Brian O'Shea

List of Publications by Year
in descending order

48 papers	2,885 citations	236925 25 h-index	243625 44 g-index
49 all docs	49 docs citations	49 times ranked	2789 citing authors

#	Article	IF	Citations
1	ENZO: AN ADAPTIVE MESH REFINEMENT CODE FOR ASTROPHYSICS. Astrophysical Journal, Supplement Series, 2014, 211, 19.	7.7	615
2	grackle: a chemistry and cooling library for astrophysics. Monthly Notices of the Royal Astronomical Society, 2017, 466, 2217-2234.	4.4	201
3	Figuring Out Gas & Galaxies in Enzo (FOGGIE). I. Resolving Simulated Circumgalactic Absorption at 2Âå‰ÀzÂå‰Â2.5. Astrophysical Journal, 2019, 873, 129.	4.5	166
4	GALAXY PROPERTIES AND UV ESCAPE FRACTIONS DURING THEÂEPOCH OF REIONIZATION: RESULTS FROM THE RENAISSANCE SIMULATIONS. Astrophysical Journal, 2016, 833, 84.	4.5	155
5	A Global Model for Circumgalactic and Cluster-core Precipitation. Astrophysical Journal, 2017, 845, 80.	4.5	149
6	COOLING, AGN FEEDBACK, AND STAR FORMATION IN SIMULATED COOL-CORE GALAXY CLUSTERS. Astrophysical Journal, 2015, 811, 73.	4.5	146
7	PROBING THE ULTRAVIOLET LUMINOSITY FUNCTION OF THE EARLIEST GALAXIES WITH THE RENAISSANCE SIMULATIONS. Astrophysical Journal Letters, 2015, 807, L12.	8.3	144
8	The Impact of Enhanced Halo Resolution on the Simulated Circumgalactic Medium. Astrophysical Journal, 2019, 882, 156.	4.5	128
9	Formation of massive black holes in rapidly growing pre-galactic gas clouds. Nature, 2019, 566, 85-88.	27.8	122
10	The first Population II stars formed in externally enriched mini-haloes. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2822-2836.	4.4	117
11	Advanced LIGO Constraints on Neutron Star Mergers and r-process Sites. Astrophysical Journal, 2017, 836, 230.	4.5	71
12	PRECIPITATION-REGULATED STAR FORMATION IN GALAXIES. Astrophysical Journal Letters, 2015, 808, L30.	8.3	70
13	The Impact of Modeling Assumptions in Galactic Chemical Evolution Models. Astrophysical Journal, 2017, 835, 128.	4.5	70
14	SUPERNOVA SWEEPING AND BLACK HOLE FEEDBACK IN ELLIPTICAL GALAXIES. Astrophysical Journal Letters, 2015, 803, L21.	8.3	56
15	Energy transfer in compressible magnetohydrodynamic turbulence. Physics of Plasmas, 2017, 24, 092311.	1.9	49
16	Triggering and Delivery Algorithms for AGN Feedback. Astrophysical Journal, 2017, 841, 133.	4.5	48
17	The Second Data Release of the KODIAQ Survey. Astronomical Journal, 2017, 154, 114.	4.7	44
18	ENZO: An Adaptive Mesh Refinement Code for Astrophysics (Version 2.6). Journal of Open Source Software, 2019, 4, 1636.	4.6	44

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19	GROWTH AND EVOLUTION OF THERMAL INSTABILITIES IN IDEALIZED GALAXY CLUSTER CORES. Astrophysical Journal, 2015, 808, 43.	4.5	40
20	Validating Semi-analytic Models of High-redshift Galaxy Formation Using Radiation Hydrodynamical Simulations. Astrophysical Journal, 2018, 859, 67.	4.5	32
21	The Origin of r-process Enhanced Metal-poor Halo Stars In Now-destroyed Ultra-faint Dwarf Galaxies. Astrophysical Journal, 2019, 871, 247.	4.5	32
22	Figuring Out Gas & Galaxies in Enzo (FOGGIE). II. Emission from the zÂ=Â3 Circumgalactic Medium. Astrophysical Journal, 2020, 896, 125.	4.5	32
23	First light: exploring the spectra of high-redshift galaxies in the Renaissance Simulations. Monthly Notices of the Royal Astronomical Society, 2017, 469, 4863-4878.	4.4	31
24	Metal Mixing and Ejection in Dwarf Galaxies Are Dependent on Nucleosynthetic Source. Astrophysical Journal, 2018, 869, 94.	4.5	31
25	Circumgalactic Pressure Profiles Indicate Precipitation-limited Atmospheres for M _* â¼ 10⁹â€“10^{11.5} M _{âŠ™}. Astrophysical Journal Letters, 2019, 879, L1.	8.3	29
26	Mass and metallicity requirement in stellar models for galactic chemical evolution applications. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3755-3767.	4.4	26
27	Figuring Out Gas & Galaxies in Enzo (FOGGIE). IV. The Stochasticity of Ram Pressure Stripping in Galactic Halos. Astrophysical Journal, 2020, 905, 167.	4.5	24
28	K-Athena: A Performance Portable Structured Grid Finite Volume Magnetohydrodynamics Code. IEEE Transactions on Parallel and Distributed Systems, 2021, 32, 85-97.	5.6	23
29	A Black Hole Feedback Valve in Massive Galaxies. Astrophysical Journal, 2020, 899, 70.	4.5	22
30	X-RAY BACKGROUND AT HIGH REDSHIFTS FROM POP III REMNANTS: RESULTS FROM POP III STAR FORMATION RATES IN THE RENAISSANCE SIMULATIONS. Astrophysical Journal Letters, 2016, 832, L5.	8.3	21
31	DISSECTING GALAXY FORMATION MODELS WITH SENSITIVITY ANALYSISâ€”A NEW APPROACH TO CONSTRAIN THE MILKY WAY FORMATION HISTORY. Astrophysical Journal, 2014, 787, 20.	4.5	18
32	From F = ma to Flying Squirrels: Curricular Change in an Introductory Physics Course. CBE Life Sciences Education, 2013, 12, 230-238.	2.3	17
33	As a Matter of Tension: Kinetic Energy Spectra in MHD Turbulence. Astrophysical Journal, 2021, 909, 148.	4.5	17
34	COSMOLOGICAL SIMULATIONS OF ISOTROPIC CONDUCTION IN GALAXY CLUSTERS. Astrophysical Journal, 2013, 778, 152.	4.5	16
35	Figuring Out Gas & Galaxies in Enzo (FOGGIE). III. The Mocky Way: Investigating Biases in Observing the Milky Wayâ€™s Circumgalactic Medium. Astrophysical Journal, 2020, 896, 143.	4.5	16
36	Environmental Dependence of Self-regulating Black Hole Feedback in Massive Galaxies. Astrophysical Journal, 2020, 905, 50.	4.5	13

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37	As a Matter of Forceâ€"Systematic Biases in Idealized Turbulence Simulations. Astrophysical Journal Letters, 2018, 858, L19.	8.3	10
38	External Enrichment of Mini Halos by the First Supernovae. Astrophysical Journal, 2021, 909, 70.	4.5	10
39	Figuring Out Gas & Galaxies In Enzo (FOGGIE). V. The Virial Temperature Does Not Describe Gas in a Virialized Galaxy Halo. Astrophysical Journal, 2021, 922, 121.	4.5	10
40	As a Matter of State: The Role of Thermodynamics in Magnetohydrodynamic Turbulence. Astrophysical Journal, 2020, 889, 19.	4.5	9
41	Some First Stars Were Red: Detecting Signatures of Massive Population III Formation through Long-term Stochastic Color Variations. Astrophysical Journal Letters, 2021, 920, L22.	8.3	7
42	Atmospheric Circulation in Simulations of the AGNâ€"CGM Connection at Halo Masses âˆ¼10^{13.5} M _{âŠ™}. Astrophysical Journal, 2022, 932, 18.	4.5	2
43	Correlations and Cascades in Magnetized Turbulence. IEEE Transactions on Plasma Science, 2019, 47, 2020-2031.	1.3	1
44	Tests of AGN Feedback Kernels in Simulated Galaxy Clusters. Astrophysical Journal, 2020, 901, 117.	4.5	1
45	The formation of the first second generation star. , 2012, , .		0
46	Magnetized decaying turbulence in the weakly compressible Taylor-Green vortex. Physical Review E, 2021, 103, 043203.	2.1	0
47	Halo Environment for Population III Star Formation. Research Notes of the AAS, 2020, 4, 93.	0.7	0
48	Analyzing Star Formation Feedback Mechanisms in Cosmological Simulations. Research Notes of the AAS, 2022, 6, 38.	0.7	0