxies. Astrophysical Journal, Supplement Series, 2020, 246, 6.	3.0	77
26	A profile in FIRE: resolving the radial distributions of satellite galaxies in the Local Group with simulations. Monthly Notices of the Royal Astronomical Society, 2020, 491, 1471-1490.	1.6	77
27	No missing photons for reionization: moderate ionizing photon escape fractions from the FIRE-2 simulations. Monthly Notices of the Royal Astronomical Society, 2020, 498, 2001-2017.	1.6	75
28	A dark matter profile to model diverse feedback-induced core sizes of Λ CDM haloes. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2393-2417.	1.6	71
29	Virialization of the Inner CGM in the FIRE Simulations and Implications for Galaxy Disks, Star Formation, and Feedback. Astrophysical Journal, 2021, 911, 88.	1.6	66
30	Predicting the binary black hole population of the Milky Way with cosmological simulations. Monthly Notices of the Royal Astronomical Society, 2018, 480, 2704-2718.	1.6	64
31	Radiative stellar feedback in galaxy formation: Methods and physics. Monthly Notices of the Royal Astronomical Society, 2020, 491, 3702-3729.	1.6	64
32	Self-consistent proto-globular cluster formation in cosmological simulations of high-redshift galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4315-4332.	1.6	59
33	Characterizing mass, momentum, energy, and metal outflow rates of multiphase galactic winds in the FIRE-2 cosmological simulations. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2979-3008.	1.6	56
34	Baryonic solutions and challenges for cosmological models of dwarf galaxies. Nature Astronomy, 2022, 6, 897-910.	4.2	55
35	Dwarf galaxies in CDM, WDM, and SIDM: disentangling baryons and dark matter physics. Monthly Notices of the Royal Astronomical Society, 2019, 490, 962-977.	1.6	54
36	The time-scales probed by star formation rate indicators for realistic, bursty star formation histories from the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2021, 501, 4812-4824.	1.6	51

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37	Reconciling Observed and Simulated Stellar Halo Masses. <i>Astrophysical Journal</i> , 2018, 869, 12.	1.6	48
38	No assembly required: mergers are mostly irrelevant for the growth of low-mass dwarf galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 319-331.	1.6	48
39	Simulating galaxies in the reionization era with FIRE-2: morphologies and sizes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 219-229.	1.6	48
40	The formation times and building blocks of Milky Way-mass galaxies in the FIRE simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 747-764.	1.6	47
41	THE PHYSICAL NATURE OF THE COSMIC ACCRETION OF BARYONS AND DARK MATTER INTO HALOS AND THEIR GALAXIES. <i>Astrophysical Journal</i> , 2015, 808, 40.	1.6	46
42	Modeling the Impact of Baryons on Subhalo Populations with Machine Learning. <i>Astrophysical Journal</i> , 2018, 859, 129.	1.6	46
43	The fates of the circumgalactic medium in the FIRE simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 3581-3595.	1.6	46
44	Evidence for a vast prograde stellar stream in the solar vicinity. <i>Nature Astronomy</i> , 2020, 4, 1078-1083.	4.2	44
45	When the Jeans Do Not Fit: How Stellar Feedback Drives Stellar Kinematics and Complicates Dynamical Modeling in Low-mass Galaxies. <i>Astrophysical Journal</i> , 2017, 835, 193.	1.6	41
46	Under the FIRElight: Stellar Tracers of the Local Dark Matter Velocity Distribution in the Milky Way. <i>Astrophysical Journal</i> , 2019, 883, 27.	1.6	40
47	Planes of satellites around Milky Way/M31-mass galaxies in the FIRE simulations and comparisons with the Local Group. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 1379-1397.	1.6	40
48	Gemini Observations of Galaxies in Rich Early Environments (GOGREEN) I: survey description. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 4168-4185.	1.6	38
49	Dark and luminous satellites of LMC-mass galaxies in the FIRE simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 5348-5364.	1.6	38
50	Halo histories versus galaxy properties at $z \sim 0$ II: large-scale galactic conformity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 935-945.	1.6	37
51	Gas kinematics in FIRE simulated galaxies compared to spatially unresolved $H\alpha$ observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 1536-1548.	1.6	37
52	AGN All the Way Down? AGN-like Line Ratios Are Common in the Lowest-mass Isolated Quiescent Galaxies. <i>Astrophysical Journal</i> , 2019, 884, 180.	1.6	37
53	Live fast, die young: GMC lifetimes in the FIRE cosmological simulations of Milky Way mass galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 3993-3999.	1.6	37
54	Evolution of giant molecular clouds across cosmic time. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 488-502.	1.6	36

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55	Pressure balance in the multiphase ISM of cosmologically simulated disc galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 498, 3664-3683.	1.6	35
56	Warm FIRE: simulating galaxy formation with resonant sterile neutrino dark matter. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 4086-4099.	1.6	34
57	Star Formation Quenching Timescale of Central Galaxies in a Hierarchical Universe. <i>Astrophysical Journal</i> , 2017, 841, 6.	1.6	32
58	Swirls of FIRE: spatially resolved gas velocity dispersions and star formation rates in FIRE-2 disc environments. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 496, 1620-1637.	1.6	32
59	The bursty origin of the Milky Way thick disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 889-902.	1.6	32
60	Hot-mode accretion and the physics of thin-disc galaxy formation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 514, 5056-5073.	1.6	32
61	Formation, vertex deviation, and age of the Milky Way's bulge: input from a cosmological simulation with a late-forming bar. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5073-5085.	1.6	31
62	The central densities of Milky Way-mass galaxies in cold and self-interacting dark matter models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 720-729.	1.6	31
63	Galaxies lacking dark matter produced by close encounters in a cosmological simulation. <i>Nature Astronomy</i> , 2022, 6, 496-502.	4.2	31
64	What drives the evolution of gas kinematics in star-forming galaxies?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 5125-5137.	1.6	30
65	Gas infall and radial transport in cosmological simulations of Milky Way-mass discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 4149-4170.	1.6	30
66	Extinguishing the FIRE: environmental quenching of satellite galaxies around Milky Way-mass hosts in simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 514, 5276-5295.	1.6	27
67	The Importance of Preventive Feedback: Inference from Observations of the Stellar Masses and Metallicities of Milky Way Dwarf Galaxies. <i>Astrophysical Journal</i> , 2017, 846, 66.	1.6	25
68	A relationship between stellar metallicity gradients and galaxy age in dwarf galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 501, 5121-5134.	1.6	25
69	Stars made in outflows may populate the stellar halo of the Milky Way. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 1539-1559.	1.6	24
70	Star Formation Histories of Ultra-faint Dwarf Galaxies: Environmental Differences between Magellanic and Non-Magellanic Satellites?*. <i>Astrophysical Journal Letters</i> , 2021, 920, L19.	3.0	24
71	3D gas-phase elemental abundances across the formation histories of Milky Way-mass galaxies in the FIRE simulations: initial conditions for chemical tagging. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 4586-4607.	1.6	23
72	Star formation at the edge of the Local Group: a rising star formation history in the isolated galaxy WLM. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 5538-5550.	1.6	21

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73	The origin of metal-poor stars on prograde disc orbits in FIRE simulations of Milky Way-mass galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 505, 921-938.	1.6	21
74	A predicted correlation between age gradient and star formation history in FIRE dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2019, 490, 1186-1201.	1.6	20
75	Thermal instability in the CGM of L^{\dagger} galaxies: testing "precipitation" models with the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2021, 505, 1841-1862.	1.6	19
76	Dissipative dark matter on FIRE " I. Structural and kinematic properties of dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 506, 4421-4445.	1.6	18
77	HALO7D II: The Halo Velocity Ellipsoid and Velocity Anisotropy with Distant Main-sequence Stars. Astrophysical Journal, 2019, 879, 120.	1.6	17
78	Cataloging accreted stars within $Gaia$ DR2 using deep learning. Astronomy and Astrophysics, 2020, 636, A75.	2.1	17
79	Neutral CGM as damped Ly α absorbers at high redshift. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2869-2884.	1.6	17
80	The Orbit and Origin of the Ultra-faint Dwarf Galaxy Segue 1. Astrophysical Journal, 2018, 860, 164.	1.6	15
81	The OSIRIS Lens-amplified Survey (OLAS). I. Dynamical Effects of Stellar Feedback in Low-mass Galaxies at $z \sim 1/4$. Astrophysical Journal, 2019, 880, 54.	1.6	15
82	3D elemental abundances of stars at formation across the histories of Milky Way-mass galaxies in the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2022, 514, 4270-4289.	1.6	14
83	Kinematics of Cluster Galaxies and Their Relation to Galaxy Evolution. Astrophysical Journal, 2019, 878, 9.	1.6	13
84	Dynamical heating of the X-ray emitting intracluster medium: the roles of merger shocks and turbulence dissipation. Monthly Notices of the Royal Astronomical Society, 2020, 495, 784-795.	1.6	13
85	The galaxy "halo size relation of low-mass galaxies in FIRE. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3967-3985.	1.6	13
86	Amplified J-factors in the Galactic Centre for velocity-dependent dark matter annihilation in FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2022, 513, 55-70.	1.6	12
87	Reproducing the CO-to-H ₂ conversion factor in cosmological simulations of Milky-Way-mass galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 499, 837-850.	1.6	11
88	Using action space clustering to constrain the recent accretion history of Milky Way-like galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 509, 5882-5901.	1.6	11
89	Variations in the slope of the resolved star-forming main sequence: a tool for constraining the mass of star-forming regions. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 493, L87-L91.	1.2	10
90	The effects of LMC-mass environments on their dwarf satellite galaxies in the FIRE simulations. Monthly Notices of the Royal Astronomical Society, 2022, 513, 2673-2688.	1.6	10

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91	Fiery Cores: Bursty and Smooth Star Formation Distributions across Galaxy Centers in Cosmological Zoom-in Simulations. <i>Astrophysical Journal Letters</i> , 2021, 908, L31.	3.0	9
92	The contribution of globular clusters to cosmic reionization. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 4062-4071.	1.6	9
93	The In Situ Origins of Dwarf Stellar Outskirts in FIRE-2. <i>Astrophysical Journal</i> , 2022, 931, 152.	1.6	9
94	New Families in our Solar Neighborhood: Applying Gaussian Mixture Models for Objective Classification of Structures in the Milky Way and in Simulations. <i>Astrophysical Journal</i> , 2021, 921, 106.	1.6	8
95	Effects of Stellar Feedback on Stellar and Gas Kinematics of Star-forming Galaxies at $0.6 \leq z \leq 1.0$. <i>Astrophysical Journal Letters</i> , 2020, 896, L26.	3.0	6
96	Progenitor-mass-dependent yields amplify intrinsic scatter in dwarf-galaxy elemental abundance ratios. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 508-515.	1.6	6
97	Galactic Mass Estimates Using Dwarf Galaxies as Kinematic Tracers. <i>Astrophysical Journal</i> , 2022, 924, 131.	1.6	6
98	Structural Parameters and Possible Association of the Ultra-faint Dwarfs Pegasus III and Pisces II from Deep Hubble Space Telescope Photometry. <i>Astrophysical Journal</i> , 2022, 933, 217.	1.6	5
99	Predictions for Complex Distributions of Stellar Elemental Abundances in Low-Mass Galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	1.6	3
100	Better Galactic Mass Models through Chemistry. <i>Galaxies</i> , 2017, 5, 43.	1.1	2
101	Gaseous Halos of Simulated Milky Way-like Galaxies. <i>Research Notes of the AAS</i> , 2022, 6, 16.	0.3	0
102	APOGEE-centric Ananke Simulations in a SciServer SQL Database. <i>Research Notes of the AAS</i> , 2022, 6, 125.	0.3	0