

As of January 22, 2023

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45	refereed papers
13	<i>first-author</i> refereed papers
9	second-author refereed papers
3168	citations to refereed papers (from NASA ADS)
758	citations to <i>first-author</i> refereed papers (from NASA ADS)
30	Hirsch <i>h</i> -index (30 papers with $\geq 30$ citations)
8	DOI-minted dataset publications

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## First-authored refereed:

1. Ly, C.; Malkan, M. A.; Rigby, J. A.; Nagao, T.; “[The Metal Abundance across Cosmic Time \(MACT\) Survey. II. Evolution of the Mass–Metallicity Relation over 8 Billion Years, Using \[OIII\]4363Å Based Metallicities](#)”, 2016, *Astrophysical Journal*, 828, 67 ([arXiv:1602.01098](#))
2. Ly, C.; Malhotra, S.; Malkan, M. A.; Rigby, J. R.; Kashikawa, N.; de los Reyes, M. A.; Rhoads, J. E.; “[The Metal Abundances across Cosmic Time \(MACT\) Survey. I. Optical Spectroscopy in the Subaru Deep Field](#)”, 2016, *Astrophysical Journal Supplements*, 226, 5 ([arXiv:1602.01089](#))
3. Ly, C.; Rigby, J. R.; Cooper, M. C.; Yan, R.; “[Metal-poor, Strongly Star-forming Galaxies in the DEEP2 Survey: The Relationship between Stellar Mass, Temperature-based Metallicity, and Star Formation Rate](#)”, 2015, *Astrophysical Journal*, 805, 45 ([arXiv:1412.1834](#))
4. Ly, C.; Malkan, M. A.; Nagao, T.; Kashikawa, N.; Shimasaku, K.; Hayashi, M.; “[Direct Gas-phase Metallicities, Stellar Properties, and the Local Environment of Emission-line Galaxies at Redshifts below 0.9](#)”, 2014, *Astrophysical Journal*, 780, 122 ([arXiv:1307.7712](#))
5. Ly, C.; Malkan, M. A.; Kashikawa, N.; Hayashi, M.; Nagao, T.; Shimasaku, K.; Ota, K.; Ross, N. R.; “[The Stellar Population and Star Formation Rates of  \$z \sim 1.5\$ – \$1.6\$  \[O II\] Emitting Galaxies Selected from Narrow-Band Emission-Line Surveys](#)”, 2012, *Astrophysical Journal*, 757, 63 ([arXiv:1206.4303](#))
6. Ly, C.; Malkan, M. A.; Kashikawa, N.; Ota, K.; Shimasaku, K.; Iye, M.; Currie, T.; “[Dust Attenuation and H \$\alpha\$  Star Formation Rates of  \$z \sim 0.5\$  Galaxies](#)”, 2012, *Astrophysical Journal Letters*, 747, L16 ([arXiv:1202.0278](#))
7. Ly, C.; Malkan, M. A.; Hayashi, M.; Motohara, K.; Kashikawa, N.; Shimasaku, K.; Nagao, T.; Grady, C.; “[A Census of Star-Forming Galaxies at  \$z = 1\$ – \$3\$  in the Subaru Deep Field](#)”, 2011, *Astrophysical Journal*, 735, 91 ([arXiv:1104.5019](#))
8. Ly, C.; Lee, J. C.; Dale, D. A.; Momcheva, I.; Salim, S.; Staudaher, S.; Moore, C.; Finn, R.; “[The Ha Luminosity Functions and Star Formation Rate Volume Density at  \$z \sim 0.8\$  from the NEWFIRM Ha Survey](#)”, 2011, *Astrophysical Journal*, 726, 109 ([arXiv:1011.2759](#))
9. Ly, C.; Malkan, M. A.; Woo, J.-H.; Treu, T.; Kashikawa, N.; Shimasaku, K.; Yoshida, M.; “[Lyman Break Galaxies at  \$z \approx 1.8\$  –  \$2.8\$ : GALEX/NUV Imaging of the Subaru Deep Field](#)”, 2009, *Astrophysical Journal*, 697, 1410
10. Ly, C.; Walker, R. C.; Junor, W.; “[High Frequency VLBA/VLBI Imaging of M87](#)”, 2007, *Astrophysical Journal*, 660, 200–205
11. Ly, C.; Malkan, M.; Kashikawa, N.; Shimasaku, K.; Doi, M.; Nagao, T.; Iye, M.; Kodama, T.; Morokuma, T.; Motohara, K.; “[The Luminosity Function and Star Formation Rate Between Redshifts of 0.07 and 1.47 for Narrow-band Emitters in the Subaru Deep Field](#)”, 2007, *Astrophysical Journal*, 657, 738–759
12. Ly, C.; De Young, D. S.; Bechtold, J.; “[The Discovery of Extended Thermal X-Ray Emission from PKS 2152-699: Evidence for a “Jet-Cloud” Interaction](#)”, 2005, *Astrophysical Journal*, 618, 609

[DOI] [HDL] [arXiv]

13. Ly, C.; Walker, R. C.; Wrobel, J. M.; “[An Attempt to Probe the Radio Jet Collimation Regions in NGC 4278, NGC 4374 \(M84\), and NGC 6166](#)”, 2004, *Astronomical Journal*, 127, 119 [DOI] [HDL] [arXiv]

Co-authored refereed:

14. Hyun, M.; Im, M.; Smail, I. R.; Cotton, W. D.; Birkin, J. E.; Kikuta, S.; Shim, H.; Willmer, C. N. A.; Condon, J. J.; Windhorst, R. A.; Cohen, S. H.; Jansen, R. A.; Ly, C.; Matsuda, Y.; Fazio, G. G.; Swinbank, A. M.; Yan, H., “[The JCMT SCUBA-2 Survey of the James Webb Space Telescope North Ecliptic Pole Time-Domain Field](#)”, 2023, *Astrophysical Journal Supplements*, 264, 19. [DOI]
15. The Astropy Collaboration; et al. “[The Astropy Project: Sustaining and Growing a Community-oriented Open-source Project and the Latest Major Release \(v5.0\) of the Core Package](#)”, 2022, *Astrophysical Journal*, 935, 167 [DOI] [arXiv:2206.14220]
16. Rios F.; Ly C.; “[Implementing and Managing a Data Curation Workflow in the Cloud](#)”, 2021, *Journal of eScience Librarianship*, 10(3), e1205 [DOI]
17. Shin, K.; Ly, C.; Malkan, M. A.; Malhotra, S.; de los Reyes; Mithi; Rhoads, J. E.; “[The Metal Abundance across Cosmic Time \(MACT\) Survey. III. The Relationship between Stellar Mass and Star Formation Rate in Extremely Low-Mass Galaxies](#)”, 2020, *Monthly Notices of the Royal Astronomical Society*, *Monthly Notices of the Royal Astronomical Society*, 501, 2231 [DOI] [arXiv:1910.10735] [data]
18. Weldon, A. J.; Ly, C.; Cooper, M.; “[The Stellar Population of Metal-poor Galaxies at  \$z \sim 1\$  and the Evolution of the Stellar Mass–Gas Metallicity Relation](#)”, 2020, *Monthly Notices of the Royal Astronomical Society*, 491, 2254 [DOI] [arXiv:1910.06975]
19. Conroy, C.; Bonaca, A.; Cargile, P.; Johnson, B. D.; Caldwell, N.; Naidu, R. P.; Zaritsky, D.; Fabricant, D.; Moran, S.; Rhee, J.; Szentgyorgyi, A.; Berlind, P.; Calkins, M. L.; Kattner, S.; Ly, C.; “[Mapping the Stellar Halo with the H3 Spectroscopic Survey](#)”, 2019, *Astrophysical Journal*, 883, 1 [DOI]
20. Hosseinzadeh, G.; Cowperthwaite, P. S.; Gomez, S.; Villar, V. A.; Nicholl, M.; Margutti, R.; Berger, E.; Chornock, R.; Paterson, K.; Fong, W.; Savchenko, V.; Short, P.; Alexander, K.D.; Blanchard, P. K.; Braga, J.; Calkins, M. L.; Cartier, R.; Coppejans, D. L.; Eftekhari, T.; Laskar, T.; Ly, C.; Patton, L.; Pelisoli, I.; Reichart, D. E.; Terreran, G.; Williams, P. K. G.; “[Follow-up of the Neutron Star Bearing Gravitational Wave Candidate Events S190425z and S190426c with MMT and SOAR](#)”, 2019, *Astrophysical Journal Letter*, 880, L4 [arXiv:1905.02186]
21. Walker, R. C.; Hardee, P. E.; Davies, F. B.; Ly, C.; Junor, W.; “[The Structure and Dynamics of the Sub-parsec Scale Jet in M87 based on 50 VLBA Observations over 17 Years at 43 GHz](#)”, 2018, *Astrophysical Journal*, 855, 128 [DOI] [arXiv:1802.06166]
22. Malkan, M.; Cohen, D. P.; Maruyama, M.; Kashikawa, N.; Ly, C.; Shimasaku, K.; Hayashi, M.; Ishikawa, S.; Motohara, K.; “[Luminosity Function, Physical Properties, and Clustering of Lyman-Break Galaxies at  \$z \sim 3\$  in the Subaru Deep Field](#)”, 2017, *AAS Journals*, 850, 5 [arXiv:1711.04787]
23. Walker, R.; Hardee, P.; Davis, F.; Ly, C.; Junor, W.; Mertens, F.; Lobanov, A.; “[Observations of the Structure and Dynamics of the Inner M87 Jet](#)”, 2016, *Galaxies*, 4, 46
24. Hayashi, M.; Ly, C.; Shimasaku, K.; Motohara, K.; Malkan, M. A.; Nagao, T.; Kashikawa, N.; Goto, R.; Naito, Y.; “[Physical conditions of the interstellar medium in star-forming galaxies at  \$z \sim 1.5\$](#) ”, 2015, *Publications of the Astronomical Society of Japan*, 67, 80 [arXiv:1504.05589]
25. de los Reyes, M.; Ly, C.; Lee, J. C.; Salim, S.; Momcheva, I.; Feddersen, J.; Dale, D.; Ouchi, M.; Ono, Y.; Finn, R.; “[The Relationship between Stellar Mass, Gas Metallicity, and Star Formation Rate for H \$\alpha\$ -selected Galaxies at  \$z \sim 0.8\$  from the NewH \$\alpha\$  Survey](#)”, 2015, *Astronomical Journal*, 149, 79

- ([arXiv:1410.1551](#))
26. Salim, S.; Lee, J. C.; **Ly, C.**; Brinchmann, J.; Davé, R.; Dickinson, M.; Salzer, J. J.; Charlot, S.; “[A Critical Look at the Mass-Metallicity-Star Formation Rate Relation in the Local Universe. I. An Improved Analysis Framework and Confounding Systematics](#)”, 2014, *Astrophysical Journal*, 797, 126 ([arXiv:1411.7391](#))
  27. Pirzkal, N.; Rothberg, B.; **Ly, C.**; Malholtra, S.; Rhoads, J. E.; Gorgin, N. A.; Dahlen, T.; Meurer, G. R.; Walsh, J. R.; Hathi, N. P.; Cohen, S. H.; Bellini, A.; Holwerda, B. W.; Straughn, A. N.; Mechtley, M.; “[Emission-Line Galaxies from the Hubble Space Telescope Probing Evolution and Reionization Spectroscopically \(PEARS\) Grism Survey. II: The Complete Sample](#)”, 2013, *Astrophysical Journal*, 772, 48 ([arXiv:1208.5535](#))
  28. Momcheva, I. G.; Lee, J. C.; **Ly, C.**; Salim, S.; Dale, D. A.; Ouchi, M.; Finn, R.; Ono, Y.; “[Nebular Attenuation in H \$\alpha\$ -selected Star-forming Galaxies from the NewH \$\alpha\$  Survey](#)”, 2013, *Astronomical Journal*, 145, 47 ([arXiv:1207.5479](#))
  29. Kashikawa, N.; Nagao, T.; Toshikawa, J.; Ishizaki, Y.; Egami, E.; Hayashi, M.; **Ly, C.**; Malkan, M. A.; Matsuda, Y.; Shimasaku, K.; Iye, M.; Ota, K.; Shibuya, T.; Taniguchi, Y.; Shioya, Y.; “[A Ly \$\alpha\$  Emitter with Extremely Large Rest-Frame Equivalent Width of  \$\sim 900\text{\AA}\$  at  \$z=6.5\$ : A Candidate of Population III-Dominated Galaxy?](#)”, 2012, *Astrophysical Journal*, 761, 85 ([arXiv:1210.4933](#))
  30. Urata, Y.; Tsai, P.; Huang, K.; Morokuma, T.; Yasuda, N.; Tanaka, M.; Motohara, K.; Hayashi, M.; Kashikawa, N.; **Ly, C.**; Malkan, M.; “[Unusual Long and Luminous Optical Transient in the Subaru Deep Field](#)”, 2012, *Astrophysical Journal Letters*, 760, L11 ([arXiv:1210.6909](#))
  31. Lee, J. C.; **Ly, C.**; Spitzer, L.; Labbe, I.; Salim, S.; Persson, S. E.; Ouchi, M.; Dale, D. A.; Monson, A.; Murphy, D.; “[A Dual Narrowband Survey for H \$\alpha\$  Emission from Galaxies at  \$z=2.2\$ : Demonstration of the Technique and Constraints on the H \$\alpha\$  Luminosity Function](#)”, 2012, *Publications of the Astronomical Society of the Pacific*, 124, 782 ([arXiv:1205.0017](#))
  32. Nakajima, K.; Ouchi, M.; Shimasaku, K.; Ono, Y.; Lee, J. C.; Foucaud, S.; **Ly, C.**; Dale, D. A.; Salim, S.; Finn, R.; Almaini, O.; Okamura, S.; “[Average Metallicity and Star Formation Rate of Ly \$\alpha\$  Emitters Probed by a Triple Narrow-Band Survey](#)”, 2012, *Astrophysical Journal*, 745, 12
  33. Abramowski, A.; et al. (446 co-authors); “[The 2010 very high energy gamma-ray flare & 10 years of multi-wavelength observations of M 87](#)”, 2011, *Astrophysical Journal*, 746, 151
  34. Kashikawa, N.; Shimasaku, K.; Matsuda, Y.; Egami, E.; Jiang, L.; Nagao, T.; Ouchi, M.; Malkan, M. A.; Hattori, T.; Ota, K.; Taniguchi, Y.; Okamura, S.; **Ly, C.**; Iye, M.; Furusawa, H.; Shioya, Y.; Shibuya, T.; Ishizaki, Y.; Toshikawa, J.; “[Completing the Census of Ly- \$\alpha\$  Emitters at the Reionization Epoch](#)”, 2011, *Astrophysical Journal*, 734, 119 ([arXiv:1104.2330](#))
  35. Ota, K.; **Ly, C.**; Malkan, M. A.; Motohara, K.; Hayashi, M.; Shimasaku, K.; Morokuma, T.; Iye, M.; Kashikawa, N.; Hattori, Takashi; “[Spitzer Space Telescope Constraint on the Stellar Mass of a  \$z = 6.96\$  Ly \$\alpha\$  Emitter](#)”, 2010, *Publications of the Astronomical Society of Japan*, 62, 1167
  36. Doherty, M.; Tanaka, M.; DeBreuck, C.; **Ly, C.**; Kodama, T.; Kurk, J.; Seymour, N.; Stern, D.; Vernet, J.; Kajisawa, M.; Tanaka, I.; Venemans, B.; “[Optical and near-IR spectroscopy of candidate red galaxies in two  \$z\sim 2.5\$  proto-clusters](#)”, 2009, *Astronomy & Astrophysics*, 509, 83
  37. Acciari, V. A.; et al. (392 co-authors); “[Radio Imaging of the Very-High-Energy  \$\gamma\$ -Ray Emission Region in the Central Engine of a Radio Galaxy](#)”, 2009, *Science*, 325, 444
  38. Hatsukade, B.; Iono, D.; Motohara, K.; Nakanishi, K.; Hayashi, M.; Shimasaku, K.; Nagao, T.; Tamura, Y.; Malkan, M. A.; **Ly, C.**; Kohno, K.; “[A Search for Molecular Gas toward a BzK-selected Star-forming Galaxy at  \$z = 2.044\$](#) ”, 2009, *Publications of the Astronomical Society of Japan*, 61, 487
  39. Hayashi, M.; Motohara, K.; Shimasaku, K.; Onodera, M.; Uchimoto, Y. K.; Kashikawa, N.; Yoshida, M.; Okamura, S.; **Ly, C.**; Malkan, M. A.; “[Star Formation Rates and Metallicities of K-selected Star Forming Galaxies at  \$z\sim 2\$](#) ”, 2008, *Astrophysical Journal*, 691, 140

40. Walker, R. C.; Ly, C.; Junor, W.; Hardee, P. E.; “[A VLBA movie of the jet launch region in M87](#)”, 2008, *Journal of Physics Conference Series: “The Universe Under the Microscope - Astrophysics at High Angular Resolution*”, 131, 012053
41. Nagao, T.; Sasaki, S. S.; Maiolino, R.; Grady, C.; Kashikawa, N.; Ly, C.; Malkan, M. A.; Motohara, K.; Murayama, T.; Schaerer, D.; Shioya, Y.; Taniguchi, T.; “[A Photometric Survey for Ly \$\alpha\$ -\[He II\] Dual Emitters: Searching for Population III Stars in High-redshift Galaxies](#)”, 2008, *Astrophysical Journal*, 680, 100
42. Nagao, T.; Murayama, T.; Maiolino, R.; Marconi, A.; Kashikawa, N.; Ajiki, M.; Hattori, T.; Ly, C.; Malkan, M.; Motohara, K.; Ohta, K.; Sasaki, S.; Shioya, Y.; Taniguchi, Y.; “[High-redshift Ly \$\alpha\$  emitters with a large equivalent width: Properties of i-dropout galaxies with an NB921-band depression in the Subaru Deep Field](#)”, 2007, *Astronomy & Astrophysics*, 468, 877
43. Kashikawa, N.; Shimasaku, K.; Malkan, M. A.; Doi, M.; Matsuda, Y.; Ouchi, M.; Taniguchi, Y.; Ly, C.; Nagao, T.; Iye, M.; Motohara, K.; Murayama, T.; Murozono, K.; Nariai, K.; Ohta, K.; Okamura, S.; Sasaki, T.; Shioya, Y.; Umemura, M.; “[The End of the Reionization Epoch Probed by Lyman-Alpha Emitters at  \$z = 6.5\$  in the Subaru Deep Field](#)”, 2006, *Astrophysical Journal*, 648, 7
44. Shimasaku, K.; Kashikawa, N.; Doi, M.; Ly, C.; Malkan, M. A.; Matsuda, Y.; Ouchi, M.; Hayashino, T.; Iye, M.; Motohara, K.; Murayama, T.; Nagao, T.; Ohta, K.; Okamura, S.; Sasaki, T.; Shioya, Y.; Taniguchi, Y.; “[Ly \$\alpha\$  Emitters at  \$z=5.7\$  in the Subaru Deep Field](#)”, 2006, *Publications of the Astronomical Society of Japan*, 58, 313
45. Brotherton, M. S.; Ly, C.; Wills, B. J.; Laurent-Muehleisen, S. A.; van Breugel, W.; Antonucci, R. R. J.; “[Multiband VLA Observations of the Faint Radio Core of 3CR 68.1](#)”, 2002, *Astronomical Journal*, 124, 1943 [[DOI](#)] [[HDL](#)] [[arXiv](#)]

#### Data Publication:

1. Ly, C.; Shin, K.; Malkan, M. A.; Malhotra, S.; de los Reyes, M. A.; Rhoads, J. (2022). [Data for "The Metal Abundances across Cosmic Time \(MACT\) Survey. III - The relationship between stellar mass and star formation rate in extremely low-mass galaxies"](#). figshare. Dataset. [[DOI](#)]
2. Merchant, N. C.; Davis, J.; Franks, G. H.; Ly, C.; Rios, F.; Wickizer, T.; Windham, G. D.; Yung, M. (2021). [University of Arizona Test-Trace-Treat COVID-19 testing results](#). University of Arizona Research Data Repository. Dataset [[DOI](#)]
3. Ly, C.; Rios, F.; Hardeman, M. (2021). [Data Curation in the Cloud with the Figshare API: Presented by the University of Arizona](#). figshare. Media [[DOI](#)]
4. Oliver, J. C.; Ly, C.; Carini, K.; Rios, F.; Romero Diaz, D. Y.; University of Arizona Libraries (2021). [University of Arizona Libraries 2021 Data Visualization Challenge](#). University of Arizona Research Data Repository. Collection [[DOI](#)]
5. Ly, C.; Oliver, J. C.; Carini, K.; Kollen, C. E.; Rios, F. (2020). [University of Arizona Libraries 2020 Data Visualization Challenge](#). University of Arizona Research Data Repository. Collection [[DOI](#)]
6. Ly, C.; McCleary, J.; Knott, C.; Castiello-Gutiérrez, S. (2020). [Independent Data Aggregation, Quality Control and Visualization of University of Arizona COVID-19 Re-Entry Testing Data](#). University of Arizona Research Data Repository. Dataset [[DOI](#)]
7. McCormick, C.; Ly, C. (2020). [The Evolution of the Stellar Mass-Chemical Abundance Relation over Seven Billion Years](#). University of Arizona Research Data Repository. Presentation [[DOI](#)]
8. Leimbach, R.; Ly, C. (2019). [Recalibrating Strong-Line Metallicity Diagnostics: Chemical Abundances from Composite Galaxy Spectra](#). University of Arizona Research Data Repository. Presentation [[DOI](#)]

Non-refereed, White papers, and Conference Proceedings:



1. Behroozi, P.; **et al.** (24 co-authors); “[\*Empirically Constraining Galaxy Evolution\*](#)”, 2019, White paper submitted to the Astro2020 decadal survey
2. Rudnick, G.; **et al.** (30 co-authors); “*The need for community access to highly multiplexed spectroscopy: DESI availability in the age of LSST*”, 2014, White paper submitted to the NRC's Committee on a Strategy to Optimize the U.S. OIR System in the Era of the LSST
3. Walker, R. C.; **Ly, C.**; Junor, W.; Hardee, P. E.; “[\*Imaging a Jet Base - Prospects with M87\*](#)”, 2009, *Astronomical Society of the Pacific Conference Series: “Approaching Micro-Arcsecond Resolution with VSOP-2: Astrophysics and Technology”*, 402, 227
4. Walker, R. C.; **Ly, C.**; Junor, W.; Hardee, P. E.; “[\*Progress Toward a VLBA Movie of the Jet Collimation Region in M87\*](#)”, 2008, *Astronomical Society of the Pacific Conference Series: “Extragalactic Jets: Theory and Observation from Radio to Gamma Ray”*, 386, 87
5. Cameron, P. B.; Grcevich, J.; Gugliucci, N.; Hess, K.; **Ly, C.**; Schillemat, K.; Shetiya, A.; Simpson, C.; Stilp, A.; Venkata, U. R.; Zeiger, B.; “[\*Radio observations of BD +60 73 = IGR J00370+6122\*](#)”, 2004, *ATel*, 314