

Guillermo Barro

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

6,609
citations

70961

41
h-index

66788

78
g-index

78
all docs

78
docs citations

78
times ranked

3582
citing authors

#	ARTICLE	IF	CITATIONS
1	GALAXY STRUCTURE AND MODE OF STAR FORMATION IN THE SFR-MASS PLANE FROM $z \approx 2.5$ TO $z \approx 0.1$. <i>Astrophysical Journal</i> , 2011, 742, 96.	1.6	590
2	The Stellar Mass Assembly of Galaxies from $z = 0$ to $z = 4$: Analysis of a Sample Selected in the Rest-frame Near-Infrared with <i>Spitzer</i> . <i>Astrophysical Journal</i> , 2008, 675, 234-261.	1.6	502
3	CANDELS MULTI-WAVELENGTH CATALOGS: SOURCE DETECTION AND PHOTOMETRY IN THE GOODS-SOUTH FIELD. <i>Astrophysical Journal, Supplement Series</i> , 2013, 207, 24.	3.0	400
4	Compaction and quenching of high- z galaxies in cosmological simulations: blue and red nuggets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 2327-2353.	1.6	392
5	CANDELS: THE PROGENITORS OF COMPACT QUIESCENT GALAXIES AT $z \approx 2$. <i>Astrophysical Journal</i> , 2013, 765, 104.	1.6	367
6	A CRITICAL ASSESSMENT OF PHOTOMETRIC REDSHIFT METHODS: A CANDELS INVESTIGATION. <i>Astrophysical Journal</i> , 2013, 775, 93.	1.6	290
7	SMOOTH(ER) STELLAR MASS MAPS IN CANDELS: CONSTRAINTS ON THE LONGEVITY OF CLUMPS IN HIGH-REDSHIFT STAR-FORMING GALAXIES. <i>Astrophysical Journal</i> , 2012, 753, 114.	1.6	271
8	CANDELS MULTI-WAVELENGTH CATALOGS: SOURCE IDENTIFICATION AND PHOTOMETRY IN THE CANDELS UKIDSS ULTRA-DEEP SURVEY FIELD. <i>Astrophysical Journal, Supplement Series</i> , 2013, 206, 10.	3.0	252
9	Structural and Star-forming Relations since $z \approx 3$: Connecting Compact Star-forming and Quiescent Galaxies. <i>Astrophysical Journal</i> , 2017, 840, 47.	1.6	180
10	CLUMPY GALAXIES IN CANDELS. I. THE DEFINITION OF UV CLUMPS AND THE FRACTION OF CLUMPY GALAXIES AT $0.5 < z < 3$. <i>Astrophysical Journal</i> , 2015, 800, 39.	1.6	172
11	CANDELS Multi-wavelength Catalogs: Source Identification and Photometry in the CANDELS Extended Groth Strip. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 32.	3.0	127
12	The MOSDEF Survey: The Evolution of the Mass-Metallicity Relation from $z = 0$ to $z \approx 3.3^*$. <i>Astrophysical Journal</i> , 2021, 914, 19.	1.6	124
13	CANDELS/GOODS-S, CDFS, AND ECDFS: PHOTOMETRIC REDSHIFTS FOR NORMAL AND X-RAY-DETECTED GALAXIES. <i>Astrophysical Journal</i> , 2014, 796, 60.	1.6	117
14	The MOSDEF survey: direct-method metallicities and ISM conditions at $z \approx 1.5 - 3.5$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 1427-1455.	1.6	116
15	The CANDELS/SHARDS Multiwavelength Catalog in GOODS-N: Photometry, Photometric Redshifts, Stellar Masses, Emission-line Fluxes, and Star Formation Rates. <i>Astrophysical Journal, Supplement Series</i> , 2019, 243, 22.	3.0	111
16	The MOSDEF Survey: A Stellar Mass-SFR-Metallicity Relation Exists at $z \approx 2.3 ⁺$. <i>Astrophysical Journal</i> , 2018, 858, 99.	1.6	108
17	A CRITICAL ASSESSMENT OF STELLAR MASS MEASUREMENT METHODS. <i>Astrophysical Journal</i> , 2015, 808, 101.	1.6	106
18	THE PROGENITORS OF THE COMPACT EARLY-TYPE GALAXIES AT HIGH REDSHIFT. <i>Astrophysical Journal</i> , 2014, 780, 1.	1.6	103

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19	THE EVOLUTION OF STAR FORMATION HISTORIES OF QUIESCENT GALAXIES. <i>Astrophysical Journal</i> , 2016, 832, 79.	1.6	99
20	UV-TO-FIR ANALYSIS OF <i>SPITZER</i> /IRAC SOURCES IN THE EXTENDED GROTH STRIP. I. MULTI-WAVELENGTH PHOTOMETRY AND SPECTRAL ENERGY DISTRIBUTIONS. <i>Astrophysical Journal</i> , Supplement Series, 2011, 193, 13.	3.0	98
21	SHARDS: AN OPTICAL SPECTRO-PHOTOMETRIC SURVEY OF DISTANT GALAXIES. <i>Astrophysical Journal</i> , 2013, 762, 46.	1.6	95
22	Half-mass Radii for $z \sim 1.0$ Galaxies at $z \sim 2.5$: Most of the Evolution in the Mass-Size Relation Is Due to Color Gradients. <i>Astrophysical Journal</i> , 2019, 877, 103.	1.6	90
23	The MOSDEF Survey: Significant Evolution in the Rest-frame Optical Emission Line Equivalent Widths of Star-forming Galaxies at $z = 1.4 - 3.8$. <i>Astrophysical Journal</i> , 2018, 869, 92.	1.6	83
24	Demographics of Star-forming Galaxies since $z \sim 2.5$. I. The UVJ Diagram in CANDELS. <i>Astrophysical Journal</i> , 2018, 858, 100.	1.6	79
25	CANDELS: Elevated Black Hole Growth in the Progenitors of Compact Quiescent Galaxies at $z \sim 2$. <i>Astrophysical Journal</i> , 2017, 846, 112.	1.6	72
26	KECK-I MOSFIRE SPECTROSCOPY OF COMPACT STAR-FORMING GALAXIES AT $z > 2$: HIGH VELOCITY DISPERSIONS IN PROGENITORS OF COMPACT QUIESCENT GALAXIES. <i>Astrophysical Journal</i> , 2014, 795, 145.	1.6	70
27	Fast, Slow, Early, Late: Quenching Massive Galaxies at $z \sim 0.8$. <i>Astrophysical Journal</i> , 2022, 926, 134.	1.6	70
28	THE BURSTY STAR FORMATION HISTORIES OF LOW-MASS GALAXIES AT $0.4 < z < 1$ REVEALED BY STAR FORMATION RATES MEASURED FROM $H\beta$ AND FUV. <i>Astrophysical Journal</i> , 2016, 833, 37.	1.6	69
29	Quenching as a Contest between Galaxy Halos and Their Central Black Holes. <i>Astrophysical Journal</i> , 2020, 897, 102.	1.6	66
30	Major merging history in CANDELS. I. Evolution of the incidence of massive galaxy-galaxy pairs from $z = 3$ to $z \sim 1.0$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 1549-1573.	1.6	65
31	The nature of massive transition galaxies in CANDELS, GAMA and cosmological simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 2054-2084.	1.6	63
32	Exploring the Evolutionary Paths of the Most Massive Galaxies since $z \sim 2$. <i>Astrophysical Journal</i> , 2008, 687, 50-58.	1.6	61
33	THE MOSDEF SURVEY: DYNAMICAL AND BARYONIC MASSES AND KINEMATIC STRUCTURES OF STAR-FORMING GALAXIES AT $1.4 < z < 2.6$. <i>Astrophysical Journal</i> , 2016, 819, 80.	1.6	61
34	TESTING DIAGNOSTICS OF NUCLEAR ACTIVITY AND STAR FORMATION IN GALAXIES AT $z > 1$. <i>Astrophysical Journal Letters</i> , 2013, 763, L6.	3.0	49
35	A catalog of polychromatic bulge-disc decompositions of $z \sim 1.7$ galaxies in CANDELS. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 5410-5426.	1.6	49
36	THE MOSDEF SURVEY: THE STRONG AGREEMENT BETWEEN $H\beta$ AND UV-TO-FIR STAR FORMATION RATES FOR $z \sim 2$ STAR-FORMING GALAXIES*. <i>Astrophysical Journal Letters</i> , 2016, 820, L23.	3.0	47

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37	Half-mass Radii of Quiescent and Star-forming Galaxies Evolve Slowly from $0.2z^2$: Implications for Galaxy Assembly Histories*. <i>Astrophysical Journal Letters</i> , 2019, 885, L22.	3.0	47
38	KINEMATIC DOWNSIZING AT $z \sim 1/4$. <i>Astrophysical Journal</i> , 2016, 830, 14.	1.6	44
39	A WFC3 GRISM EMISSION LINE REDSHIFT CATALOG IN THE GOODS-SOUTH FIELD. <i>Astronomical Journal</i> , 2015, 149, 178.	1.9	43
40	The relationship between star formation activity and galaxy structural properties in CANDELS and a semi-analytic model. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 619-640.	1.6	41
41	The MOSDEF Survey: Sulfur Emission-line Ratios Provide New Insights into Evolving Interstellar Medium Conditions at High Redshift. <i>Astrophysical Journal Letters</i> , 2019, 881, L35.	3.0	41
42	CAUGHT IN THE ACT: GAS AND STELLAR VELOCITY DISPERSIONS IN A FAST QUENCHING COMPACT STAR-FORMING GALAXY AT $z \sim 1/4$. <i>Astrophysical Journal</i> , 2016, 820, 120.	1.6	39
43	Beyond spheroids and discs: classifications of CANDELS galaxy structure at $1.4 < z < 2$ via principal component analysis. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 963-987.	1.6	38
44	Optically Faint Massive Balmer Break Galaxies at $z \sim 3$ in the CANDELS/GOODS Fields. <i>Astrophysical Journal</i> , 2019, 876, 135.	1.6	37
45	Pathways to quiescence: SHARDS view on the star formation histories of massive quiescent galaxies at $1.0 < z < 1.5$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 3743-3768.	1.6	35
46	The MOSDEF Survey: Kinematic and Structural Evolution of Star-forming Galaxies at $1.4 < z < 3.8$. <i>Astrophysical Journal</i> , 2020, 894, 91.	1.6	34
47	Stellar Metallicities and Elemental Abundance Ratios of $z \sim 1/4$ Massive Quiescent Galaxies*. <i>Astrophysical Journal Letters</i> , 2019, 880, L31.	3.0	33
48	THE TEAM KECK REDSHIFT SURVEY 2: MOSFIRE SPECTROSCOPY OF THE GOODS-NORTH FIELD. <i>Astronomical Journal</i> , 2015, 150, 153.	1.9	32
49	The AGN-Star Formation Connection: Future Prospects with JWST. <i>Astrophysical Journal</i> , 2017, 849, 111.	1.6	31
50	Dissecting the Size-Mass and Σ_1 -Mass Relations at $1.0 < z < 2.5$: Galaxy Mass Profiles and Color Gradients as a Function of Spectral Shape. <i>Astrophysical Journal</i> , 2021, 915, 87.	1.6	30
51	STELLAR MASS-GAS-PHASE METALLICITY RELATION AT $0.5 < z < 0.7$: A POWER LAW WITH INCREASING SCATTER TOWARD THE LOW-MASS REGIME. <i>Astrophysical Journal</i> , 2016, 822, 103.	1.6	29
52	The MOSDEF Survey: The Metallicity Dependence of X-Ray Binary Populations at $z \sim 1/4$. <i>Astrophysical Journal</i> , 2019, 885, 65.	1.6	28
53	The MOSDEF survey: a comprehensive analysis of the rest-optical emission-line properties of $z \sim 1/4$ 2.3 star-forming galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 2600-2614.	1.6	28
54	THE UV-OPTICAL COLOR GRADIENTS IN STAR-FORMING GALAXIES AT $0.5 < z < 1.5$: ORIGINS AND LINK TO GALAXY ASSEMBLY. <i>Astrophysical Journal Letters</i> , 2016, 822, L25.	3.0	25

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55	Testing the Recovery of Intrinsic Galaxy Sizes and Masses of $z \sim 1/2$ Massive Galaxies Using Cosmological Simulations. <i>Astrophysical Journal Letters</i> , 2017, 844, L6.	3.0	25
56	shards: constraints on the dust attenuation law of star-forming galaxies at $z \sim 2$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 2363-2374.	1.6	25
57	Color Gradients along the Quiescent Galaxy Sequence: Clues to Quenching and Structural Growth. <i>Astrophysical Journal Letters</i> , 2020, 899, L26.	3.0	24
58	Structural and stellar-population properties versus bulge types in Sloan Digital Sky Survey central galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 1686-1707.	1.6	23
59	The Origins of UV-optical Color Gradients in Star-forming Galaxies at $z \sim 1/2$: Predominant Dust Gradients but Negligible sSFR Gradients. <i>Astrophysical Journal Letters</i> , 2017, 844, L2.	3.0	20
60	The MOSDEF Survey: Neon as a Probe of ISM Physical Conditions at High Redshift [*] . <i>Astrophysical Journal Letters</i> , 2020, 902, L16.	3.0	20
61	The MOSDEF Survey: [S iii] as a New Probe of Evolving Interstellar Medium Conditions*. <i>Astrophysical Journal Letters</i> , 2020, 888, L11.	3.0	19
62	Galaxy Inclination and the IRX ^{†2} Relation: Effects on UV Star Formation Rate Measurements at Intermediate to High Redshifts. <i>Astrophysical Journal</i> , 2018, 869, 161.	1.6	18
63	The MOSDEF Survey: Environmental Dependence of the Gas-phase Metallicity of Galaxies at $1.4 \leq z \leq 2.6$ *. <i>Astrophysical Journal</i> , 2021, 908, 120.	1.6	18
64	From Naked Spheroids to Disky Galaxies: How Do Massive Disk Galaxies Shape Their Morphology?. <i>Astrophysical Journal</i> , 2022, 929, 121.	1.6	18
65	The Mass-metallicity Relation at $z \sim 1/2$ and Its Dependence on the Star Formation Rate. <i>Astrophysical Journal</i> , 2021, 919, 143.	1.6	17
66	SHARDS: A GLOBAL VIEW OF THE STAR FORMATION ACTIVITY AT $z \sim 0.84$ and $z \sim 1.23$. <i>Astrophysical Journal</i> , 2015, 812, 155.	1.6	16
67	The structural properties of classical bulges and discs from $z \sim 2$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 4135-4154.	1.6	14
68	HALO7D I. The Line-of-sight Velocities of Distant Main-sequence Stars in the Milky Way Halo. <i>Astrophysical Journal</i> , 2019, 876, 124.	1.6	14
69	The MOSDEF Survey: No Significant Enhancement in Star Formation or Deficit in Metallicity in Merging Galaxy Pairs at $1.5 \leq z \leq 3.5$. <i>Astrophysical Journal</i> , 2019, 874, 18.	1.6	14
70	On the Transition of the Galaxy Quenching Mode at $0.5 \leq z \leq 1$ in CANDELS. <i>Astrophysical Journal</i> , 2018, 860, 60.	1.6	13
71	SERENDIPITOUS DISCOVERY OF A MASSIVE cD GALAXY AT $z = 1.096$: IMPLICATIONS FOR THE EARLY FORMATION AND LATE EVOLUTION OF cD GALAXIES. <i>Astrophysical Journal</i> , 2013, 769, 147.	1.6	11
72	The MOSDEF survey: the mass-metallicity relationship and the existence of the FMR at $z \sim 1.5$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 506, 1237-1249.	1.6	11

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73	The MOSDEF Survey: Stellar Continuum Spectra and Star Formation Histories of Active, Transitional, and Quiescent Galaxies at $1.4 < z < 2.6$. <i>Astrophysical Journal Letters</i> , 2018, 867, L16.	3.0	8
74	The MOSDEF survey: differences in SFR and metallicity for morphologically selected mergers at $z \sim 2$. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 501, 137-145.	1.6	8
75	The Star Formation Rate–Radius Connection: Data and Implications for Wind Strength and Halo Concentration. <i>Astrophysical Journal</i> , 2020, 899, 93.	1.6	8
76	The Baltimore Oriole’s Nest: Cool Winds from the Inner and Outer Parts of a Star-forming Galaxy at $z = 1.3$. <i>Astrophysical Journal</i> , 2022, 930, 146.	1.6	7
77	Reconciling the results of the $z \sim 2$ MOSDEF and KBSS-MOSFIRE Surveys. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 3871-3892.	1.6	5
78	The Isophotal Structure of Star-forming Galaxies at $0.5 < z < 1.8$ in CANDELS: Implications for the Evolution of Galaxy Structure. <i>Astrophysical Journal</i> , 2018, 854, 70.	1.6	4