CHUN LY **PUBLICATION LIST**

As of September 22, 2020

41	refereed papers
13	*first-author* refereed papers
7	second-author refereed papers
2524	citations to refereed papers (from NASA ADS)
665	citations to *first-author* refereed papers (from NASA ADS)
26	Hirsch *h*-index (26 papers with ≥ 26 citations)
2	DOI-minted dataset publications

Submitted or in preparation:

1. 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", 2019, *Monthly Notices of the Royal Astronomical Society*, *Monthly Notices of the Royal Astronomical Society,* submitted (arXiv:1910.10735)

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~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 Hα Star Formation Rates of z~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 Hα Luminosity Functions and Star Formation Rate Volume Density at z~0.8 from the NEWFIRM Hα 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 ≈ 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. Weldon, A. J.; **Ly, C.**; Cooper, M.; "*The Stellar Population of Metal-poor Galaxies at z ~ 1 and the Evolution of the Stellar Mass–Gas Metallicity Relation*", 2020, *Monthly Notices of the Royal Astronomical Society,* 491, 2254 [DOI] [arXiv]
15. 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
16. 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)
17. 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*, in press (arXiv:1802.06166)
18. 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~3 in the Subaru Deep Field*", 2017, *AAS Journals*, 850, 5 (arXiv:1711.04787)
19. 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
20. 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~1.5*", 2015, *Publications of the Astronomical Society of Japan*, 67, 80 (arXiv:1504.05589)
21. 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 Hα-selected Galaxies at z~0.8 from the NewHα Survey*", 2015, *Astronomical Journal*, 149, 79 (arXiv:1410.1551)
22. 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)
23. 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)

24. Momcheva, I. G.; Lee, J. C.; **Ly, C.**; Salim, S.; Dale, D. A.; Ouchi, M.; Finn, R.; Ono, Y.; "*Nebular Attenuation in Hα-selected Star-forming Galaxies from the NewHα Survey*", 2013, *Astronomical Journal*, 145, 47 (arXiv:1207.5479)
25. 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 Lyα Emitter with Extremely Large Rest-Frame Equivalent Width of ~900A at z=6.5: A Candidate of Population III-Dominated Galaxy?*", 2012, *Astrophysical Journal*, 761, 85 (arXiv:1210.4933)
26. 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)
27. 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 Hα Emission from Galaxies at z=2.2: Demonstration of the Technique and Constraints on the Hα Luminosity Function*", 2012, *Publications of the Astronomical Society of the Pacific,* 124, 782 (arXiv:1205.0017)
28. 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 Lyα Emitters Probed by a Triple Narrow-Band Survey*", 2012, *Astrophysical Journal*, 745, 12
29. 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
30. 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-α Emitters at the Reionization Epoch*", 2011, *Astrophysical Journal*, 734, 119 (arXiv:1104.2330)
31. 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 Lyα Emitter"*, 2010, *Publications of the Astronomical Society of Japan*, 62, 1167
32. 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~2.5 proto-clusters"*, 2009, *Astronomy & Astrophysics*, 509, 83
33. Acciari, V. A., **et al.** (392 co-authors); "*Radio Imaging of the Very-High-Energy γ-Ray Emission Region in the Central Engine of a Radio Galaxy"*, 2009, *Science*, 325, 444
34. 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
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36. 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
37. 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 Lyα-[He II] Dual Emitters: Searching for Population III Stars in High-redshift Galaxies"*, 2008*, Astrophysical Journal*, 680, 100
38. 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 Lyα 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

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40. 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.; "*Lyα Emitters at z=5.7 in the Subaru Deep Field"*, 2006*, Publications of the Astronomical Society of Japan*, 58, 313
41. 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, Chun; Oliver, Jeffrey C; Carini, Kiriann; Kollen, Christine E; Rios, Fernando (2020). *University of Arizona Libraries 2020 Data Visualization Challenge*. University of Arizona Research Data Repository. Collection. [DOI]
2. Ly, Chun; McCleary, Jill; Knott, Cheryl; Castiello-Gutiérrez, Santiago (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]

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