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List of Publications by Year
in descending order

125	24,987	10986	17105
papers	citations	71	122
		h-index	g-index

130	130	130	6652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Introducing the Illustris Project: simulating the coevolution of dark and visible matter in the Universe. Monthly Notices of the Royal Astronomical Society, 2014, 444, 1518-1547.	4.4	1,694
2	Simulating galaxy formation with the IllustrisTNG model. Monthly Notices of the Royal Astronomical Society, 2018, 473, 4077-4106.	4.4	1,144
3	First results from the IllustrisTNG simulations: matter and galaxy clustering. Monthly Notices of the Royal Astronomical Society, 2018, 475, 676-698.	4.4	1,035
4	First results from the IllustrisTNG simulations: the stellar mass content of groups and clusters of galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 475, 648-675.	4.4	983
5	Properties of galaxies reproduced by a hydrodynamic simulation. Nature, 2014, 509, 177-182.	27.8	979
6	First results from the IllustrisTNG simulations: the galaxy colour bimodality. Monthly Notices of the Royal Astronomical Society, 2018, 475, 624-647.	4.4	894
7	THE SINS SURVEY: SINFONI INTEGRAL FIELD SPECTROSCOPY OF z ≃ 2 STAR-FORMING GALAXIES. Astrophysical Journal, 2009, 706, 1364-1428.	4.5	887
8	Introducing the Illustris project: the evolution of galaxy populations across cosmic time. Monthly Notices of the Royal Astronomical Society, 2014, 445, 175-200.	4.4	805
9	First results from the IllustrisTNG simulations: a tale of two elements – chemical evolution of magnesium and europium. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1206-1224.	4.4	746
10	Simulating galaxy formation with black hole driven thermal and kinetic feedback. Monthly Notices of the Royal Astronomical Society, 2017, 465, 3291-3308.	4.4	725
11	A model for cosmological simulations of galaxy formation physics. Monthly Notices of the Royal Astronomical Society, 2013, 436, 3031-3067.	4.4	711
12	The IllustrisTNG simulations: public data release. Computational Astrophysics and Cosmology, 2019, 6, .	22.7	698
13	First results from the IllustrisTNG simulations: radio haloes and magnetic fields. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	643
14	Submillimeter Galaxies at z ≃ 2: Evidence for Major Mergers and Constraints on Lifetimes, IMF, and CO–H_2 Conversion Factor. Astrophysical Journal, 2008, 680, 246-262.	4.5	603
15	From Rings to Bulges: Evidence for Rapid Secular Galaxy Evolution at z ≃ 2 from Integral Field Spectroscopy in the SINS Survey. Astrophysical Journal, 2008, 687, 59-77.	4.5	536
16	THE SINS SURVEY OF z ≃ 2 GALAXY KINEMATICS: PROPERTIES OF THE GIANT STAR-FORMING CLUMPS. Astrophysical Journal, 2011, 733, 101.	4.5	511
17	First results from the TNG50 simulation: galactic outflows driven by supernovae and black hole feedback. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3234-3261.	4.4	510
18	THE IMPACT OF COLD GAS ACCRETION ABOVE A MASS FLOOR ON GALAXY SCALING RELATIONS. Astrophysical Journal, 2010, 718, 1001-1018.	4.5	483

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19	The merger rate of galaxies in the Illustris simulation: a comparison with observations and semi-empirical models. Monthly Notices of the Royal Astronomical Society, 2015, 449, 49-64.	4.4	472
20	First results from the TNG50 simulation: the evolution of stellar and gaseous discs across cosmic time. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3196-3233.	4.4	453
21	The Illustris simulation: the evolving population of black holes across cosmic time. Monthly Notices of the Royal Astronomical Society, 2015, 452, 575-596.	4.4	452
22	The illustris simulation: Public data release. Astronomy and Computing, 2015, 13, 12-37.	1.7	412
23	The stellar mass assembly of galaxies in the Illustris simulation: growth by mergers and the spatial distribution of accreted stars. Monthly Notices of the Royal Astronomical Society, 2016, 458, 2371-2390.	4.4	319
24	Moving mesh cosmology: tracing cosmological gas accretion. Monthly Notices of the Royal Astronomical Society, 2013, 429, 3353-3370.	4.4	288
25	Supermassive black holes and their feedback effects in the IllustrisTNG simulation. Monthly Notices of the Royal Astronomical Society, 2018, 479, 4056-4072.	4.4	270
26	A model for cosmological simulations of galaxy formation physics: multi-epoch validation. Monthly Notices of the Royal Astronomical Society, 2014, 438, 1985-2004.	4.4	242
27	THE SINS SURVEY: MODELING THE DYNAMICS OF z ~ 2 GALAXIES AND THE HIGH-z TULLY-FISHER RELATION. Astrophysical Journal, 2009, 697, 115-132.	4.5	239
28	The optical morphologies of galaxies in the IllustrisTNG simulation: a comparison to Pan-STARRS observations. Monthly Notices of the Royal Astronomical Society, 2019, 483, 4140-4159.	4.4	236
29	CONSTRAINTS ON THE ASSEMBLY AND DYNAMICS OF GALAXIES. II. PROPERTIES OF KILOPARSEC-SCALE CLUMPS IN REST-FRAME OPTICAL EMISSION OF z ~ 2 STAR-FORMING GALAXIES. Astrophysical Journal, 2011, 739, 45.	4.5	219
30	The star formation main sequence and stellar mass assembly of galaxies in the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2015, 447, 3548-3563.	4.4	201
31	The size evolution of star-forming and quenched galaxies in the IllustrisTNG simulation. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3976-3996.	4.4	195
32	The formation of massive, compact galaxies at $z=2$ in the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2015, 449, 361-372.	4.4	187
33	MERGERS IN ΛCDM: UNCERTAINTIES IN THEORETICAL PREDICTIONS AND INTERPRETATIONS OF THE MERGER RATE. Astrophysical Journal, 2010, 724, 915-945.	4.5	183
34	THE SINS/zC-SINF SURVEY of z ~ 2 GALAXY KINEMATICS: OUTFLOW PROPERTIES. Astrophysical Journal, 2012, 761, 43.	4.5	182
35	Strongly baryon-dominated disk galaxies at the peak of galaxy formation ten billion years ago. Nature, 2017, 543, 397-401.	27.8	177
36	The star formation activity of IllustrisTNG galaxies: main sequence, UVJ diagram, quenched fractions, and systematics. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4817-4840.	4.4	176

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37	GALACTIC ANGULAR MOMENTUM IN THE ILLUSTRIS SIMULATION: FEEDBACK AND THE HUBBLE SEQUENCE. Astrophysical Journal Letters, 2015, 804, L40.	8.3	174
38	Galaxy morphology and star formation in the Illustris Simulation at $z = 0$. Monthly Notices of the Royal Astronomical Society, 2015, 454, 1886-1908.	4.4	155
39	SHORT-LIVED STAR-FORMING GIANT CLUMPS IN COSMOLOGICAL SIMULATIONS OF $z \simeq 2$ DISKS. Astrophysical Journal, 2012, 745, 11.	4.5	146
40	The SINS/zC-SINF Survey of $z \sim 2$ Galaxy Kinematics: SINFONI Adaptive Optics–assisted Data and Kiloparsec-scale Emission-line Properties[*]. Astrophysical Journal, Supplement Series, 2018, 238, 21.	7.7	143
41	Ingredients for 21 cm Intensity Mapping. Astrophysical Journal, 2018, 866, 135.	4.5	139
42	Mergers and Mass Accretion Rates in Galaxy Assembly: The Millennium Simulation Compared to Observations of $z \simeq 2$ Galaxies. Astrophysical Journal, 2008, 688, 789-793.	4.5	135
43	The role of mergers and halo spin in shaping galaxy morphology. Monthly Notices of the Royal Astronomical Society, 2017, 467, 3083-3098.	4.4	134
44	The abundance, distribution, and physical nature of highly ionized oxygen O vi, O vii, and O viii in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2018, 477, 450-479.	4.4	133
45	The relationship between black hole mass and galaxy properties: examining the black hole feedback model in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1888-1906.	4.4	127
46	The evolution of the mass-metallicity relation and its scatter in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	123
47	The impact of feedback on cosmological gas accretion. Monthly Notices of the Royal Astronomical Society, 2015, 448, 59-74.	4.4	120
48	THE GROWTH OF DARK MATTER HALOS: EVIDENCE FOR SIGNIFICANT SMOOTH ACCRETION. Astrophysical Journal, 2010, 719, 229-239.	4.5	119
49	Halo mass and assembly history exposed in the faint outskirts: the stellar and dark matter haloes of Illustris galaxies. Monthly Notices of the Royal Astronomical Society, 2014, 444, 237-249.	4.4	117
50	The CAMELS Project: Cosmology and Astrophysics with Machine-learning Simulations. Astrophysical Journal, 2021, 915, 71.	4.5	113
51	Morphology and star formation in IllustrisTNG: the build-up of spheroids and discs. Monthly Notices of the Royal Astronomical Society, 2019, 487, 5416-5440.	4.4	109
52	HOW WELL CAN WE MEASURE THE INTRINSIC VELOCITY DISPERSION OF DISTANT DISK GALAXIES?. Astrophysical Journal, 2011, 741, 69.	4.5	107
53	Following the flow: tracer particles in astrophysical fluid simulations. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1426-1442.	4.4	107
54	HIGH-REDSHIFT STAR-FORMING GALAXIES: ANGULAR MOMENTUM AND BARYON FRACTION, TURBULENT PRESSURE EFFECTS, AND THE ORIGIN OF TURBULENCE. Astrophysical Journal, 2010, 725, 2324-2332.	4.5	106

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55	Synthetic galaxy images and spectra from the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2015, 447, 2753-2771.	4.4	106
56	Damped Lyman α absorbers as a probe of stellar feedback. Monthly Notices of the Royal Astronomical Society, 2014, 445, 2313-2324.	4.4	105
57	Jellyfish galaxies with the IllustrisTNG simulations – I. Gas-stripping phenomena in the full cosmological context. Monthly Notices of the Royal Astronomical Society, 2019, 483, 1042-1066.	4.4	102
58	THE HALO MERGER RATE IN THE MILLENNIUM SIMULATION AND IMPLICATIONS FOR OBSERVED GALAXY MERGER FRACTIONS. Astrophysical Journal, 2009, 701, 2002-2018.	4.5	97
59	THE SINS/zC-SINF SURVEY OF $z ≈ 2$ GALAXY KINEMATICS: THE NATURE OF DISPERSION-DOMINATED GALAXIES. Astrophysical Journal, 2013, 767, 104.	4.5	97
60	The fraction of dark matter within galaxies from the IllustrisTNG simulations. Monthly Notices of the Royal Astronomical Society, 2018, 481, 1950-1975.	4.4	97
61	The diverse evolutionary paths of simulated high-z massive, compact galaxies to $z = 0$. Monthly Notices of the Royal Astronomical Society, 2016, 456, 1030-1048.	4.4	96
62	Quenched fractions in the IllustrisTNG simulations: the roles of AGN feedback, environment, and pre-processing. Monthly Notices of the Royal Astronomical Society, 2020, 500, 4004-4024.	4.4	86
63	The impact of galactic feedback on the circumgalactic medium. Monthly Notices of the Royal Astronomical Society, 2015, 448, 895-909.	4.4	82
64	On the evolution of the intrinsic scatter in black hole versus galaxy mass relations. Monthly Notices of the Royal Astronomical Society, 2010, 407, 1016-1032.	4.4	81
65	Zooming in on accretion – I. The structure of halo gas. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2881-2904.	4.4	80
66	SHOCKED SUPERWINDS FROM THE $z ≈ 2$ CLUMPY STAR-FORMING GALAXY, ZC406690. Astrophysical Journal, 2012, 752, 111.	4.5	79
67	The origin and evolution of fast and slow rotators in the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2017, 468, 3883-3906.	4.4	78
68	Zooming in on accretion – II. Cold circumgalactic gas simulated with a super-Lagrangian refinement scheme. Monthly Notices of the Royal Astronomical Society, 2019, 483, 4040-4059.	4.4	78
69	The effect of metal enrichment and galactic winds on galaxy formation in cosmological zoom simulations. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2929-2949.	4.4	77
70	Reproducing the kinematics of damped Lyman α systems. Monthly Notices of the Royal Astronomical Society, 2015, 447, 1834-1846.	4.4	77
71	Is the dark-matter halo spin a predictor of galaxy spin and size?. Monthly Notices of the Royal Astronomical Society, 2019, 488, 4801-4815.	4.4	77
72	Similar star formation rate and metallicity variability time-scales drive the fundamental metallicity relation. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 477, L16-L20.	3.3	75

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73	The uniformity and time-invariance of the intra-cluster metal distribution in galaxy clusters from the IllustrisTNG simulations. Monthly Notices of the Royal Astronomical Society, 2018, 474, 2073-2093.	4.4	71
74	NEBULAR EXCITATION IN $z \sim 2$ STAR-FORMING GALAXIES FROM THE SINS AND LUCI SURVEYS: THE INFLUENCE OF SHOCKS AND ACTIVE GALACTIC NUCLEI. Astrophysical Journal, 2014, 781, 21.	4.5	65
75	A Quantification of the Butterfly Effect in Cosmological Simulations and Implications for Galaxy Scaling Relations. Astrophysical Journal, 2019, 871, 21.	4.5	65
76	THE SINS SURVEY: BROAD EMISSION LINES IN HIGH-REDSHIFT STAR-FORMING GALAXIES. Astrophysical Journal, 2009, 701, 955-963.	4.5	63
77	Supermassive black holes in cosmological simulations I: $M_{BH} - M_*$ relation and black hole mass function. Monthly Notices of the Royal Astronomical Society, 2021, 503, 1940-1975.	4.4	63
78	The diversity and variability of star formation histories in models of galaxy evolution. Monthly Notices of the Royal Astronomical Society, 2020, 498, 430-463.	4.4	62
79	Antigen recognition-triggered drug delivery mediated by nanocapsule-functionalized cytotoxic T-cells. Biomaterials, 2017, 117, 44-53.	11.4	61
80	Large-scale mass distribution in the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3024-3035.	4.4	60
81	The colours of satellite galaxies in the Illustris simulation. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 447, L6-L10.	3.3	59
82	Linking galaxy structural properties and star formation activity to black hole activity with IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2019, 484, 4413-4443.	4.4	59
83	Evolution of violent gravitational disc instability in galaxies: late stabilization by transition from gas to stellar dominance. Monthly Notices of the Royal Astronomical Society, 2012, , no-no.	4.4	51
84	The Hubble Sequence at $z \sim 0$ in the IllustrisTNG simulation with deep learning. Monthly Notices of the Royal Astronomical Society, 2019, 489, 1859-1879.	4.4	51
85	On the effect of cosmological inflow on turbulence and instability in galactic discs. Monthly Notices of the Royal Astronomical Society, 2012, 425, 788-800.	4.4	50
86	The Impact of Galactic Winds on the Angular Momentum of Disk Galaxies in the Illustris Simulation. Astrophysical Journal, 2017, 841, 16.	4.5	45
87	Hydrogen reionization in the Illustris universe. Monthly Notices of the Royal Astronomical Society, 2015, 453, 3594-3611.	4.4	44
88	Statistical Properties of Paired Fixed Fields. Astrophysical Journal, 2018, 867, 137.	4.5	42
89	HOT GASEOUS CORONAE AROUND SPIRAL GALAXIES: PROBING THE ILLUSTRIS SIMULATION. Astrophysical Journal, 2015, 804, 72.	4.5	40
90	Modelling galactic conformity with the colour–halo age relation in the Illustris simulation. Monthly Notices of the Royal Astronomical Society, 2016, 455, 185-198.	4.4	38

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91	On the Origin of Star–Gas Counterrotation in Low-mass Galaxies. Astrophysical Journal, 2019, 878, 143.	4.5	37
92	HOW ENVIRONMENT AFFECTS GALAXY METALLICITY THROUGH STRIPPING AND FORMATION HISTORY: LESSONS FROM THE ILLUSTRIS SIMULATION. Astrophysical Journal, 2016, 822, 107.	4.5	35
93	THE CONTRIBUTION OF HALOS WITH DIFFERENT MASS RATIOS TO THE OVERALL GROWTH OF CLUSTER-SIZED HALOS. Astrophysical Journal, 2013, 776, 91.	4.5	33
94	The CAMELS Multifield Data Set: Learning the Universe's Fundamental Parameters with Artificial Intelligence. Astrophysical Journal, Supplement Series, 2022, 259, 61.	7.7	30
95	Formation of a Malin 1 analogue in IllustrisTNG by stimulated accretion. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 480, L18-L22.	3.3	27
96	A Framework for Multiphase Galactic Wind Launching Using TIGRESS. Astrophysical Journal Letters, 2020, 903, L34.	8.3	27
97	Supermassive black holes in cosmological simulations – II: the AGN population and predictions for upcoming X-ray missions. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3015-3042.	4.4	27
98	The Angular Momentum of the Circumgalactic Medium in the TNG100 Simulation. Astrophysical Journal, 2020, 895, 17.	4.5	26
99	First Results from SMAUG: The Need for Preventative Stellar Feedback and Improved Baryon Cycling in Semianalytic Models of Galaxy Formation. Astrophysical Journal, 2020, 905, 4.	4.5	25
100	Shock finding on a moving-mesh – II. Hydrodynamic shocks in the Illustris universe. Monthly Notices of the Royal Astronomical Society, 2016, 461, 4441-4465.	4.4	24
101	Correlations between Black Holes and Host Galaxies in the Illustris and IllustrisTNG Simulations. Astrophysical Journal, 2020, 895, 102.	4.5	24
102	IQ-Collaboratory 1.1: The Star-forming Sequence of Simulated Central Galaxies. Astrophysical Journal, 2019, 872, 160.	4.5	23
103	Chemical pre-processing of cluster galaxies over the past 10 billion years in the IllustrisTNG simulations. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 477, L35-L39.	3.3	21
104	Galactic angular momentum in the IllustrisTNG simulation – I. Connection to morphology, halo spin, and black hole mass. Monthly Notices of the Royal Astronomical Society, 2022, 512, 5978-5994.	4.4	21
105	Finding Universal Relations in Subhalo Properties with Artificial Intelligence. Astrophysical Journal, 2022, 927, 85.	4.5	21
106	A study of stellar orbit fractions: simulated IllustrisTNG galaxies compared to CALIFA observations. Monthly Notices of the Royal Astronomical Society, 2019, 489, 842-854.	4.4	19
107	IQ Collaboratory. II. The Quiescent Fraction of Isolated, Low-mass Galaxies across Simulations and Observations. Astrophysical Journal, 2021, 915, 53.	4.5	19
108	Reducing noise in moving-grid codes with strongly-centroidal Lloyd mesh regularization. Monthly Notices of the Royal Astronomical Society, 2015, 452, 3853-3862.	4.4	17

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109	Decoupling the rotation of stars and gas â€" II. The link between black hole activityÂand simulated IFU kinematics in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2020, 495, 4542-4547.	4.4	17
110	The kinematics and dark matter fractions of TNG50 galaxies at <i>z</i> = 2 from an observational perspective. Monthly Notices of the Royal Astronomical Society, 2020, 500, 4597-4619.	4.4	17
111	Cosmological Hydrodynamic Simulations with Suppressed Variance in the LyÎ± Forest Power Spectrum. Astrophysical Journal, 2019, 871, 144.	4.5	16
112	Morphological Types of DM Halos in Milky Way-like Galaxies in the TNG50 Simulation: Simple, Twisted, or Stretched. Astrophysical Journal, 2021, 913, 36.	4.5	15
113	A Comparison of Circumgalactic Mg ii Absorption between the TNG50 Simulation and the MEGAFLOW Survey. Astrophysical Journal, 2021, 923, 56.	4.5	12
114	Breaking baryon-cosmology degeneracy with the electron density power spectrum. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 046.	5.4	11
115	Extreme spheres: counts-in-cells for 21cm intensity mapping. Monthly Notices of the Royal Astronomical Society, 2019, 484, 269-281.	4.4	10
116	Cosmology with One Galaxy?. Astrophysical Journal, 2022, 929, 132.	4.5	10
117	The MUSE Hubble Ultra Deep Field Survey. XVI. The angular momentum of low-mass star-forming galaxies: A cautionary tale and insights from TNG50. Astronomy and Astrophysics, 0, , .	5.1	9
118	Inferring the Morphology of Stellar Distribution in TNG50: Twisted and Twisted-stretched Shapes. Astrophysical Journal, 2021, 918, 7.	4.5	9
119	Neural Networks as Optimal Estimators to Marginalize Over Baryonic Effects. Astrophysical Journal, 2022, 928, 44.	4.5	8
120	Implications of Galaxy Buildup for Putative IMF Variations in Massive Galaxies. Astrophysical Journal, 2017, 845, 136.	4.5	7
121	Detecting the cosmic web: LyÎ± emission from simulated filaments at zÂ=Â3. Monthly Notices of the Royal Astronomical Society, 2020, 494, 5439-5448.	4.4	7
122	MOSEL and IllustrisTNG: Massive Extended Galaxies at zÂ=Â2 Quench Later Than Normal-size Galaxies. Astrophysical Journal, 2021, 907, 95.	4.5	6
123	First Results from SMAUG: Insights into Star Formation Conditions from Spatially Resolved ISM Properties in TNG50. Astrophysical Journal, 2022, 926, 139.	4.5	3
124	The TNG50 Simulation of the IllustrisTNG Project: Bridging the Gap Between Large Cosmological Volumes and Resolved Galaxies. , 2019, , 5-20.		0
125	The TNG50 Simulation: Highly-Resolved Galaxies in a Large Cosmological Volume to the Present Day. , 2021, , 5-22.		0