

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
papers

16,267
citations

28274

55
h-index

21540

114
g-index

122
all docs

122
docs citations

122
times ranked

6453
citing authors

#	ARTICLE	IF	CITATIONS
1	Predicted future fate of COSMOS galaxy protoclusters over 11 Gyr with constrained simulations. <i>Nature Astronomy</i> , 2022, 6, 857-865.	10.1	8
2	Higher order Hamiltonian Monte Carlo sampling for cosmological large-scale structure analysis. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 3976-3992.	4.4	3
3	History of the gas fuelling star formation in <i>eagle</i> galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 4655-4668.	4.4	7
4	Formation of the first galaxies in the aftermath of the first supernovae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 3226-3238.	4.4	20
5	Evaluating hydrodynamical simulations with green valley galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 3685-3702.	4.4	11
6	FOREVER22: galaxy formation in protocluster regions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 4037-4057.	4.4	21
7	Sub one per cent mass fractions of young stars in red massive galaxies. <i>Nature Astronomy</i> , 2020, 4, 252-259.	10.1	36
8	Kinematic analysis of <i>eagle</i> simulations: evolution of \dot{M}_{Re} and its connection with mergers and gas accretion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 5652-5665.	4.4	20
9	Constraining the inner density slope of massive galaxy clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 496, 4717-4733.	4.4	15
10	The intracluster light as a tracer of the total matter density distribution: a view from simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 1859-1864.	4.4	34
11	The discovery of the most UV \pm luminous star-forming galaxy: a young, dust- and metal-poor starburst with QSO-like luminosities. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 499, L105-L110.	3.3	13
12	Deep spectroscopy in nearby galaxy clusters – V. The Perseus cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 1681-1692.	4.4	9
13	Signatures of the Galactic bar in high-order moments of proper motions measured by Gaia. <i>Astronomy and Astrophysics</i> , 2020, 634, A90.	5.1	2
14	The First Billion Years project: Finding infant globular clusters at $z = 6$. <i>Astronomy and Astrophysics</i> , 2020, 641, A132.	5.1	12
15	Stellar splashback: the edge of the intracluster light. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 500, 4181-4192.	4.4	22
16	Comparing approximate methods for mock catalogues and covariance matrices – III: bispectrum. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 4883-4905.	4.4	55
17	Comparing approximate methods for mock catalogues and covariance matrices – I. Correlation function. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 1786-1806.	4.4	63
18	The signal of decaying dark matter with hydrodynamical simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 4071-4089.	4.4	9

#	ARTICLE	IF	CITATIONS
19	Disruption of satellite galaxies in simulated groups and clusters: the roles of accretion time, baryons, and pre-processing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 2287-2311.	4.4	47
20	Comparing approximate methods for mock catalogues and covariance matrices II: power spectrum multipoles. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 2806-2824.	4.4	53
21	A case study of hurdle and generalized additive models in astronomy: the escape of ionizing radiation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 3307-3321.	4.4	6
22	Galaxies with monstrous black holes in galaxy cluster environments. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 396-407.	4.4	14
23	Conditions for Reionizing the Universe with a Low Galaxy Ionizing Photon Escape Fraction. <i>Astrophysical Journal</i> , 2019, 879, 36.	4.5	201
24	The Cluster-EAGLE project: a comparison of dynamical mass estimators using simulated clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3308-3325.	4.4	14
25	The diverse density profiles of galaxy clusters with self-interacting dark matter plus baryons. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2018, 476, L20-L24.	3.3	62
26	Growing a "cosmic beast": observations and simulations of MACSJ0717.5+3745. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 2901-2917.	4.4	25
27	The VANDELS survey: dust attenuation in star-forming galaxies at $z = 3-4$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 3218-3232.	4.4	33
28	The Origin of the Relation between Metallicity and Size in Star-forming Galaxies. <i>Astrophysical Journal</i> , 2018, 859, 109.	4.5	19
29	The evolution of the luminosity function faint end of cluster galaxies in the Cluster-EAGLE simulation. <i>Proceedings of the International Astronomical Union</i> , 2018, 14, 495-497.	0.0	0
30	The Cluster-EAGLE project: velocity bias and the velocity dispersion-mass relation of cluster galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 3746-3759.	4.4	33
31	The connection between mass, environment, and slow rotation in simulated galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 4327-4345.	4.4	65
32	Signatures of the Galactic bar on stellar kinematics unveiled by APOGEE. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 1231-1243.	4.4	6
33	Growth of First Galaxies: Impacts of Star Formation and Stellar Feedback. <i>Astrophysical Journal</i> , 2017, 846, 30.	4.5	28
34	On the Dearth of Ultra-faint Extremely Metal-poor Galaxies. <i>Astrophysical Journal</i> , 2017, 835, 159.	4.5	15
35	The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmological implications of the configuration-space clustering wedges. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 1640-1658.	4.4	143
36	A numerical study of interactions and stellar bars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 1502-1511.	4.4	39

#	ARTICLE	IF	CITATIONS
37	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
38	The First Billion Years project: constraining the dust attenuation law of star-forming galaxies at $z \approx 5$. Monthly Notices of the Royal Astronomical Society, 2017, 470, 3006-3026.	4.4	58
39	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
40	Deep spectroscopy in nearby galaxy clusters – III. Orbital structure of galaxies in Abell 85. Monthly Notices of the Royal Astronomical Society, 2017, 468, 364-377.	4.4	17
41	The Hydrangea simulations: galaxy formation in and around massive clusters. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4186-4208.	4.4	167
42	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
43	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
44	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
45	Barred galaxies in the EAGLE cosmological hydrodynamical simulation. Monthly Notices of the Royal Astronomical Society, 2017, 469, 1054-1064.	4.4	66
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 APOSTLE simulations: solutions to the Local Group's cosmic puzzles. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1931-1943.	4.4	453
48	nFTy galaxy cluster simulations – IV. Quantifying the influence of baryons on halo properties. Monthly Notices of the Royal Astronomical Society, 2016, 458, 4052-4073.	4.4	39
49	The eagle simulations of galaxy formation: Public release of halo and galaxy catalogues. Astronomy and Computing, 2016, 15, 72-89.	1.7	394
50	The distribution of atomic hydrogen in eagle galaxies: morphologies, profiles, and H α holes. Monthly Notices of the Royal Astronomical Society, 2016, 456, 1115-1136.	4.4	117
51	The fate of high-redshift massive compact galaxies. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1916-1930.	4.4	61
52	nFTy galaxy cluster simulations – I. Dark matter and non-radiative models. Monthly Notices of the Royal Astronomical Society, 2016, 457, 4063-4080.	4.4	63
53	Deep spectroscopy of nearby galaxy clusters – I. Spectroscopic luminosity function of Abell 85. Monthly Notices of the Royal Astronomical Society, 2016, 458, 1590-1603.	4.4	26
54	Gaussian covariance matrices for anisotropic galaxy clustering measurements. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1577-1592.	4.4	96

#	ARTICLE	IF	CITATIONS
55	Bent by baryons: the low-mass galaxy-halo relation. Monthly Notices of the Royal Astronomical Society, 2015, 448, 2941-2947.	4.4	163
56	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
57	Colours and luminosities of $z \approx 0.1$ galaxies in the eagle simulation. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2879-2896.	4.4	200
58	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
59	Molecular hydrogen abundances of galaxies in the EAGLE simulations. Monthly Notices of the Royal Astronomical Society, 2015, 452, 3815-3837.	4.4	182
60	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
61	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
62	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
63	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
64	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
65	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
66	The First Billion Years project: gamma-ray bursts at $z \approx 5$. Monthly Notices of the Royal Astronomical Society, 2015, 446, 4239-4249.	4.4	13
67	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
68	A cosmological context for compact massive galaxies. Monthly Notices of the Royal Astronomical Society, 2015, 449, 2396-2404.	4.4	26
69	Baryon effects on the internal structure of Λ CDM haloes in the EAGLE simulations. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1247-1267.	4.4	302
70	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
71	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
72	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

#	ARTICLE	IF	CITATIONS
73	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
74	Physical properties of simulated galaxy populations at $z = 2$ II. Effects of cosmology, reionization and ISM physics. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2955-2967.	4.4	27
75	The impact of different physical processes on the statistics of Lyman-limit and damped Lyman λ absorbers. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2689-2707.	4.4	40
76	Physical properties of simulated galaxy populations at $z = 2$ 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
77	A measurement of galaxy halo mass from the surrounding H&I Ly λ absorption. Monthly Notices of the Royal Astronomical Society, 2013, 433, 3103-3114.	4.4	31
78	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
79	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
80	Ubiquitous seeding of supermassive black holes by direct collapse. Monthly Notices of the Royal Astronomical Society, 2012, 425, 2854-2871.	4.4	202
81	The growth of the stellar seeds of supermassive black holes. , 2012, , .		0
82	The First Billion Years simulation project. Galactic outflows and metal enrichment. Proceedings of the International Astronomical Union, 2012, 8, 17-20.	0.0	0
83	Absorption signatures of warm-hot gas at low redshift: broad H&I Ly λ absorbers. Monthly Notices of the Royal Astronomical Society, 2012, 425, 1640-1663.	4.4	47
84	Simulating galactic outflows with thermal supernova feedback. Monthly Notices of the Royal Astronomical Society, 2012, 426, 140-158.	4.4	437
85	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
86	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
87	Modelling neutral hydrogen in galaxies using cosmological hydrodynamical simulations. Monthly Notices of the Royal Astronomical Society, 2012, , no-no.	4.4	18
88	The filling factor of intergalactic metals at redshift $z = 3$. Monthly Notices of the Royal Astronomical Society, 2012, 420, 1053-1060.	4.4	41
89	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
90	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

#	ARTICLE	IF	CITATIONS
91	The origin of discs and spheroids in simulated galaxies. Monthly Notices of the Royal Astronomical Society, 2012, 423, 1544-1555.	4.4	215
92	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
93	THROUGH THICK AND THIN H I ABSORPTION IN COSMOLOGICAL SIMULATIONS. Astrophysical Journal Letters, 2011, 737, L37.	8.3	115
94	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
95	Absorption signatures of warm-hot gas at low redshift: O&Fvi. Monthly Notices of the Royal Astronomical Society, 2011, 413, 190-212.	4.4	53
96	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
97	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
98	The correlation structure of dark matter halo properties. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 415, L69-L73.	3.3	41
99	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
100	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
101	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
102	The enrichment history of cosmic metals. Monthly Notices of the Royal Astronomical Society, 2010, 409, 132-144.	4.4	50
103	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
104	The physics driving the cosmic star formation history. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1536-1560.	4.4	704
105	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
106	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
107	The case for AGN feedback in galaxy groups. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	105
108	Galaxies and intergalactic medium interaction calculation 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
109	Chemical enrichment in cosmological, smoothed particle hydrodynamics simulations. Monthly Notices of the Royal Astronomical Society, 2009, 399, 574-600.	4.4	525
110	The origin of extended disc galaxies at $\langle i \rangle z \langle i \rangle = 2$. Monthly Notices of the Royal Astronomical Society: Letters, 2009, 399, L64-L68.	3.3	23
111	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
112	Simulating galactic outflows with kinetic supernova feedback. Monthly Notices of the Royal Astronomical Society, 2008, 387, 1431-1444.	4.4	359
113	Simulations of Magnetic Fields in Filaments. Astrophysical Journal, 2005, 631, L21-L24.	4.5	102
114	Quenching cluster cooling flows with recurrent hot plasma bubbles. Monthly Notices of the Royal Astronomical Society, 2004, 355, 995-1004.	4.4	87
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	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
117	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
118	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