

Zhi-Yu Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

68
papers

2,309
citations

159585

30
h-index

223800

46
g-index

71
all docs

71
docs citations

71
times ranked

2819
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric Star Formation Triggered by Gas Inflow in a Barred Lenticular Galaxy PGC 34107. <i>Astrophysical Journal</i> , 2022, 927, 215.	4.5	3
2	Unusually High HCO ⁺ /CO Ratios in and outside Supernova Remnant W49B. <i>Astrophysical Journal</i> , 2022, 931, 144.	4.5	6
3	Properties of Dense Molecular Gas along the Major Axis of M82. <i>Astrophysical Journal</i> , 2022, 933, 139.	4.5	2
4	A massive stellar bulge in a regularly rotating galaxy 1.2 billion years after the Big Bang. <i>Science</i> , 2021, 371, 713-716.	12.6	53
5	A Cuspy Dark Matter Halo. <i>Astrophysical Journal</i> , 2021, 909, 20.	4.5	20
6	Dense gas in local galaxies revealed by multiple tracers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 503, 4508-4528.	4.4	9
7	HCN ($1\text{--}0$) opacity of outflowing gas in Arp 220W. <i>Astronomy and Astrophysics</i> , 2021, 649, A125.	5.1	2
8	PGC 38025: A Star-forming Lenticular Galaxy with an Off-nuclear Star-forming Core. <i>Astrophysical Journal</i> , 2021, 915, 1.	4.5	4
9	Molecular Gas in a Gravitationally Lensed Galaxy Group at $z = 2.9$. <i>Astrophysical Journal</i> , 2021, 917, 79.	4.5	3
10	Extremely weak CO emission in IZw 18. <i>Astronomy and Astrophysics</i> , 2021, 653, L10.	5.1	4
11	VALES VI: ISM enrichment in star-forming galaxies up to $z \approx 0.2$ using $12\text{CO}(1\text{--}0)$, $13\text{CO}(1\text{--}0)$, and $\text{C}18\text{O}(1\text{--}0)$ line luminosity ratios. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 2771-2785.	4.4	11
12	High molecular gas content and star formation rates in local galaxies that host quasars, outflows, and jets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 498, 1560-1575.	4.4	49
13	The MALATANG survey: dense gas and star formation from high-transition HCN and HCO ⁺ maps of NGC 253. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 1276-1296.	4.4	9
14	Weak CS emission in an extremely metal-poor galaxy DDO 70. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 496, L38-L42.	3.3	0
15	HCN ³⁻² survey towards a sample of local galaxies. <i>Publication of the Astronomical Society of Japan</i> , 2020, 72, .	2.5	7
16	CO observations towards H ₂ -rich Ultradiffuse Galaxies. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 499, L26-L30.	3.3	5
17	Oversized Gas Clumps in an Extremely Metal-poor Molecular Cloud Revealed by ALMA's Parsec-scale Maps. <i>Astrophysical Journal</i> , 2020, 892, 147.	4.5	7
18	Isotopologues of dense gas tracers in nearby infrared bright galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 1095-1113.	4.4	7

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19	Molecular Oxygen in the Nearest QSO Mrk 231. <i>Astrophysical Journal</i> , 2020, 889, 129.	4.5	6
20	The Chemical Structure of Young High-mass Star-forming Clumps. II. Parsec-scale CO Depletion and Deuterium Fraction of HCO ⁺ . <i>Astrophysical Journal</i> , 2020, 901, 145.	4.5	13
21	A Systematic Observational Study on Galactic Interstellar Ratio ¹⁸ O/ ¹⁷ O. I. C ¹⁸ O and C ¹⁷ O <i>i</i> = 1 ^σ Data Analysis. <i>Astrophysical Journal, Supplement Series</i> , 2020, 249, 6.	7.7	10
22	Resolved Neutral Carbon Emission in Nearby Galaxies: [C I] Lines as Total Molecular Gas Tracers. <i>Astrophysical Journal</i> , 2019, 880, 133.	4.5	37
23	The evolution of CNO isotopes: the impact of massive stellar rotators. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 2838-2854.	4.4	62
24	A SiO J ₅₋₄ Survey Toward Massive Star Formation Regions. <i>Astrophysical Journal</i> , 2019, 878, 29.	4.5	30
25	The molecular gas properties in the gravitationally lensed merger HATLAS ^{142935.3} 002836. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 2366-2378.	4.4	1
26	¹³ C/ ¹⁸ O ratio as a litmus test of stellar IMF variations in high-redshift starbursts. <i>Proceedings of the International Astronomical Union</i> , 2019, 15, 234-238.	0.0	0
27	Extreme conditions in the molecular gas of lensed star-forming galaxies at <i>z</i> ~ 3. <i>Astronomy and Astrophysics</i> , 2018, 615, A142.	5.1	20
28	Molecular Gas toward Supernova Remnant Cassiopeia A. <i>Astrophysical Journal</i> , 2018, 865, 6.	4.5	16
29	Catching the Birth of a Dark Molecular Cloud for the First Time. <i>Astrophysical Journal</i> , 2018, 867, 13.	4.5	13
30	New places and phases of CO-poor/C ¹⁸ O-rich molecular gas in the Universe. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 1716-1725.	4.4	44
31	The MALATANG Survey: The L _{GAS} vs L _{IR} Correlation on Sub-kiloparsec Scale in Six Nearby Star-forming Galaxies as Traced by HCN J ₄₋₃ and HCO ⁺ J ₄₋₃ . <i>Astrophysical Journal</i> , 2018, 860, 165.		35
32	Revisiting the Extended Schmidt Law: The Important Role of Existing Stars in Regulating Star Formation. <i>Astrophysical Journal</i> , 2018, 853, 149.	4.5	54
33	ALMA [C I] ³ P ₁ vs [C I] ³ P ₀ Observations of NCC 6240: A Puzzling Molecular Outflow, and the Role of Outflows in the Global \dot{M}_{CO} Factor of (U)LIRGs. <i>Astrophysical Journal</i> , 2018, 863, 143.	4.5	57
34	Stellar populations dominated by massive stars in dusty starburst galaxies across cosmic time. <i>Nature</i> , 2018, 558, 260-263.	27.8	156
35	Cosmic-ray Induced Destruction of CO in Star-forming Galaxies. <i>Astrophysical Journal</i> , 2017, 839, 90.	4.5	92
36	Neutral Carbon Emission in Luminous Infrared Galaxies: The [C I] Lines as Total Molecular Gas Tracers. <i>Astrophysical Journal Letters</i> , 2017, 840, L18.	8.3	53

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37	Cloud Structure of Three Galactic Infrared Dark Star-forming Regions from Combining Ground- and Space-based Bolometric Observations. <i>Astrophysical Journal</i> , 2017, 840, 22.	4.5	33
38	The Molecular Gas Environment in the 20 km s ⁻¹ Cloud in the Central Molecular Zone. <i>Astrophysical Journal</i> , 2017, 839, 1.	4.5	34
39	ALMA Maps of Dust and Warm Dense Gas Emission in the Starburst Galaxy IC 5179*. <i>Astrophysical Journal</i> , 2017, 845, 58.	4.5	2
40	Millimetre spectral line mapping observations towards four massive star-forming H _{ii} regions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 248-275.	4.4	7
41	The evolution of CNO isotopes: a new window on cosmic star formation history and the stellar IMF in the age of ALMA. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 401-415.	4.4	108
42	The Dependence of the IR- ν Radio Correlation on the Metallicity. <i>Astrophysical Journal</i> , 2017, 846, 68.	4.5	5
43	The most distant, luminous, dusty star-forming galaxies: redshifts from NOEMA and ALMA spectral scans. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 2028-2041.	4.4	51
44	OUTFLOW DETECTION IN A 70 μ m DARK HIGH-MASS CORE. <i>Astrophysical Journal</i> , 2016, 828, 100.	4.5	32
45	Gone with the heat: a fundamental constraint on the imaging of dust and molecular gas in the early Universe. <i>Royal Society Open Science</i> , 2016, 3, 160025.	2.4	64
46	EXPANDING MOLECULAR BUBBLE SURROUNDING TYCHO'S SUPERNOVA REMNANT (SN 1572) OBSERVED WITH THE IRAM 30 m TELESCOPE: EVIDENCE FOR A SINGLE-DEGENERATE PROGENITOR. <i>Astrophysical Journal</i> , 2016, 826, 34.	4.5	44
47	MULTI-WAVELENGTH STUDY OF THE SUPERNOVA REMNANT KES 79 (G33.6+0.1): ON ITS SUPERNOVA PROPERTIES AND EXPANSION INTO A MOLECULAR ENVIRONMENT. <i>Astrophysical Journal</i> , 2016, 831, 192.	4.5	25
48	Carbon monoxide in an extremely metal-poor galaxy. <i>Nature Communications</i> , 2016, 7, 13789.	12.8	34
49	CLOUD STRUCTURE OF GALACTIC OB CLUSTER-FORMING REGIONS FROM COMBINING GROUND- AND SPACE-BASED BOLOMETRIC OBSERVATIONS. <i>Astrophysical Journal</i> , 2016, 828, 32.	4.5	38
50	WITNESSING THE BIRTH OF THE RED SEQUENCE: ALMA HIGH-RESOLUTION IMAGING OF AND DUST IN TWO INTERACTING ULTRA-RED STARBURSTS AT z = 4.425. <i>Astrophysical Journal</i> , 2016, 827, 34.	4.5	75
51	Dense-gas properties in Arp 220 revealed by isotopologue lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 3986-3990.	4.4	13
52	THE WEAK CARBON MONOXIDE EMISSION IN AN EXTREMELY METAL-POOR GALAXY, SEXTANS A. <i>Astrophysical Journal Letters</i> , 2015, 804, L11.	8.3	28
53	SUB-MILLIMETER TELESCOPE CO (2-1) OBSERVATIONS OF NEARBY STAR-FORMING GALAXIES. <i>Astrophysical Journal</i> , 2015, 799, 92.	4.5	19
54	SMA OBSERVATIONS OF C ₂ H IN HIGH-MASS STAR-FORMING REGIONS. <i>Astrophysical Journal</i> , 2015, 808, 114.	4.5	10

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55	Physical conditions of molecular gas in the Circinus galaxy Multi- λ CO and C^{18}O observations. <i>Astronomy and Astrophysics</i> , 2014, 568, A122.	5.1	35
56	SiO and CH ₃ OH mega-masers in NGC 1068. <i>Nature Communications</i> , 2014, 5, 5449.	12.8	26
57	ISOTOPOLOGUES OF DENSE GAS TRACERS IN NGC 1068. <i>Astrophysical Journal</i> , 2014, 796, 57.	4.5	18
58	STAR FORMATION RELATIONS AND CO SPECTRAL LINE ENERGY DISTRIBUTIONS ACROSS THE z -LADDER AND REDSHIFT. <i>Astrophysical Journal</i> , 2014, 794, 142.	4.5	130
59	MOLECULAR GAS HEATING MECHANISMS, AND STAR FORMATION FEEDBACK IN MERGER/STARBURSTS: NGC 6240 AND Arp 193 AS CASE STUDIES. <i>Astrophysical Journal</i> , 2014, 788, 153.	4.5	67
60	DENSE GAS TRACERS AND STAR FORMATION LAWS IN ACTIVE GALAXIES: APEX SURVEY OF HCN $\lambda = 4 \hat{a}^{\prime} 3$, HCO $\lambda = 4 \hat{a}^{\prime} 3$, AND CS $\lambda = 7 \hat{a}^{\prime} 6$. <i>Astrophysical Journal Letters</i> , 2014, 784, L31.	8.3	75
61	Inefficient star formation in extremely metal poor galaxies. <i>Nature</i> , 2014, 514, 335-338.	27.8	176
62	A SiO 2-1 SURVEY TOWARD GAS-RICH ACTIVE GALAXIES. <i>Astrophysical Journal Letters</i> , 2013, 778, L39.	8.3	6
63	High resolution observations of the 6 cm H ₂ CO maser in NGC 6240. <i>Research in Astronomy and Astrophysics</i> , 2013, 13, 270-276.	1.7	1
64	MUSCLE W49: A MULTI-SCALE CONTINUUM AND LINE EXPLORATION OF THE MOST LUMINOUS STAR FORMATION REGION IN THE MILKY WAY. I. DATA AND THE MASS STRUCTURE OF THE GIANT MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2013, 779, 121.	4.5	63
65	THE ORIGIN OF OB CLUSTERS: FROM 10 pc TO 0.1 pc. <i>Astrophysical Journal</i> , 2012, 745, 61.	4.5	42
66	LARGE-SCALE KINEMATICS, ASTROCHEMISTRY, AND MAGNETIC FIELD STUDIES OF MASSIVE STAR-FORMING REGIONS THROUGH HC^{13}N , HNC, AND C^{18}H MAPPINGS. <i>Astrophysical Journal</i> , 2012, 745, 47.	4.5	35
67	A KILOPARSEC-SCALE BINARY ACTIVE GALACTIC NUCLEUS CONFIRMED BY THE EXPANDED VERY LARGE ARRAY. <i>Astrophysical Journal Letters</i> , 2011, 740, L44.	8.3	84
68	^{12}CO , ^{13}CO and C^{18}O observations along the major axes of nearby bright infrared galaxies. <i>Research in Astronomy and Astrophysics</i> , 2011, 11, 787-810.	1.7	27