Zhi-Yu Zhang

List of Publications by Year
in descending order

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		159585	223800
68	2,309	30	46
papers	citations	h-index	g-index

71	71	71	2819
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Inefficient star formation in extremely metal poor galaxies. Nature, 2014, 514, 335-338.	27.8	176
2	Stellar populations dominated by massive stars in dusty starburst galaxies across cosmic time. Nature, 2018, 558, 260-263.	27.8	156
3	STAR FORMATION RELATIONS AND CO SPECTRAL LINE ENERGY DISTRIBUTIONS ACROSS THEJ-LADDER AND REDSHIFT. Astrophysical Journal, 2014, 794, 142.	4.5	130
4	The evolution of CNO isotopes: a new window on cosmic star formation history and the stellar IMF in the age of ALMA. Monthly Notices of the Royal Astronomical Society, 2017, 470, 401-415.	4.4	108
5	Cosmic-ray Induced Destruction of CO in Star-forming Galaxies. Astrophysical Journal, 2017, 839, 90.	4.5	92
6	A KILOPARSEC-SCALE BINARY ACTIVE GALACTIC NUCLEUS CONFIRMED BY THE EXPANDED VERY LARGE ARRAY. Astrophysical Journal Letters, 2011, 740, L44.	8.3	84
7	DENSE GAS TRACERS AND STAR FORMATION LAWS IN ACTIVE GALAXIES: APEX SURVEY OF HCN J = 4 â†' 3, HCO ⁺ J = 4 â†' 3, AND CS J = 7 â†' 6. Astrophysical Journal Letters, 2014, 784, L31.	8.3	75
8	WITNESSING THE BIRTH OF THE RED SEQUENCE: ALMA HIGH-RESOLUTION IMAGING OF AND DUST IN TWO INTERACTING ULTRA-RED STARBURSTS AT *z* = 4.425. Astrophysical Journal, 2016, 827, 34.	4.5	75
9	MOLECULAR GAS HEATING MECHANISMS, AND STAR FORMATION FEEDBACK IN MERGER/STARBURSTS: NGC 6240 AND Arp 193 AS CASE STUDIES. Astrophysical Journal, 2014, 788, 153.	4.5	67
10	Gone with the heat: a fundamental constraint on the imaging of dust and molecular gas in the early Universe. Royal Society Open Science, 2016, 3, 160025.	2.4	64
11	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. Astrophysical Journal, 2013, 779, 121.	4.5	63
12	The evolution of CNO isotopes: the impact of massive stellar rotators. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2838-2854.	4.4	62
13	ALMA [C i]³P₁â€“³P₀ Observations of NGC 6240: A Puzzling Molecular Outflow, and the Role of Outflows in the Global Î±_{CO} Factor of (U)LIRGs. Astrophysical Journal, 2018, 863, 143.	4.5	57
14	Revisiting the Extended Schmidt Law: The Important Role of Existing Stars in Regulating Star Formation. Astrophysical Journal, 2018, 853, 149.	4.5	54
15	Neutral Carbon Emission in Luminous Infrared Galaxies: The [C i] Lines as Total Molecular Gas Tracers^{â^—}. Astrophysical Journal Letters, 2017, 840, L18.	8.3	53
16	A massive stellar bulge in a regularly rotating galaxy 1.2 billion years after the Big Bang. Science, 2021, 371, 713-716.	12.6	53
17	The most distant, luminous, dusty star-forming galaxies: redshifts from NOEMA and ALMA spectral scans. Monthly Notices of the Royal Astronomical Society, 2017, 472, 2028-2041.	4.4	51
18	High molecular gas content and star formation rates in local galaxies that host quasars, outflows, and jets. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1560-1575.	4.4	49

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19	EXPANDING MOLECULAR BUBBLE SURROUNDING TYCHOâ€™S SUPERNOVA REMNANT (SN 1572) OBSERVED WITH THE IRAM 30 m TELESCOPE: EVIDENCE FOR A SINGLE-DEGENERATE PROGENITOR. Astrophysical Journal, 2016, 826, 34.	4.5	44
20	New places and phases of CO-poor/Câ€‰i-rich molecular gas in the Universe. Monthly Notices of the Royal Astronomical Society, 2018, 478, 1716-1725.	4.4	44
21	THE ORIGIN OF OB CLUSTERS: FROM 10 pc TO 0.1 pc. Astrophysical Journal, 2012, 745, 61.	4.5	42
22	CLOUD STRUCTURE OF GALACTIC OB CLUSTER-FORMING REGIONS FROM COMBINING GROUND- AND SPACE-BASED BOLOMETRIC OBSERVATIONS. Astrophysical Journal, 2016, 828, 32.	4.5	38
23	Resolved Neutral Carbon Emission in Nearby Galaxies: [C i]ÂLines as Total Molecular Gas Tracers. Astrophysical Journal, 2019, 880, 133.	4.5	37
24	LARGE-SCALE KINEMATICS, ASTROCHEMISTRY, AND MAGNETIC FIELD STUDIES OF MASSIVE STAR-FORMING REGIONS THROUGH HC₃N, HNC, AND C₂H MAPPINGS. Astrophysical Journal, 2012, 745, 47.	4.5	35
25	Physical conditions of molecular gas in the Circinus galaxy Multi-JCO and Ci³PP₀observations. Astronomy and Astrophysics, 2014, 568, A122.	5.1	35
26	The MALATANG Survey: The L_{GAS}â€“L_{IR} Correlation on Sub-kiloparsec Scale in Six Nearby Star-forming Galaxies as Traced by HCN JÂ=Â4Ââ†’Â3 and HCO⁺ JÂ=Â4Ââ†’Â3. Astrophysical Journal, 2018, 860, 165.	4.5	35
27	Carbon monoxide in an extremely metal-poor galaxy. Nature Communications, 2016, 7, 13789.	12.8	34
28	The Molecular Gas Environment in the 20 km s^{â^’1} Cloud in the Central Molecular Zone. Astrophysical Journal, 2017, 839, 1.	4.5	34
29	Cloud Structure of Three Galactic Infrared Dark Star-forming Regions from Combining Ground-Âand Space-based Bolometric Observations. Astrophysical Journal, 2017, 840, 22.	4.5	33
30	OUTFLOW DETECTION IN A 70 Î¼m DARK HIGH-MASS CORE. Astrophysical Journal, 2016, 828, 100.	4.5	32
31	A SiO JÂ=Â5Ââ†’Â4 Survey Toward Massive Star Formation Regions. Astrophysical Journal, 2019, 878, 29.	4.5	30
32	THE WEAK CARBON MONOXIDE EMISSION IN AN EXTREMELY METAL-POOR GALAXY, SEXTANS A. Astrophysical Journal Letters, 2015, 804, L11.	8.3	28
33	¹²CO,¹³CO and C¹⁸O observations along the major axes of nearby bright infrared galaxies. Research in Astronomy and Astrophysics, 2011, 11, 787-810.	1.7	27
34	SiO and CH3OH mega-masers in NGC 1068. Nature Communications, 2014, 5, 5449.	12.8	26
35	MULTI-WAVELENGTH STUDY OF THE SUPERNOVA REMNANT KES 79 (G33.6+0.1): ON ITS SUPERNOVA PROPERTIES AND EXPANSION INTO A MOLECULAR ENVIRONMENT. Astrophysical Journal, 2016, 831, 192.	4.5	25
36	Extreme conditions in the molecular gas of lensed star-forming galaxies at z ~3. Astronomy and Astrophysics, 2018, 615, A142.	5.1	20

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37	A Cuspy Dark Matter Halo. Astrophysical Journal, 2021, 909, 20.	4.5	20
38	SUB-MILLIMETER TELESCOPE CO (2-1) OBSERVATIONS OF NEARBY STAR-FORMING GALAXIES. Astrophysical Journal, 2015, 799, 92.	4.5	19
39	ISOTOPOLOGUES OF DENSE GAS TRACERS IN NGC 1068. Astrophysical Journal, 2014, 796, 57.	4.5	18
40	Molecular Gas toward Supernova Remnant Cassiopeia A. Astrophysical Journal, 2018, 865, 6.	4.5	16
41	Dense-gas properties in Arp 220 revealed by isotopologue lines. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3986-3990.	4.4	13
42	Catching the Birth of a Dark Molecular Cloud for the First Time. Astrophysical Journal, 2018, 867, 13.	4.5	13
43	The Chemical Structure of Young High-mass Star-forming Clumps. II. Parsec-scale CO Depletion and Deuterium Fraction of HCO⁺. Astrophysical Journal, 2020, 901, 145.	4.5	13
44	VALES VI: ISM enrichment in star-forming galaxies up to zâ€‰â¼â€‰0.2 using 12CO(1â€“0), 13CO(1â€“0), and C18O(1â€“0) line luminosity ratios. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2771-2785.	4.4	11
45	SMA OBSERVATIONS OF C₂H IN HIGH-MASS STAR-FORMING REGIONS. Astrophysical Journal, 2015, 808, 114.	4.5	10
46	A Systematic Observational Study on Galactic Interstellar Ratio ¹⁸O/¹⁷O. I. C¹⁸O and C¹⁷O J = 1â€“0 Data Analysis. Astrophysical Journal, Supplement Series, 2020, 249, 6.	7.7	10
47	The MALATANG survey: dense gas and star formation from high-transition HCN and HCO+ maps of NGCâ€‰253. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1276-1296.	4.4	9
48	Dense gas in local galaxies revealed by multiple tracers. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4508-4528.	4.4	9
49	Millimetre spectral line mapping observations towards four massive star-forming Hâ€‰ii regions. Monthly Notices of the Royal Astronomical Society, 2017, 466, 248-275.	4.4	7
50	HCNâ€‰3â€“2 survey towards a sample of local galaxies. Publication of the Astronomical Society of Japan, 2020, 72, .	2.5	7
51	Oversized Gas Clumps in an Extremely Metal-poor Molecular Cloud Revealed by ALMAâ€™s Parsec-scale Maps. Astrophysical Journal, 2020, 892, 147.	4.5	7
52	Isotopologues of dense gas tracers in nearby infrared bright galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1095-1113.	4.4	7
53	A SiO 2-1 SURVEY TOWARD GAS-RICH ACTIVE GALAXIES. Astrophysical Journal Letters, 2013, 778, L39.	8.3	6
54	Molecular Oxygen in the Nearest QSO Mrk 231. Astrophysical Journal, 2020, 889, 129.	4.5	6

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55	Unusually High HCO⁺/CO Ratios in and outside Supernova Remnant W49B. Astrophysical Journal, 2022, 931, 144.	4.5	6
56	The Dependence of the IRâ€“Radio Correlation on the Metallicity. Astrophysical Journal, 2017, 846, 68.	4.5	5
57	CO observations towards Hâ€‰<scp>i</scp>-rich Ultradiffuse Galaxies. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 499, L26-L30.	3.3	5
58	PGC 38025: A Star-forming Lenticular Galaxy with an Off-nuclear Star-forming Core. Astrophysical Journal, 2021, 915, 1.	4.5	4
59	Extremely weak CO emission in IZw 18. Astronomy and Astrophysics, 2021, 653, L10.	5.1	4
60	Molecular Gas in a Gravitationally Lensed Galaxy Group at z = 2.9. Astrophysical Journal, 2021, 917, 79.	4.5	3
61	Asymmetric Star Formation Triggered by Gas Inflow in a Barred Lenticular Galaxy PGC 34107. Astrophysical Journal, 2022, 927, 215.	4.5	3
62	ALMA Maps of Dust and Warm Dense Gas Emission in the Starburst Galaxy IC 5179*. Astrophysical Journal, 2017, 845, 58.	4.5	2
63	HCN (1â^'0) opacity of outflowing gas in Arp 220W. Astronomy and Astrophysics, 2021, 649, A125.	5.1	2
64	Properties of Dense Molecular Gas along the Major Axis of M82. Astrophysical Journal, 2022, 933, 139.	4.5	2
65	High resolution observations of the 6 cm H2CO maser in NGC 6240. Research in Astronomy and Astrophysics, 2013, 13, 270-276.	1.7	1
66	The molecular gas properties in the gravitationally lensed merger HATLASâ€‰J142935.3â€“002836. Monthly Notices of the Royal Astronomical Society, 2019, 486, 2366-2378.	4.4	1
67	13C/18O ratio as a litmus test of stellar IMF variations in high-redshift starbursts. Proceedings of the International Astronomical Union, 2019, 15, 234-238.	0.0	0
68	Weak CS emission in an extremely metal-poor galaxy DDOÂ70. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 496, L38-L42.	3.3	0