Claudio Dalla Vecchia

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3650556/publications.pdf

Version: 2024-02-01

118	16,267	28274	21540
papers	citations	55 h-index	114 g-index

122	122	122	6453
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The EAGLE project: simulating the evolution and assembly of galaxies and their environments. Monthly Notices of the Royal Astronomical Society, 2015, 446, 521-554.	4.4	2,549
2	The EAGLE simulations of galaxy formation: calibration of subgrid physics and model variations. Monthly Notices of the Royal Astronomical Society, 2015, 450, 1937-1961.	4.4	1,038
3	Dark matter halo concentrations in the Wilkinson Microwave Anisotropy Probe year 5 cosmology. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 390, L64-L68.	3.3	740
4	The physics driving the cosmic star formation history. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1536-1560.	4.4	704
5	Chemical enrichment in cosmological, smoothed particle hydrodynamics simulations. Monthly Notices of the Royal Astronomical Society, 2009, 399, 574-600.	4.4	525
6	On the relation between the Schmidt and Kennicutt-Schmidt star formation laws and its implications for numerical simulations. Monthly Notices of the Royal Astronomical Society, 0, 383, 1210-1222.	4.4	521
7	The APOSTLE simulations: solutions to the Local Group's cosmic puzzles. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1931-1943.	4.4	453
8	Simulating galactic outflows with thermal supernova feedback. Monthly Notices of the Royal Astronomical Society, 2012, 426, 140-158.	4.4	437
9	The eagle simulations of galaxy formation: Public release of halo and galaxy catalogues. Astronomy and Computing, 2016, 15, 72-89.	1.7	394
10	The Aquila comparison project: the effects of feedback and numerical methods on simulations of galaxy formation. Monthly Notices of the Royal Astronomical Society, 2012, 423, 1726-1749.	4.4	381
11	Simulating galactic outflows with kinetic supernova feedback. Monthly Notices of the Royal Astronomical Society, 2008, 387, 1431-1444.	4.4	359
12	The effects of galaxy formation on the matter power spectrum: a challenge for precision cosmology. Monthly Notices of the Royal Astronomical Society, 2011, 415, 3649-3665.	4.4	344
13	Evolution of galaxy stellar masses and star formation rates in the eagle simulations. Monthly Notices of the Royal Astronomical Society, 2015, 450, 4486-4504.	4.4	332
14	Baryon effects on the internal structure of Î›CDM haloes in the EAGLE simulations. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1247-1267.	4.4	302
15	The rates and modes of gas accretion on to galaxies and their gaseous haloes. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2458-2478.	4.4	264
16	Cosmological simulations of the formation of the stellar haloes around disc galaxies. Monthly Notices of the Royal Astronomical Society, 2011, 416, 2802-2820.	4.4	232
17	The impact of angular momentum on black hole accretion rates in simulations of galaxy formation. Monthly Notices of the Royal Astronomical Society, 2015, 454, 1038-1057.	4.4	219
18	Galaxiesï¿½ï¿½intergalactic medium interaction calculation ï¿½ï¿½ I. Galaxy formation as a function of large-scale environment. Monthly Notices of the Royal Astronomical Society, 2009, 399, 1773-1794.	4.4	216

#	Article	IF	Citations
19	The origin of discs and spheroids in simulated galaxies. Monthly Notices of the Royal Astronomical Society, 2012, 423, 1544-1555.	4.4	215
20	Ubiquitous seeding of supermassive black holes by direct collapse. Monthly Notices of the Royal Astronomical Society, 2012, 425, 2854-2871.	4.4	202
21	Conditions for Reionizing the Universe with a Low Galaxy Ionizing Photon Escape Fraction. Astrophysical Journal, 2019, 879, 36.	4.5	201
22	Colours and luminosities ofzÂ=Â0.1 galaxies in the eagle simulation. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2879-2896.	4.4	200
23	The eagle simulations of galaxy formation: the importance of the hydrodynamics scheme. Monthly Notices of the Royal Astronomical Society, 2015, 454, 2277-2291.	4.4	192
24	Gas expulsion by quasar-driven winds as a solution to the overcooling problem in galaxy groups and clusters. Monthly Notices of the Royal Astronomical Society, 2011, 412, 1965-1984.	4.4	185
25	Molecular hydrogen abundances of galaxies in the EAGLE simulations. Monthly Notices of the Royal Astronomical Society, 2015, 452, 3815-3837.	4.4	182
26	The Cluster-EAGLE project: global properties of simulated clusters with resolved galaxies. Monthly Notices of the Royal Astronomical Society, 2017, 471, 1088-1106.	4.4	178
27	The First Billion Years project: the escape fraction of ionizing photons in the epoch of reionization. Monthly Notices of the Royal Astronomical Society, 2015, 451, 2544-2563.	4.4	172
28	The Hydrangea simulations: galaxy formation in and around massive clusters. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4186-4208.	4.4	167
29	Bent by baryons: the low-mass galaxy-halo relation. Monthly Notices of the Royal Astronomical Society, 2015, 448, 2941-2947.	4.4	163
30	Implementation of feedback in smoothed particle hydrodynamics: towards concordance of methods. Monthly Notices of the Royal Astronomical Society, 2012, 419, 465-478.	4.4	162
31	The First Billion Years project: the impact of stellar radiation on the co-evolution of Populations II and III. Monthly Notices of the Royal Astronomical Society, 2013, 428, 1857-1872.	4.4	155
32	The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmological implications of the configuration-space clustering wedges. Monthly Notices of the Royal Astronomical Society, 2017, 464, 1640-1658.	4.4	143
33	The impact of galaxy formation on the total mass, mass profile and abundance of haloes. Monthly Notices of the Royal Astronomical Society, 2014, 442, 2641-2658.	4.4	137
34	Impact of baryon physics on dark matter structures: a detailed simulation study of halo density profiles. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	135
35	Feedback and the structure of simulated galaxies at redshift z= 2. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1541-1556.	4.4	131
36	The distribution of atomic hydrogen in eagle galaxies: morphologies, profiles, and Hâ€‰i holes. Monthly Notices of the Royal Astronomical Society, 2016, 456, 1115-1136.	4.4	117

#	Article	IF	Citations
37	THROUGH THICK AND THINâ€"H I ABSORPTION IN COSMOLOGICAL SIMULATIONS. Astrophysical Journal Letters, 2011, 737, L37.	8.3	115
38	The impact of baryons on the spins and shapes of dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2013, 429, 3316-3329.	4.4	114
39	The alignment and shape of dark matter, stellar, and hot gas distributions in the EAGLE and cosmo-OWLS simulations. Monthly Notices of the Royal Astronomical Society, 2015, 453, 721-738.	4.4	108
40	The case for AGN feedback in galaxy groups. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	105
41	Simulations of Magnetic Fields in Filaments. Astrophysical Journal, 2005, 631, L21-L24.	4.5	102
42	The drop in the cosmic star formation rate below redshift 2 is caused by a change in the mode of gas accretion and by active galactic nucleus feedback. Monthly Notices of the Royal Astronomical Society, 2011, 415, 2782-2789.	4.4	101
43	Gaussian covariance matrices for anisotropic galaxy clustering measurements. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1577-1592.	4.4	96
44	The First Billion Years project: birthplaces of direct collapse black holes. Monthly Notices of the Royal Astronomical Society, 2014, 443, 648-657.	4.4	92
45	Quenching cluster cooling flows with recurrent hot plasma bubbles. Monthly Notices of the Royal Astronomical Society, 2004, 355, 995-1004.	4.4	87
46	Supermassive black holes in the EAGLE Universe. Revealing the observables of their growth. Monthly Notices of the Royal Astronomical Society, 2016, 462, 190-205.	4.4	84
47	The impact of baryonic processes on the two-point correlation functions of galaxies, subhaloes and matter. Monthly Notices of the Royal Astronomical Society, 2014, 440, 2997-3010.	4.4	82
48	The effect of baryons on the inner density profiles of rich clusters. Monthly Notices of the Royal Astronomical Society, 2015, 452, 343-355.	4.4	80
49	Barred galaxies in the EAGLE cosmological hydrodynamical simulation. Monthly Notices of the Royal Astronomical Society, 2017, 469, 1054-1064.	4.4	66
50	The connection between mass, environment, and slow rotation in simulated galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 476, 4327-4345.	4.4	65
51	nIFTy galaxy cluster simulations â€“ I. Dark matter and non-radiative models. Monthly Notices of the Royal Astronomical Society, 2016, 457, 4063-4080.	4.4	63
52	Comparing approximate methods for mock catalogues and covariance matrices â€“ I. Correlation function. Monthly Notices of the Royal Astronomical Society, 2019, 482, 1786-1806.	4.4	63
53	The diverse density profiles of galaxy clusters with self-interacting dark matter plus baryons. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 476, L20-L24.	3.3	62
54	The fate of high-redshift massive compact galaxies. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1916-1930.	4.4	61

#	Article	IF	Citations
55	Physical properties of simulated galaxy populations at z = 2 â€“ I. Effect of metal-line cooling and feedback from star formation and AGN. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2931-2954.	4.4	59
56	The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmological implications of the Fourier space wedges of the final sample. Monthly Notices of the Royal Astronomical Society, 0, , stw3384.	4.4	58
57	The First Billion Years project: constraining the dust attenuation law of star-forming galaxies at z â‰ƒ 5. Monthly Notices of the Royal Astronomical Society, 2017, 470, 3006-3026.	4.4	58
58	Comparing approximate methods for mock catalogues and covariance matrices â€“ III: bispectrum. Monthly Notices of the Royal Astronomical Society, 2019, 482, 4883-4905.	4.4	55
59	The Aurora radiation-hydrodynamical simulations of reionization: calibration and first results. Monthly Notices of the Royal Astronomical Society, 2017, 466, 960-973.	4.4	54
60	Absorption signatures of warm-hot gas at low redshift: Oâ€ƒvi. Monthly Notices of the Royal Astronomical Society, 2011, 413, 190-212.	4.4	53
61	Comparing approximate methods for mock catalogues and covariance matrices II: power spectrum multipoles. Monthly Notices of the Royal Astronomical Society, 2019, 485, 2806-2824.	4.4	53
62	The enrichment history of cosmic metals. Monthly Notices of the Royal Astronomical Society, 2010, 409, 132-144.	4.4	50
63	Spatially adaptive radiation-hydrodynamical simulations of galaxy formation during cosmological reionization. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1586-1605.	4.4	49
64	The Spectral Evolution of the First Galaxies. III. Simulated James Webb Space Telescope Spectra of Reionization-epoch Galaxies with Lyman-continuum Leakage. Astrophysical Journal, 2017, 836, 78.	4.5	48
65	Absorption signatures of warm-hot gas at low redshift: broad Hâ€‰i LyÎ± absorbers. Monthly Notices of the Royal Astronomical Society, 2012, 425, 1640-1663.	4.4	47
66	Disruption of satellite galaxies in simulated groups and clusters: the roles of accretion time, baryons, and pre-processing. Monthly Notices of the Royal Astronomical Society, 2019, 485, 2287-2311.	4.4	47
67	Rotation rates, sizes and star formation efficiencies of a representative population of simulated disc galaxies. Monthly Notices of the Royal Astronomical Society, 2012, 427, 379-392.	4.4	44
68	The correlation structure of dark matter halo properties. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 415, L69-L73.	3.3	41
69	The filling factor of intergalactic metals at redshift z= 3. Monthly Notices of the Royal Astronomical Society, 2012, 420, 1053-1060.	4.4	41
70	The impact of different physical processes on the statistics of Lyman-limit and damped Lyman Î± absorbers. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2689-2707.	4.4	40
71	Metal-line emission from the warm-hot intergalactic medium - I. Soft X-rays. Monthly Notices of the Royal Astronomical Society, 2010, 407, 544-566.	4.4	39
72	nIFTy galaxy cluster simulations â€“ IV. Quantifying the influence of baryons on halo properties. Monthly Notices of the Royal Astronomical Society, 2016, 458, 4052-4073.	4.4	39

#	Article	IF	Citations
73	A numerical study of interactions and stellar bars. Monthly Notices of the Royal Astronomical Society, 2017, 464, 1502-1511.	4.4	39
74	Sub one per cent mass fractions of young stars in red massive galaxies. Nature Astronomy, 2020, 4, 252-259.	10.1	36
75	The intracluster light as a tracer of the total matter density distribution: a view from simulations. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1859-1864.	4.4	34
76	The VANDELS survey: dust attenuation in star-forming galaxies at z = 3-4. Monthly Notices of the Royal Astronomical Society, 2018, 476, 3218-3232.	4.4	33
77	The Cluster-EAGLE project: velocity bias and the velocity dispersionâ€“mass relation of cluster galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3746-3759.	4.4	33
78	A measurement of galaxy halo mass from the surrounding HÂi LyÎ± absorption. Monthly Notices of the Royal Astronomical Society, 2013, 433, 3103-3114.	4.4	31
79	Metal-line emission from the warm-hot intergalactic medium - II. Ultraviolet. Monthly Notices of the Royal Astronomical Society, 2010, 408, 1120-1138.	4.4	29
80	Influence of baryons on the orbital structure of dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2012, 422, 1863-1879.	4.4	29
81	Growth of First Galaxies: Impacts of Star Formation and Stellar Feedback. Astrophysical Journal, 2017, 846, 30.	4.5	28
82	Hydrodynamical simulations and semi-analytic models of galaxy formation: two sides of the same coin. Monthly Notices of the Royal Astronomical Society, 2012, 421, 3579-3593.	4.4	27
83	Physical properties of simulated galaxy populations at z = 2 â€“ II. Effects of cosmology, reionization and ISM physics. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2955-2967.	4.4	27
84	A cosmological context for compact massive galaxies. Monthly Notices of the Royal Astronomical Society, 2015, 449, 2396-2404.	4.4	26
85	Deep spectroscopy of nearby galaxy clusters â€“ I. Spectroscopic luminosity function of Abell 85. Monthly Notices of the Royal Astronomical Society, 2016, 458, 1590-1603.	4.4	26
86	Growing a â€˜cosmic beastâ€™: observations and simulations of MACSâ€‰J0717.5+3745. Monthly Notices of the Royal Astronomical Society, 2018, 481, 2901-2917.	4.4	25
87	The origin of extended disc galaxies at z = 2. Monthly Notices of the Royal Astronomical Society: Letters, 2009, 399, L64-L68.	3.3	23
88	Stellar splashback: the edge of the intracluster light. Monthly Notices of the Royal Astronomical Society, 2020, 500, 4181-4192.	4.4	22
89	FOREVER22: galaxy formation in protocluster regions. Monthly Notices of the Royal Astronomical Society, 2021, 509, 4037-4057.	4.4	21
90	Kinematic analysis of eagle simulations: evolution of Î»Re and its connection with mergers and gas accretion. Monthly Notices of the Royal Astronomical Society, 2020, 494, 5652-5665.	4.4	20

#	Article	IF	Citations
91	Formation of the first galaxies in the aftermath of the first supernovae. Monthly Notices of the Royal Astronomical Society, 2021, 508, 3226-3238.	4.4	20
92	The Origin of the Relation between Metallicity and Size in Star-forming Galaxies. Astrophysical Journal, 2018, 859, 109.	4.5	19
93	Modelling neutral hydrogen in galaxies using cosmological hydrodynamical simulations. Monthly Notices of the Royal Astronomical Society, 2012, , no-no.	4.4	18
94	The First Billion Years project: dark matter haloes going from contraction to expansion and back again. Monthly Notices of the Royal Astronomical Society, 2014, 443, 985-1001.	4.4	17
95	Deep spectroscopy in nearby galaxy clusters â€“ III. Orbital structure of galaxies in Abell 85. Monthly Notices of the Royal Astronomical Society, 2017, 468, 364-377.	4.4	17
96	On the Dearth of Ultra-faint Extremely Metal-poor Galaxies. Astrophysical Journal, 2017, 835, 159.	4.5	15
97	Constraining the inner density slope of massive galaxy clusters. Monthly Notices of the Royal Astronomical Society, 2020, 496, 4717-4733.	4.4	15
98	Galaxies with monstrous black holes in galaxy cluster environments. Monthly Notices of the Royal Astronomical Society, 2019, 485, 396-407.	4.4	14
99	The Cluster-EAGLE project: a comparison of dynamical mass estimators using simulated clusters. Monthly Notices of the Royal Astronomical Society, 2019, 482, 3308-3325.	4.4	14
100	The First Billion Years project: gamma-ray bursts at zÂ>Â5. Monthly Notices of the Royal Astronomical Society, 2015, 446, 4239-4249.	4.4	13
101	One simulation to have them all: performance of the Bias Assignment Method against N-body simulations. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	13
102	The discovery of the most UVâ€“Ly Î± luminous star-forming galaxy: a young, dust- and metal-poor starburst with QSO-like luminosities. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 499, L105-L110.	3.3	13
103	The First Billion Years project: Finding infant globular clusters at $z = 6$. Astronomy and Astrophysics, 2020, 641, A132.	5.1	12
104	Evaluating hydrodynamical simulations with green valley galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 502, 3685-3702.	4.4	11
105	Testing the conditional mass function of dark matter haloes against numerical N-body simulations. Monthly Notices of the Royal Astronomical Society, 2017, 467, 3424-3442.	4.4	9
106	The signal of decaying dark matter with hydrodynamical simulations. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4071-4089.	4.4	9
107	Deep spectroscopy in nearby galaxy clusters â€“ V. The Perseus cluster. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1681-1692.	4.4	9
108	Predicted future fate of COSMOS galaxy protoclusters over 11â€‰Gyr with constrained simulations. Nature Astronomy, 2022, 6, 857-865.	10.1	8

#	Article	IF	Citations
109	History of the gas fuelling star formation in <scp>eagle</scp> galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 505, 4655-4668.	4.4	7
110	Galactic wind X-ray heating of the intergalactic medium during the Epoch of Reionization. Monthly Notices of the Royal Astronomical Society, 2017, 471, 3632-3645.	4.4	6
111	Signatures of the Galactic bar on stellar kinematics unveiled by APOGEE. Monthly Notices of the Royal Astronomical Society, 2018, 478, 1231-1243.	4.4	6
112	A case study of hurdle and generalized additive models in astronomy: the escape of ionizing radiation. Monthly Notices of the Royal Astronomical Society, 2019, 483, 3307-3321.	4.4	6
113	Higher order Hamiltonian Monte Carlo sampling for cosmological large-scale structure analysis. Monthly Notices of the Royal Astronomical Society, 2021, 502, 3976-3992.	4.4	3
114	Signatures of the Galactic bar in high-order moments of proper motions measured by Gaia. Astronomy and Astrophysics, 2020, 634, A90.	5.1	2
115	Non-instantaneous gas recycling and chemical evolution in N-body disk galaxies. Astrophysics and Space Science, 2004, 289, 441-444.	1.4	1
116	The growth of the stellar seeds of supermassive black holes. , 2012, , .		0
117	The First Billion Years simulation project. Galactic outflows and metal enrichment. Proceedings of the International Astronomical Union, 2012, 8, 17-20.	0.0	0
118	The evolution of the luminosity function faint end of cluster galaxies in the Cluster-EAGLE simulation. Proceedings of the International Astronomical Union, 2018, 14, 495-497.	0.0	0