

YAN GONG

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I am an astronomer working at Purple Mountain Observatory and Max-Planck-Institut für Radioastronomie.

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RESEARCH INTERESTS

- Molecular clouds and star formation
- Astrochemistry
- Circumstellar envelopes of late-type stars
- Astronomical masers

EDUCATION

- **Purple Mountain Observatory** 2009.09–2016.07
Ph.D in Astrophysics
Thesis: *A search for triggered star formation and a 1.3 cm spectral line survey*
Advisors: Prof. Dr. Rui-qing Mao & Dr. Christian Henkel
- **Central China Normal University** 2005.09–2009.07
B.Sc. in physics

EMPLOYMENT

- **Purple Mountain Observatory** 2024.01–present
Guest scientist
- **Max-Planck-Institut für Radioastronomie** 2024.01–present
Guest scientist
- **Max-Planck-Institut für Radioastronomie** 2021.09–2023.12
Scientific Staff
- **Max-Planck-Institut für Radioastronomie** 2017.09–2021.09
Postdoc
- **Purple Mountain Observatory** 2016.06–2017.08
Research assistant

HONOR AND AWARDS

- 2017 Excellent Doctoral Dissertation of Chinese Academy of Sciences
- 2016 The Zhu-Li Yuehua outstanding doctoral award of Chinese Academy of Sciences
- 2012–2015 MPG-CAS Joint Doctoral Promotion Program
- 2011–2012 Merit Student, University of Chinese Academy of Sciences

REFEREEING DUTIES

PASJ, MNRAS, RAA, ALMA, FAST

SKILLS OF NOTE

- Software/Language** GILDAS, python, IDL, CASA, MIRIAD (basic), html/css (basic), markdown, NOD3, DS9, LATEX, KARMA, MONTAGE, vi, emacs
- Operating systems** Linux, Mac OS, Windows
- Observing experience** IRAM-30 m (>1000 hours, on site+remote; PI: 262 hours); PMO-13.7 m (>800 hours, on site/service); Effelsberg-100 m (>2000 hours, on site+remote; PI: >100 hours); APEX (>300 hours, four weeks, on site+remote; PI: 398 hours); Onsala-20 m (a

week, onsite); SMT-10 m (a week, remote), ALMA (17.2 hours), ACA (~240 hours), VLA (>100 hours; PI: 15 hours), SMA (>50 hours; PI: 27 hours)

Speaking language Chinese (mother tongue), English (fluent), and German (A1)

PROFESSIONAL REFERENCES

Prof. Dr. Karl M. Menten (Max-Planck-Institut für Radioastronomie)

Director of Dept. Millimeter and Submillimeter Astronomy

E-mail: kmenten@mpifr-bonn.mpg.de

Prof. Dr. Rui-qing Mao (Purple Mountain Observatory)

Deputy director of Purple Mountain Observatory

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Dr. Christian Henkel (Max-Planck-Institut für Radioastronomie)

Staff of Dept. Millimeter and Submillimeter Astronomy

E-mail: chenkel@mpifr-bonn.mpg.de

Dr. Arnaud Belloche (Max-Planck-Institut für Radioastronomie)

Staff of Dept. Millimeter and Submillimeter Astronomy

E-mail: belloche@mpifr-bonn.mpg.de

Dr. Wolfgang Reich (Max-Planck-Institut für Radioastronomie)

Former station manager of the Effelsberg 100m telescope

E-mail: wreich@mpifr-bonn.mpg.de

PRESENTATIONS

- 2024.11 [[Invited talk](#)] [KIAA Colloquium](#), Beijing, China, "Exploring the Cycle of the Interstellar Medium: Insights from the GLOSTAR Survey, Molecular Chemistry, and Maser Studies"
- 2024.10 [[Invited talk](#)] International Symposium on Polar Sciences – The 40th anniversary of CHINARE, Shanghai, China, "Unveiling the Mystery of Stellar Physics with THz HCN Lasers: Resolving Stellar Atmospheres from Dome A"
- 2024.10 [[Contributed talk](#)] The Eleventh Interstellar Physics and Chemistry workshop, Lishui, China, "Tracing Molecular Clouds from Pristine to Extreme: Insights from HCNH⁺ observations"
- 2024.08 [[invited talk](#)] QTT workshop, XAO, Urumqi, China, "Studying ISM with QTT"
- 2024.04 [[invited talk](#)] Martes talk #42, Nanjing University, Nanjing, China, "Decoding interstellar and circumstellar environments with molecular tools"
- 2023.08 [[invited talk](#)], Shanghai Astronomical Observatory, Shanghai, China, "Recent progress on the GLOSTAR survey"
- 2023.07 [[invited talk](#)], Zhejiang lab, Hangzhou, China, "Decoding interstellar and circumstellar environments with molecular tools"
- 2023.07 [[invited talk](#)], Anhui Normal University, Wuhu, China, "Recent progress on the GLOSTAR survey"
- 2023.07 [[invited talk](#)], [PMO Youth Forum](#), Purple Mountain Observatory, Nanjing, China, "Recent progress on the GLOSTAR survey"
- 2021.06 [[e-poster](#)], [EAS2021](#), "Physical and chemical structure of the Serpens filament: fast formation and gravity-driven accretion"
- 2020.11 [[invited talk \(on-line\)](#)] Guangzhou University, China, "The Serpens filament as a key to the initial conditions of filament evolution"
- 2020.02 [[contributed talk](#)] [APEX2020](#), Schloss Ringberg, Germany, "The Serpens filament as a key to the initial conditions of filament evolution"
- 2019.06 [[invited talk](#)] [the CASSACA & Calan star formation joint meeting](#), CASSACA, Santiago, Chile, "L1188: a tangoing molecule cloud complex"
- 2018.06 [[invited talk](#)] [Star and Planet Formation Seminar](#), ESO, Garching, Germany, "The Serpens filament: at the onset of slightly supercritical collapse"
- 2016.11 [[contributed talk](#)] [The Chinese Annual Astronomy/Astrophysics Meeting](#), Wuhan, China, "Star formation triggered by a collision of molecular clouds in L1188"
- 2016.04 [[contributed talk](#)] [JCMT PI Science](#), Mitaka, Japan, "Studying the thermal state of dense gas with JCMT"

- 2015.08 [contributed talk] [Zhangheng academic seminar](#), Delingha, China, "Molecular clouds and star formation toward the Galactic plane within $216.25^\circ \leq l \leq 218.75^\circ$ and $0.75^\circ \leq b \leq 1.25^\circ$ "
- 2015.07 [invited talk] [Scientific talk at XAO](#), Urumqi, China, "A 1.3 cm line survey toward Orion KL"
- 2015.07 [contributed talk] MPIFR group meeting, Bonn, Germany, "A 1.3 cm line survey toward IRC +10216"
- 2013.07 [poster] [Protostars & Planets VI](#), Heidelberg, Germany, "Triggered Star Formation at the End of the Galactic Bar?"
- 2012.08 [poster] [The 28th IAU](#), Beijing, China, "Molecular gas around infrared dust bubbles"

REFEREED PUBLICATIONS

A full list via ADS

13 first-author paper, 6 second-author paper, 4 third-author paper

63. [Dynamic Massive Star Formation: Radio Flux Variability in Regions](#)

Yang, A. Y. ; Thompson, M. A. ; Urquhart, J. S. ; Brunthaler, A. ; Menten, K. M. ; **Gong, Yan** ; Tsai, Chao-Wei ; Patel, A. L. ; Li, D. ; Cotton, W. D. [2024, A&A, accepted](#)

62. [Nitrogen Abundance Distribution in the inner Milky Way](#)

Pineda, Jorge L. ; Horiuchi, Shinji ; Anderson, L. D. ; Luisi, Matteo ; Langer, William D. ; Goldsmith, Paul F. ; Kuiper, Thomas B. H. ; Fischer, Christian ; **Gong, Yan**; Brunthaler, Andreas ; Rugel, Michael ; Menten, Karl M. , [2024, ApJ, 932, 89](#)

61. [A global view on star formation: The GLOSTAR Galactic plane survey. XI. Radio source catalog IV: \$2^\circ < l < 28^\circ\$, \$36^\circ < l < 60^\circ\$ and \$|b| < 1^\circ\$](#) [A&A cover page](#)

Medina, S. -N. X. ; Dzib, S. A. ; Urquhart, J. S. ; Yang, A. Y. search by orcid ; Brunthaler, A. ; Menten, K. M. ; Wyrowski, F. ; Cotton, W. D. ; Cheema, A. ; Dokara, R. ; **Gong, Y.** ; Khan, S. ; Nguyen, H. ; Ortiz-Leon, G. N. ; Rugel, M. R. ; Veena, V. S. ; Beuther, H. ; Csengeri, T. ; Pandian, J. D. ; Roy, N., [2024, A&A, 689, A196](#)

60. [Hyperfine structure of the methanol molecule as traced by Class I methanol masers](#)

Agafonova, I. I. ; Bayandina, O. S. ; **Gong, Y.** ; Henkel, C. ; Kim, Kee-Tae ; Kozlov, M. G. ; Lankhaar, B. ; Levshakov, S. A. ; Menten, K. M. ; Ubachs, W. ; Val'tts, I. E. ; Yang, W., [2024, MNRAS, 533, 1714](#)

59. [A global view on star formation: The GLOSTAR Galactic plane survey X. Galactic HII region catalog using radio recombination lines](#)

Khan, S. ; Rugel, M. R. ; Brunthaler, A. ; Menten, K. M. ; Wyrowski, F. ; Urquhart, J. S. ; **Gong, Y.** ; Yang, A. Y.; Nguyen, H. ; Dokara, R. ; Dzib, S. A. ; Medina, S. -N. X. ; Ortiz-León, G. N. ; Pandian, J. D. ; Beuther, H. ; Veena, V. S. ; Neupane, S. ; Cheema, A. ; Reich, W. ; Roy, N., [2024, A&A, 689, A81](#)

58. [Spatial Distribution of C₄H and c-C₂H₂ in Cold Molecular Cores](#)

Liu, Yijia; Wang, Junzhi; Liu, Shu; Tang, Ningyu; **Gong, Yan**; Li, Yuqiang; Li, Juan; Luo, Rui; Xu, Yani, [2024, ApJ, 969, 33](#)

57. [Kinetic temperature of massive star-forming molecular clumps measured with formaldehyde V. The massive filament DR21](#)

Zhao, X. ; Tang, X. D. ; Henkel, C. ; **Gong, Y.** ; Lin, Y. ; Li, D. L. ; He, Y. X. ; Ao, Y. P. ; Lu, X. ; Liu, T. ; Sun, Y. ; Wang, K. ; Chen, X. P. ; Esimbek, J. ; Zhou, J. J. ; Wu, J. W. ; Qiu, J. J. ; Zheng, X. W. ; Li, J. S. ; Luo, C. S. ; Zhao, Q. [2024, A&A, 687, A207](#)

56. [First detection of CF⁺ in the Large Magellanic Cloud](#)

Gong, Yan, Menten Karl M., Jacob Arshia M., Christian Henkel, Chen C.-H. Rosie, [2024, A&A, 687, A29](#)

55. [Discovery of widespread non-metastable ammonia masers in the Milky Way](#)

Yan, Y. T. ; Henkel, C. ; Menten, K. M. ; Wilson, T. L. ; Wootten, A. ; **Gong, Y.** ; Wyrowski, F. ; Yang, W. ; Brunthaler, A. ; Kraus, A. ; Winkel, B., [2024, A&A, 686, A205](#)

54. [Magnetically Aligned Striations in the L914 Filamentary Cloud](#)

Sun, Li ; Chen, Xuepeng ; Fang, Min ; Zhang, Shaobo ; **Gong, Yan** ; Feng, Jiancheng ; Li, Xuefu ; Yan, Qing-Zeng ; Yang, Ji, [2024, AJ, 167, 176](#)

53. [Massive clumps in W43-main: Structure formation in an extensively shocked molecular cloud](#)

Lin, Yuxin ; Wyrowski, Friedrich ; Liu, Hanyu Baobab ; **Gong, Yan**; Sipilä, Olli ; Izquierdo, Andrés F. ; Csengeri,

Timea ; Ginsburg, Adam ; Li, Guang-Xing ; Spezzano, Silvia ; Pineda, Jaime E. ; Leurini, Silvia ; Caselli, Paola ; Menten, Karl M., [2024, A&A, 685, 101](#)

52. [The first Ka-band \(26.1-35 GHz\) blind line survey towards Orion KL](#)

Liu, Xunchuan ; Liu, Tie ; Shen, Zhiqiang ; Qin, Sheng-Li ; Luo, Qiuyi ; **Gong, Yan** ; Cheng, Yu ; Henkel, Christian ; Gu, Qilao ; Zhu, Fengyao ; Zhang, Tianwei ; Zhao, Rongbing ; Wu, Yajun ; Li, Bin ; Li, Juan ; Zhao, Zhang ; Wang, Jinqing ; Zhong, Weiye ; Liu, Qinghui ; Xia, Bo ; Fu, Li ; Yan, Zhen ; Zhang, Chao ; Wang, Lingling ; Ye, Qian ; Yang, Aiyuan ; Xu, Fengwei ; Zhang, Chao ; Dutta, Somnath ; Li, Shanghuo ; Liu, Meizhu ; Yang, Dongting ; Li, Chuanshou ; Chen, Li [2024, ApJS, 271, 3](#)

51. [Maser Investigation toward Off-Plane Stars \(MIOPS\): detection of SiO masers in the Galactic thick disk and halo](#)

Yang, Wenjin ; Wu, Yuanwei ; **Gong, Yan** ; Mauron, Nicolas ; Zhang, Bo ; Menten, Karl M. ; Mai, Xiaofeng ; Liu, Dejian ; Li, Juan ; Li, Jingjing, [2024, ApJ, 961, 190](#)

50. [A global view on star formation: The GLOSTAR Galactic plane survey. IX. Radio Source Catalog III: \$2^\circ < l < 28^\circ\$, \$36^\circ < l < 40^\circ\$, \$56^\circ < l < 60^\circ\$ and \$|b| < 1^\circ\$, VLA B-configuration](#)

Yang, A. Y. ; Dzib, S. A. ; Urquhart, J. S. ; Brunthaler, A. ; Medina, S. -N. X. ; Menten, K. M. ; Wyrowski, F. ; Ortiz-León, G. N. ; Cotton, W. D. ; **Gong, Y.** ; Dokara, R. ; Rugel, M. R. ; Beuther, H. ; Pandian, J. D. ; Csengeri, T. ; Veena, V. S. ; Roy, N. ; Nguyen, H. ; Winkel, B. ; Ott, J. ; Carrasco-Gonzalez, C. ; Khan, S. ; Cheema, A., [2023, A&A, 680, A92](#)

49. [Sulfur Isotope Ratios in the Large Magellanic Cloud](#)

Gong, Y. ; Henkel, C. ; Menten, K. M. ; R. Chen, C. -H. ; Zhang, Z. Y. ; Yan, Y. T. ; Weiss, A. ; Langer, N. ; Wang, J. Z. ; Mao, R. Q. ; Tang, X. D. ; Yang, W. ; Ao, Y. P. ; Wang, M., [2023, A&A, 679, L6](#)

48. [Protonated hydrogen cyanide as a tracer of pristine molecular gas](#)

Gong, Y. ; Du, F. J. ; Henkel, C. ; Jacob, A. M. ; Belloche, A. ; Wang, J. Z. ; Menten, K. M. ; Yang, W. ; Quan, D. H. ; Bop, C. T. ; Ortiz-León, G. N. ; Tang, X. D. ; Rugel, M. R. ; Liu, S., [2023, A&A, 679, A39](#)

47. [A global view on star formation: The GLOSTAR Galactic plane survey VIII. Formaldehyde absorption in Cygnus X](#)

Gong, Y. ; Ortiz-León, G. N. ; Rugel, M. R. ; Menten, K. M. ; Brunthaler, A. ; Wyrowski, F. ; Henkel, C. ; Beuther, H. ; Dzib, S. A. ; Urquhart, J. S. ; Yang, A. Y. ; Pandian, J. D. ; Dokara, R. ; Veena, V. S. ; Nguyen, H. ; Medina, S. -N. X. ; Cotton, W. D. ; Reich, W. ; Winkel, B. ; Müller, P. ; Skretas, I. ; Csengeri, T. ; Khan, S. ; Cheema, A., [2023, A&A, 678, A130](#)

46. [High-resolution APEX/LAsMA \$^{12}\text{CO}\$ and \$^{13}\text{CO}\$ \(3-2\) observation of the G333 giant molecular cloud complex : I. Evidence for gravitational acceleration in hub-filament systems](#)

Zhou, J. W. ; Wyrowski, F. ; Neupane, S. ; Urquhart, J. S. ; Evans, N. J., II ; Vázquez-Semadeni, E. ; Menten, K. M. ; **Gong, Y.** ; Liu, T., [2023, A&A, 676, A69](#)

45. [ATLASGAL: 3-mm class I methanol masers in high-mass star formation regions](#)

Yang, W. ; **Gong, Y.** ; Menten, K. M. ; Urquhart, J. S. ; Henkel, C. ; Wyrowski, F. ; Csengeri, T. ; Ellingsen, S. P. ; Bemis, A. R. ; Jang, J., [2023, A&A, 675, A112](#)

44. [The Effelsberg survey of FU Orionis and EX Lupi objects II. \$\text{H}_2\text{O}\$ maser observations](#)

Szabó, Zs. M., **Gong, Y.** ; Yang, W. ; Menten, K. M. ; Bayandina, O. S. ; Cyganowski, C. J. ; Kóspál, Á. ; Ábrahám, P. ; Belloche, A. ; Wyrowski, F., [2023, A&A, 674, A202](#)

43. [The distance to the Serpens South Cluster from \$\text{H}_2\text{O}\$ masers](#)

Ortiz-León, Gisela N. ; Dzib, Sergio A. ; Loinard, Laurent ; **Gong Yan** ; Pillai Thushara ; Plunkett Adele ; [2023, A&A, 673, L1](#)

42. [The Effelsberg survey of FU Orionis and EX Lupi objects I. Host environments of FUors/EXors traced by \$\text{NH}_3\$](#)

Szabó, Zs. M., **Gong, Y.** ; Menten, K. M. ; Yang, W. ; Cyganowski, C. J. ; Kóspál, Á. ; Ábrahám, P. ; Belloche, A. ; Wyrowski, F., [2023, A&A, 672, A158](#)

41. [Direct measurements of carbon and sulfur isotope ratios in the Milky Way](#)

Yan, Y. T. ; Henkel, C. ; Kobayashi, C. ; Menten, K. M. ; **Gong, Y.** ; Zhang, J. S. ; Yu, H. Z. ; Yang, K. ; Xie, J. J. ; Wang, Y. X., [2022, A&A, 670, A98](#)

40. [A global view on star formation: The GLOSTAR Galactic plane survey. VII. Supernova remnants in the Galactic longitude range \$28^\circ < l < 36^\circ\$](#)
Dokara, R. ; **Gong, Y.**; Reich, W. ; Rugel, M. ; Brunthaler, A. ; Menten, K. ; Cotton, W. ; Dzib, S. ; Khan, S. ; Medina, S. ; Nguyen, H. ; Ortiz-León, G. ; Urquhart, J. ; Wyrowski, F. ; Yang, A. ; Anderson, L. D. ; Beuther, H. ; Csengeri, T. ; Müller, P. ; Ott, J. ; Pandian, J. D. ; Roy, N.; [2022, A&A, 671, A145](#)
39. [A global view on star formation: The GLOSTAR Galactic plane survey. VI. Radio Source Catalog II: \$28^\circ < l < 36^\circ\$ and \$|b| < 1^\circ\$, VLA B-configuration](#)
Dzib, S. A. ; Yang, A. Y. ; Urquhart, J. S. ; Medina, S. -N. X. ; Brunthaler, A. ; Menten, K. M. ; Wyrowski, F. ; Cotton, W. D. ; Dokara, R. ; Ortiz-León, G. N. ; Rugel, M. R. ; Nguyen, H. ; **Gong, Y.**; Chakraborty, A. ; Beuther, H. ; Billington, S. J. ; Carrasco-Gonzalez, C. ; Csengeri, T. ; Hofner, P. ; Ott, J. ; Pandian, J. D. ; Roy, N. ; Yanza, V.; [2022, A&A, 670, A9](#)
38. [Discovery of non-metastable ammonia masers in Sagittarius B2](#)
Yan, Y. T. ; Henkel, C. ; Menten, K. M. ; **Gong, Y.**; Nguyen, H. ; Ott, J. ; Ginsburg, A. ; Wilson, T. L. ; Brunthaler, A. ; Belloche, A. ; Zhang, J. S. ; Budaiev, N. ; Jeff, D.; [2022, A&A, 666, L15](#)
37. [A Global View on Star Formation: The GLOSTAR Galactic Plane Survey V. 6.7 GHz Methanol Maser Catalogue](#)
Nguyen, H. ; Rugel, M. R. ; Murugesan, C. ; Menten, K. M. ; Brunthaler, A. ; Urquhart, J. S. ; Dokara, R. ; Dzib, S. A. ; **Gong, Y.**; Khan, S. ; Medina, S-N. X. ; Ortiz-León, G. N. ; Reich, W. ; Wyrowski, F. ; Yang, A. Y. ; Beuther, H. ; Cotton, W. D. ; Pandian, J. D.; [2022, A&A, 666, A59](#)
36. [Water Masers as an Early Tracer of Star Formation](#)
Ladeyschikov, Dmitry A.; **Gong, Yan**; Sobolev, Andrey M.; Menten, Karl M.; Urquhart, James S.; Breen, Shari L.; Shakhvorostova, Nadezhda N.; Bayandina, Olga S.; Tsivilev, Alexander P.; [2022, ApJS, 261, 14](#)
35. [And then they were two: detection of non-thermal radio emission from the bow shocks of two runaway stars](#)
Moutzouri, M. ; Mackey, J. ; Carrasco González, C. ; **Gong, Y.** ; Brose, R. ; Zargaryan, D. ; Toalá, J. A. ; Menten, K. M. ; Gvaramadze, V. V. ; Rugel, M. R.; [2022, A&A, 663, A80](#)
34. [Vibrationally excited HCN transitions in circumstellar envelopes of carbon-rich AGB stars](#)
Jeste, M.; **Gong, Y.**; Wong, K. T.; Menten, K. M.; Kamiński, T.; Wyrowski, F.; [2022, A&A, 666, A69](#)
33. [Widespread subsonic turbulence in Ophiuchus North 1](#)
Gong, Y.; Liu, S.; Wang, J. Z.; Zhu, W. S.; Li, G. X.; Yang, W. J.; Sun, J. X.; [2022, A&A, 663, A82](#)
32. [Redshifted methanol absorption tracing infall motions of high-mass star formation regions](#)
Yang, W. J. ; Menten, K. M. ; Yang, A. Y.; Wyrowski, F. ; **Gong, Y.** ; Ellingsen, S. P. ; Henkel, C. ; Chen, X. ; Xu, Y.; [2022, A&A, 658, A192](#)
31. [Discovery of ammonia \(9,6\) masers in two high-mass star-forming regions](#)
Yan, Y. T. ; Henkel, C. ; Menten, K. M. ; **Gong, Y.** ; Ott, J. ; Wilson, T. L. ; Wootten, A. ; Brunthaler, A. ; Zhang, J. S. ; Chen, J. L. ; Yang, K.; [2022, A&A, 659, A5](#)
30. [The Nearby Evolved Stars Survey II: Constructing a volume-limited sample and first results from the James Clerk Maxwell Telescope](#)
Scicluna, P. + 90 authors including (**Gong, Y.**); [2022, MNRAS, 512, 1091](#)
29. [HI-H₂ transition: Exploring the role of the magnetic field. A case study toward the Ursa Major cirrus](#)
Skalidis, R.; Tassis, K. ; Panopoulou, G. V. ; Pineda, J. L. ; **Gong, Y.** ; Mandarakas, N. ; Blinov, D. ; Kiehlmann, S. ; Kypriotakis, J. A.; [2022, A&A, 665, A77](#)
28. [Kinetic temperature of massive star-forming molecular clumps measured with formaldehyde IV. The ALMA view of N113 and N159W in the LMC](#)
Tang, X. D. ; Henkel, C. ; Menten, K. M. ; **Gong, Y.** ; Chen, C. -H. R. ; Li, D. L. ; Lee, M. -Y. ; Mangum, J. G. ; Ao, Y. P. ; Mühle, S. ; Aalto, S. ; García-Burillo, S. ; Martín, S. ; Viti, S. ; Muller, S. ; Costagliola, F. ; Asiri, H. ; Levshakov, S. A. ; Spaans, M. ; Ott, J. Impellizzeri, C. M. V. ; Fukui, Y. ; He, Y. X. ; Esimbek, J. ; Zhou, J. J. ; Zheng, X. W. ; Zhao, X. ; Li, J. S.; [2021, A&A, 665, A12](#)
27. [A global view on star formation: The GLOSTAR Galactic Plane Survey. I. Overview and first results for the Galactic longitude range \$28^\circ < l < 36^\circ\$ A&A/MPIFR/NRAO press release](#)

Brunthaler, A.; Menten, K. M.; Dzib, S. A.; Cotton, W. D.; Wyrowski, F.; Dokara, R.; **Gong, Y.**; Medina, S.-N. X.; Müller, P.; Nguyen, H.; Ortiz-León, G. N.; Reich, W.; Rugel, M. R.; Urquhart, J. S.; Winkel, B.; Yang, A. Y.; Beuther, H.; Billington, S.; Carrasco-Gonzales, C.; Csengeri, T. Murugesan, C.; Pandian, J. D.; Roy, N.; **2021, A&A, 651, A85**

26. [Discovery of 22 GHz Water Masers in the Serpens South Region](#)

Ortiz-León, Gisela N.; Plunkett, Adele; Loinard, Laurent; Dzib, Sergio A.; Rodríguez-Garza, Carolina B.; Pillai, Thushara; **Gong, Yan**; Brunthaler, Andreas; **2021, AJ, 162, 68**

25. [A Global View on Star Formation: The GLOSTAR Galactic Plane Survey III. 6.7 GHz Methanol maser survey in Cygnus X](#) **A&A/MPIFR/NRAO press release**

Ortiz-León, Gisela N.; Menten, Karl M.; Brunthaler, Andreas; Csengeri, Timea; Urquhart, James S.; Wyrowski, Friedrich; **Gong, Yan**; Rugel, Michael R.; Dzib, Sergio A.; Yang, Aiyuan; Nguyen, Hans; Cotton, William D.; Medina, Sac Nicté X.; Dokara, Rohit; Koenig, Carsten; Beuther, Henrik; Pandian, Jagadheep D.; Reich, Wolfgang; Roy, Nirupam; **2021, A&A, 651, A87**

24. [A global view on star formation: The GLOSTAR Galactic plane survey IV. Radio continuum detections of young stellar objects in the Galactic Centre region](#) **A&A/MPIFR/NRAO press release**

Nguyen, H.; Rugel, M. R.; Menten, K. M.; Brunthaler, A.; Dzib, S. A.; Yang, A. Y.; Kauffmann, J.; Pillai, T.; Nandakumar, G.; Schultheis, M.; Urquhart, J. S.; Dokara, R.; **Gong, Y.**; Medina, S.-N. X.; Ortiz-León, G. N.; Reich, W.; Wyrowski, F.; Beuther, H.; Cotton, W. D.; Csengeri, T. Pandian, J. D.; Roy, N.; **2021, A&A, 651, A88**

23. [A global view on star formation: The GLOSTAR Galactic plane survey. II. Supernova Remnants in the first quadrant of the Milky Way](#) **A&A/MPIFR/NRAO press release**

Dokara, Rohit; Brunthaler, A.; Menten, K. M.; Dzib, S. A.; Reich, W.; Cotton, W. D.; Anderson, L. D.; Chen, C. -H. R.; **Gong, Y.**; Medina, S. -N. X.; Ortiz-León, G. N.; Rugel, M.; Urquhart, J. S.; Wyrowski, F.; Yang, A. Y.; Beuther, H.; Billington, S. J.; Csengeri, T.; Carrasco-González, C.; Roy, N.; **2021, A&A, 651, A86**

22. [Dense gas in local galaxies revealed by multiple tracers](#)

Li, Fei; Wang, Junzhi; Gao, Feng; Liu, Shu; Zhang, Zhi-Yu; Li, Shanghuo; **Gong, Yan**; Li, Juan; Shi, Yong; **2021, MNRAS, 503, 4508**

21. [Hunting for the elusive methylene radical](#) **A&A highlight**

Jacob, A. M.; Menten, K. M.; **Gong, Y.**; Bergman, P.; Tiwari, M.; Bruenken, S.; Olofsson, A.O.H.; **2021, A&A, 647, A42**

20. [Physical and chemical structure of the Serpens filament: fast formation and gravity-driven accretion](#)

Gong, Y.; Belloche, A.; Du, F. J.; Menten, K. M.; Henkel, C.; Li, G. X.; Wyrowski, F.; Mao, R. Q.; **2021, A&A, 646, A170**

19. [Evidence for dense gas heated by the explosion in Orion KL](#)

Li, Dalei; Tang, Xindi; Henkel, Christian; Menten, Karl M.; Wyrowski, Friedrich; **Gong, Yan**; Wu, Gang; He, Yuxin; Esimbek, Jarken; Zhou, Jianjun, **2020, ApJ, 901, 62**

18. [New maser species tracing spiral-arm accretion flows in a high-mass young stellar object](#)

Chen, Xi; Sobolev, Andrej M.; Ren, Zhi-Yuan; Parfenov, Sergey; Breen, Shari L.; Ellingsen, Simon P.; Shen, Zhi-Qiang; Li, Bin; MacLeod, Gordon C.; Baan, Willem; Brogan, Crystal; Hirota, Tomoya; Hunter, Todd R.; Linz, Hendrik; Menten, Karl; Sugiyama, Koichiro; Stecklum, Bringfried; **Gong, Yan**; Zheng, Xingwu; **2020, NatAs, 4, 1170**

17. [Interstellar glycolamide: A comprehensive rotational study and an astronomical search in Sgr B2\(N\)](#)

Sanz-Novo, M.; Belloche, A.; Alonso, J. L.; Kolesníková, L.; Garrod, R. T.; Mata, S.; Müller, H. S. P.; Menten, K. M., **Gong, Y.**; **2020, A&A, 639, A135**

16. [Local molecular gas toward the Aquila Rift region](#)

Su, Y.; Yang, J.; Yan, Q. Z., **Gong, Y.**; Chen, Z. W.; Zhang, S. B., Sun, Y., Zhang, M. M., Chen, X. P., Zhou, X., Wang, M., Wang, H. C., Xu, Y., Jiang, Z. B., **2020, ApJ, 893, 91**

15. [36 GHz methanol lines from nearby galaxies: maser or quasi-thermal emission?](#)

Humire, P.; Henkel, C.; **Gong, Y.**; Leurini, S.; Mauersberger, R.; Levshakov, S. A.; Winkel, B.; Tarchi, A.; Castangia, P.; Malawi, A.; Asiri, H.; Ellingsen, S. P.; McCarthy, T. P.; Chen, X.; Tang, X., **2020, A&A, 633, A106**

14. [Search for further evidence for cloud-cloud collisions in L1188](#)

Gong, Y.; Tang, X.D.; Henkel, C.; Menten, K.M.; Mao, R.Q.; Wang, Y.; Lee, M.-Y.; Zhu, W.S.; Lin, Y.; Zhang, S.B.; Chen, X.P.; Yang, W.J., [2019, A&A, 632, A115](#)

13. [ALMA view of the 12C/13C isotopic ratio in starburst galaxies](#)

Tang, X. D.; Henkel, C.; Menten, K. M.; **Gong, Y.**; Martin, S.; Muhle, S.; Aalto, S.; Muller, S.; Garcia-Burillo, S.; Levshakov, S.; Aladro, R.; Spaans, M.; Viti, S.; Asiri, H. M.; Ao, Y. P.; Zhang, J. S.; Zheng, X. W.; Esimbek, J.; Zhou, J. J., [2019, A&A, 629, A6](#)

12. [GLOSTAR: Radio Source Catalog I. \$28^\circ < l < 36^\circ\$ and \$|b| < 1^\circ\$](#)

Medina, S. N. X.; Urquhart, J. S.; Dzib, S. A.; Brunthaler, A.; Cotton, B.; Menten, K. M.; Wyrowski, F.; Beuther, H.; Billington, S. J.; Carrasco-Gonzalez, C.; Csengeri, T.; **Gong, Y.**; Hofner, P.; Nguyen, H.; Ortiz-León, G. N.; Ott, J.; Pandian, J. D.; Roy, N.; Sarkar, E.; Wang, Y. Winkel, B., [2019, A&A, 627, A175](#)

11. [The Milky Way Imaging Scroll Painting \(MWISP\): Project Details and Initial Results from the Galactic Longitudes of 25.8–49.7](#)

Su, Yang; Yang, Ji; Zhang, Shaobo; **Gong, Yan**; Wang, Hongchi; Zhou, Xin; Wang, Min; Chen, Zhiwei; Sun, Yan; Chen, Xuepeng; Xu, Ye; Jiang, Zhibo, [2019, ApJS, 240, 9](#)

10. [The Serpens filament at the onset of slightly supercritical collapse](#)

Gong, Y.; Li, G. X.; Mao, R. Q.; Henkel, C.; Menten, K. M.; Fang, M.; Wang, M.; Sun, J. X., [2018, A&A, 620, A62](#)

9. [Molecular line emission in NGC 4945, imaged with ALMA](#)

Henkel, C.; Mühle S.; Bendo, G.; Józsa, G. I. G.; **Gong, Y.**; Viti, S.; Aalto, S.; Combes, F.; García-Burillo, S.; Hunt, L. K.; Mangum, J.; Martín, S.; Muller, S.; Ott, J.; van der Werf, P.; Malawi, A. A.; Ismail, H.; Alkhuja, E.; Asiri, H. M.; Aladro, R.; Alves, F.; Ao, Y.; Baan, W. A.; Costagliola, F.; Fuller, G.; Greene, J.; Impellizzeri, C. M. V.; Kamali, F.; Klessen, R. S.; Mauersberger, R.; Tang, X. D.; Tristram, K.; Wang, M.; Zhang, J. S. [2018, A&A, 615, A155](#)

8. [Kinetic temperature of massive star-forming molecular clumps measured with formaldehyde. III. The Orion molecular cloud 1](#)

Tang, X. D.; Henkel, C.; Menten, K. M.; Wyrowski, F.; Brinkmann, N.; Zheng, X. W.; **Gong, Y.**; Lin, Y. X.; Esimbek, J.; Zhou, J. J.; Yuan, Y.; Li, D. L.; He, Y. X., [2018, A&A, 609, A16](#)

7. [Is HESS J1912+101 Associated with an Old Supernova Remnant?](#)

Su, Yang; Zhou, Xin; Yang, Ji; Chen, Yang; Chen, Xuepeng; **Gong, Yan**; Zhang, Shaobo, [2017, ApJ, 845, 48](#)

6. [SiS in the Circumstellar Envelope of IRC +10216: Maser and Quasi-thermal Emission](#)

Gong, Y.; Henkel, C.; J. Ott; K. M. Menten; M. R. Morris; D. Keller; M. J. Claussen; M. Grasshoff; R. Q. Mao, [2017, ApJ, 843, 54](#)

5. [L1188: a promising candidate of cloud–cloud collision triggering the formation of the low- and intermediate-mass stars](#)

Gong, Yan; Fang, Min; Mao, Ruiqing; Zhang, Shaobo; Wang, Yuan; Su, Yang; Chen, Xuepeng; Yang, Ji; Wang, Hongchi; Lu, Dengrong, [2017, ApJL, 835, L14](#)

4. [Molecular clouds and star formation toward the Galactic plane within \$216.25^\circ \leq l \leq 218.75^\circ\$ and \$-0.75^\circ \leq b \leq 1.25^\circ\$](#)

Gong, Y.; Mao, R. Q.; Fang, M.; Zhang, S. B.; Su, Y.; Yang, J.; Jiang, Z. B.; Xu, Y.; Wang, M.; Wang, Y.; Lu, D. R.; Sun, J. X., [2016, A&A, 588, A104](#)

3. [N131: A dust bubble born from the disruption of a gas filament](#)

Zhang, C. P.; Li, G. X.; Wyrowski, F.; Wang, J. J.; Yuan, J. H.; Xu, J. L.; **Gong, Y.**; Yeh, Cosmos C.; Menten, K. M., [2016, A&A, 585, A117](#)

2. [A 1.3 cm line survey toward Orion KL](#)

Gong, Y.; Henkel, C.; Thorwirth, S.; Spezzano, S.; Menten, K. M.; Walmsley, C. M.; Wyrowski, F.; Mao, R. Q.; Klein, B, [2015, A&A, 581, A48](#)

1. [A 1.3 cm line survey toward IRC +10216](#)

Gong, Y.; Henkel, C.; Spezzano, S.; Thorwirth, S.; Menten, K. M.; Wyrowski, F.; Mao, R. Q.; Klein, B, [2015, A&A, 574, A56](#)