

Publicaciones ISI

1. **Garay, G.**, and Rodríguez, L.F. 1983, "The Galactic gradient in electron temperature from observations of low density HII regions"
The Astrophysical Journal 266 263.
2. Moran, J.M., **Garay, G.**, Reid, M.J., Genzel, R., Wright, M.C.H., and Plambeck, R.L. 1983, "Detection of radio emission from the Becklin-Neugebauer object"
The Astrophysical Journal 271 L31.
3. **Garay, G.**, Reid, M.J., and Moran, J.M. 1985, "Compact HII regions : Hydrogen recombination and OH maser lines"
The Astrophysical Journal 289 681.
4. Rodríguez, L.F., Garcia-Barreto, J.A., Cantó, J., Moreno, M.A., Torres-Peimbert, S., Costero, R., Serrano, A., Moran, J.M., and **Garay, G.** 1985, "Radio observations of the young planetary nebula NGC 6302"
Monthly Notices Royal Astronomical Society 215 353.
5. Alvarez, H., Bronfman, L., Cohen, R., **Garay, G.**, Graham, J., and Thaddeus, P. 1986, "Sandqvist 187 : A dense molecular cloud in Norma"
The Astrophysical Journal 300 756.
6. **Garay, G.**, Rodríguez, L.F., and van Gorkom, J.H. 1986, "Rotating and expanding ultracompact HII regions"
The Astrophysical Journal 309 553.
7. Andersson, M., and **Garay, G.** 1986, "A warm molecular core associated with the compact HII region G34.3+0.2"
Astronomy and Astrophysics 167 L1.
8. **Garay, G.**, Moran, J.M., and Reid, M.J. 1987, "Compact continuum radio sources in the Orion Nebula"
The Astrophysical Journal 314 535.
9. **Garay, G.** 1987, "The Orion radio zoo : PIGS, DEERS and FOXES"
Revista Mexicana de Astronomía y Astrofísica 14 489.
10. Cohen, R.S., Dame, T.M., **Garay, G.**, Montani, J., Rubio, M., and Thaddeus, P. 1988, "A complete CO survey of the Large Magellanic Cloud"
The Astrophysical Journal 331 L95.
11. Mirabel, I.F., Booth, R.S., **Garay, G.**, Johansson, L.E.B., and Sanders, D.B. 1988, "SEST observations of CO(J=1-->0) in ultraluminous infrared galaxies"
Astronomy and Astrophysics 206 L20.
12. **Garay, G.**, Moran, J.M., and Haschick, A.D. 1989, "The Orion-KL super water maser"
The Astrophysical Journal 338 244.
13. **Garay, G.**, Gathier, R., and Rodríguez, L.F. 1989, "Radio recombination line observations of compact planetary nebulae"
Astronomy and Astrophysics 215 101.
14. Gómez, Y., Moran, J.M., Rodríguez, L.F., and **Garay, G.** 1989, "The distance to NGC 6302"
The Astrophysical Journal 345 862.
15. Rodríguez, L.F., Curiel, S., Moran, J.M., Mirabel, I.F., Roth, M., and **Garay, G.** 1989, "Large proper motions in the remarkable triple radio source in Serpens"
The Astrophysical Journal 346 L85.

16. Mirabel, I.F., Booth, R.S., **Garay, G.**, Johansson, L.E.B., and Sanders, D.B. 1990, "CO($1 \rightarrow 0$) emission from luminous infrared galaxies in the southern hemisphere" *Astronomy and Astrophysics* 236 327.
17. **Garay, G.**, and Rodríguez, L.F. 1990, "The compact molecular core toward G34.3 +0.2: VLA observations in the 2,2) and (3,3) lines of ammonia" *The Astrophysical Journal* 362 191.
18. Rubio, M., **Garay, G.**, Montani, J., and Thaddeus, P. 1991, "A ^{12}CO survey of the Small Magellanic Cloud" *The Astrophysical Journal* 368 173.
19. Estalella, R., Anglada, G., Rodríguez, L.F., and **Garay, G.** 1991, "Multifrequency VLA observations of radio continuum emission from IRAS 16293-2422" *The Astrophysical Journal* 371 626.
20. **Garay, G.** 1991, "Máseres cósmicos" *Ciencia*, 42 47.
21. Gómez, Y., Rodríguez, L.F., **Garay, G.**, and Moran, J.M. 1991, "The dense molecular envelope around the compact HII region G5.89-0.39 (W28 A2)" *The Astrophysical Journal* 377 519.
22. Gómez, Y., Rodríguez, L.F., and **Garay, G.** 1992, "Carbon monoxide emission from the planetary nebula M3-28" *Astronomy and Astrophysics* 258 469.
23. Rubio, M., Lequeux, J., Boulanger, F., Booth, R.S., **Garay, G.**, de Graauw, T., Israel, F.P., Johansson, L.E.B., Kutner, M.L., and Nyman, L.-*Astronomy and Astrophysics*. 1993, "Results of the ESO-SEST Key Programme: CO in the Magellanic Clouds. II. CO in the SW region of the Small Magellanic Cloud" *Astronomy and Astrophysics* 271 1.
24. **Garay, G.**, Rubio, M., Ramírez, S., Johansson, L.E.B., and Thaddeus, P. 1993, "Molecular clouds in the 30 Doradus halo" *Astronomy and Astrophysics* 274 743.
25. **Garay, G.**, Moran, J.M., and Rodríguez, L.F. 1993, "Compact ammonia sources toward the G10.5+0.0\$ HII region complex" *The Astrophysical Journal* 413 582.
26. Israel, F.P., Johansson, L.E.B., Lequeux, J., Booth, R.S., Nyman, L.-*Astronomy and Astrophysics*., Crane, P., Rubio, M., de Graauw, T., Kutner, M.L., Gredel, R., Boulanger, F., **Garay, G.**, and Westerlund, B. 1993, "Results of the ESO-SEST Key Programme: CO in the Magellanic Clouds. I. A survey of CO in LMC and SMC" *Astronomy and Astrophysics* 276 25.
27. **Garay, G.**, Mardones, D., and Mirabel, I.F. 1993, "CO($2 \rightarrow 1$) and 13CO ($1 \rightarrow 0$) emission from luminous southern infrared galaxies" *Astronomy and Astrophysics* 277 405.
28. **Garay, G.**, Rodríguez, L.F., Moran, J.M., and Churchwell, E. 1993, "VLA observations of strong IRAS point sources associated with HII regions" *The Astrophysical Journal* 418 368.
29. Rodríguez, L.F., **Garay, G.**, Curiel, S., Ramírez, S., Torrelles, J.M., Gómez, Y., and Velázquez, A. 1994, "Cep A HW2: a powerful thermal radio jet" *The Astrophysical Journal* 430 L65.

30. **Garay, G.**, Lizano, S., and Gómez, Y. 1994, "The velocity structure of the cometary HII regions G13.87+0.28, G32.80+0.19B, and G61.48+0.09B1"
The Astrophysical Journal 429 268.
31. Gómez, Y., **Garay, G.**, and Lizano, S. 1995, "Warm molecular gas associated with cometary HII regions"
The Astrophysical Journal 453 727.
32. **Garay, G.**, Köhnenkamp, I., and Rodríguez, L.F. 1996, "A multiline molecular study of the highly collimated bipolar outflow Sandqvist 136",
Messenger 83 31.
33. Torrelles, J.M., Gómez, J.F., Rodríguez, L.F., Curiel, S., Ho, P.T.P., and **Garay, G.** 1996, "The thermal radio jet of Cepheus A HW2 and the water maser distribution at 0¹pc scale (60 AU)"
The Astrophysical Journal 457 L107.
34. **Garay, G.**, Ramírez, S., Rodríguez, L.F., Curiel, S., and Torrelles, J.M. 1996, "The nature of the radio sources within the Cepheus A star forming region"
The Astrophysical Journal 459 193.
35. Rubio, M., Lequeux, J., Boulanger, F., Booth, R.S., **Garay, G.**, de Graauw, Th., Israel, F.P., Johansson, L.E.B., Kutner, M.L., and Nyman, L.-Astronomy and Astrophysics. 1996, "Results of the ESO-SEST Key Programme: CO in the Magellanic Clouds. V. Further CO observations of the Small Magellanic Cloud"
Astronomy and Astrophysics 118 263
36. Lizano, S., Cantó, J., **Garay, G.**, and Hollenbach, D. 1996, "Photoevaporated flows from HII regions"
The Astrophysical Journal 468 739.
37. **Garay, G.** 1996, "Estudios de regiones de formación estelar en longitudes de onda de radio",
Formación Estelar, ed. L.F. Rodríguez
Ediciones Científicas Universitarias 53.
38. Bourke, T.L., **Garay, G.**, Lehtinen, K.K., Köhnenkamp, I., Launhardt, R., Nyman, L.-Astronomy and Astrophysics, May, J., Robinson, G., and Hyland, A.R. 1997, "Discovery of a highly collimated molecular outflow in the southern Bok globule BHR 71"
The Astrophysical Journal 476 781.
39. Kutner, M., Rubio, M., Booth, R.S., Boulanger, F., de Graauw, Th., **Garay, G.**, Israel, F.P., Johansson, L.E.B., Lequeux, J., and Nyman, L.-Astronomy and Astrophysics. 1997, "Results of the ESO-SEST Key Programme: CO in the Magellanic Clouds. VI. The 30 Dor Complex"
Astronomy and Astrophysics 122 255.
40. Mardones, D., Myers, P.C., Tafalla, M., Wilner, D.J., Bachiller, R., and **Garay, G.** 1997, "A search for infall motions toward nearby young stellar objects"
The Astrophysical Journal 489 719.
41. **Garay, G.**, Moran, J.M., Rodríguez, L.F., and Reid, M.J. 1998, "The G19.6-0.2 region of star formation: molecular and ionized environs"
The Astrophysical Journal 492 635.
42. Johansson, L.E.B., Greve, A., Booth, R.S., Boulanger, F., **Garay, G.**, de Graauw, Th., Israel, F.P., Kutner, M.L., Lequeux, J., Murphy, D.M., Nyman, L.-Astronomy and Astrophysics., and Rubio, M. 1998, "Results of the SEST Key Programme: CO in the Magellanic Clouds. VII. 30 Doradus and its southern HII regions "
Astronomy and Astrophysics 331 857.

43. **Garay, G.**, Gómez, Y., Lizano, S., and Brown, R.L. 1998, "VLA observations of carbon radio recombination lines toward the HII region complex S 88B" *The Astrophysical Journal* 501 699.
44. **Garay, G.**, Lizano, S., Gómez, Y., and Brown, R.L. 1998, "VLA observations of hydrogen and helium recombination lines from partially and fully ionized gas in S 88B" *The Astrophysical Journal* 501 710.
45. Gómez, Y., Lebrón, M., Rodríguez, L.F., **Garay, G.**, Lizano, S., Escalante, V., and Cantó, J. 1998, "A photodissociated region associated with the compact HII region near GGD 12-15" *The Astrophysical Journal* 503 297.
46. Rubio, M., **Garay, G.**, and Probst, R. 1998, "Molecular gas in 30 Doradus" *Messenger* 93 38.
47. **Garay, G.**, Köhnenkamp, I., Bourke, T.L., Rodríguez, L.F., and Lehtinen, K.K. 1998, "Molecular abundance enhancements in the highly collimated bipolar outflow BHR 71" *The Astrophysical Journal* 509 768.
48. Torrelles, J.M., Gómez, J.F., **Garay, G.**, Rodríguez, L.F., Curiel, S., Cohen, R.J., and Ho, P.T.P. 1998, "Systems with H₂O Maser and 1.3 cm Continuum in Cepheus A-East: An Evolutionary Sequence in the Formation of the YSOs?" *The Astrophysical Journal* 509 262.
49. Gómez, J.F., Sargent, A.I., Torrelles, J.M., Ho, P.T.P., Rodríguez, L.F., Cantó, J., and **Garay, G.** 1999, "Disk and outflow in Cepheus A-HW2: Interferometric SiO and HCO⁺ observations" *The Astrophysical Journal* 514 287.
50. Torrelles, J.M., Gómez, J.F., **Garay, G.**, Rodríguez, L.F., Miranda, L.F., Curiel, S., and Ho, P.T.P. 1999, "The Distribution of the Warm and Dense Molecular Gas Around Cepheus A HW2" *Monthly Notices Royal Astronomical Society* 307 58.
51. **Garay, G.**, and Lizano, S. 1999, "Massive stars: their environment and formation" *Publications of the Astronomical Society of the Pacific* 111 1049.
52. Gómez, Y., Rodríguez, L.F., and **Garay, G.** 2000, "A cluster of radio sources near GGD 14" *The Astrophysical Journal* 531 861.
53. Gómez, Y., Rodríguez-Rico, C.A., Rodríguez, L.F., and **Garay, G.** 2000, "A new warm molecular clump toward the star forming region G34.26+0.15" *Revista Mexicana de Astronomía y Astrofísica* 36 161.
54. **Garay, G.**, Mardones, D., and Rodríguez, L.F. 2000, "Silicon monoxide and methanol emission from the NGC 2071 molecular outflow" *The Astrophysical Journal* 545 861.
55. Torrelles, J.M., Patel, N.A., Gómez, J.F., Ho, P.T.P., Rodríguez, L.F., Anglada, G., **Garay, G.**, Greenhill, L., Curiel, S., and Cantó, J. 2001, "Spherical episodic ejection of material from a young star" *Nature* 411 277.
56. Ruiz, M.T., Rojo, P.M., **Garay, G.**, and Maza, J. 2001, "CE-315: A New Interacting Double-degenerate Binary Star" *The Astrophysical Journal* 552 679.
57. Torrelles, J.M., Patel, N.A., Gómez, J.F., Ho, P.T.P., Rodríguez, L.F., Anglada, G., **Garay, G.**, Greenhill, L., Curiel, S., and Cantó, J. 2001, "Discovery of linear "building blocks" of water masers shaping linear/arcuate microstructures in Cepheus A" *The Astrophysical Journal* 560 853.

58. Curiel, S., Trinidad, M.A., Cantó, J., Rodríguez, L.F., Torrelles, J.M., Ho, P.T.P., Patel, N.A., Greenhill, L., Gómez, J.F., **Garay, G.**, Hernández, L., Contreras, M.E., and Anglada, G. 2002, "Detection of a candidate for the exciting source of the expanding water maser bubble in Cepheus A"
The Astrophysical Journal 564 L35.
59. **Garay, G.**, Mardones, D., Rodríguez, L.F., Caselli, P., and Bourke, T.L. 2002, "Methanol and silicon monoxide observations toward bipolar outflows associated with class 0 objects".
The Astrophysical Journal 567 980.
60. Gómez, Y., Rodríguez, L.F., and **Garay, G.** 2002, "The nature of the cluster of radio sources in GGD14".
The Astrophysical Journal 571 901.
61. **Garay, G.**, Johansson, L.E.B., Nyman, L.-Astronomy and Astrophysics., Booth, R.S., Israel, F.P., Kutner, M.L., Lequeux, J., and Rubio, M. 2002, "Results of the SEST Key Programme: CO in the Magellanic Clouds. VIII. The giant molecular complex No. 37 of the LMC".
Astronomy and Astrophysics 389 977.
62. **Garay, G.**, Brooks, K., Mardones, D., Norris, R. P. and Burton, M.G. 2002, "Two massive star forming regions in early evolutionary stages".
The Astrophysical Journal 579 678.
63. **Garay, G.**, Brooks, K., Mardones, D., and Norris, R. P. 2003, "A triple radio continuum source associated with IRAS 16547-4247: a collimated stellar wind emanating from a massive protostar".
The Astrophysical Journal 587 739.
64. Israel, F.P., de Graauw, Th., Johansson, L.E.B., Booth, R.S., Boulanger, F., **Garay, G.**, Kutner, M.L., Lequeux, J., Nyman, L.-Astronomy and Astrophysics., and Rubio, M. 2003, "Results of the ESO-SEST Key Programme on CO in the Magellanic Clouds. IX. The giant LMC HII region complex N 11".
Astronomy and Astrophysics 401 99.
65. Israel, F.P., de Graauw, Th., Rubio, M., Johansson, L.E.B., Booth, R.S., Boulanger, F., **Garay, G.**, Kutner, M.L., Lequeux, J., and Nyman, L.-Astronomy and Astrophysics. 2003, "Results of the ESO-SEST Key Programme on CO in the Magellanic Clouds. X. CO emission from star formation regions in LMC and SMC".
Astronomy and Astrophysics 406 817.
66. Brooks, K.J., **Garay, G.**, Mardones, D., and Bronfman L. 2003, "A parsec-scale flow associated with the IRAS 16547-4247 radio jet".
The Astrophysical Journal 594 L131.
67. Gómez, Y., Rodríguez, L.F., Girart, J.M., **Garay, G.**, and Martí, J. 2003, "VLA and BIMA observations toward the exciting source of the massive HH 80-81 outflow".
The Astrophysical Journal 597 414.
68. Torrelles, J.M., Patel, N.A., Anglada, G., Gómez, J.F., Ho, P.T.P., Lara, L., Alberdi, A., Cantó, J., Curiel, S., **Garay, G.**, and Rodríguez, L.F. 2003, "Evidence for evolution of the outflow collimation in very young stellar objects".
The Astrophysical Journal 598 L115.
69. **Garay, G.**, Faúndez, S., Mardones, D., Bronfman, L., Chini, R., and Nyman, L.-Astronomy and Astrophysics. 2004, "Discovery of four new massive and dense cold cores".
The Astrophysical Journal 610 313
70. Faúndez, S., Bronfman, L., **Garay, G.**, Chini, R., Nyman, L.-Astronomy and Astrophysics., and May, J. 2004, "SIMBA survey of southern high-mass star forming regions. I. Physical parameters of the 1.2-mm/IRAS sources"
Astronomy and Astrophysics.

71. Lugo, J., Lizano, S., and **Garay, G.** 2004, "Photoevaporated disks around massive young stars" *The Astrophysical Journal*.
72. **Garay, G.**, Brooks, K. J., Mardones, D., Norris, R., 2004 "A Collimated Stellar Wind Emanating from a Massive Protostar". *Astrophysics and Space Science*, 292, 517-523.
73. Minier, V., Burton, M.G., Hill, T., Pestalozzi, M.R., Purcell, C., Longmore, S., **Garay, G.**, and Walsh, A. 2005, "Star-forming protoclusters associated with methanol masers" *Astronomy and Astrophysics*.
74. Rodríguez, L. F., **Garay, G.**, Brooks, K. J., Mardones, D., 2005, "High Angular Resolution Observations of the Collimated Jet Source Associated with a Massive" *The Astrophysical Journal*, 953-958.
75. Hill, T., Burton, M. G., Minier, V., Thompson, M. A., Walsh, A. J., Hunt-Cunningham, M., **Garay, G.**, 2005, "Millimetre continuum observations of southern massive star formation regions - I. SIMBA observations of cold cores" *Monthly Notices of the Royal Astronomical Society*.
76. Brooks, K.J., **Garay, G.**, Nielbock, M., Smith, N., Cox, P., 2005, "SIMBA Observations of the Keyhole Nebula". *The Astrophysical Journal*, 634, 436-441.
77. Curiel, S., Ho, P. T. P., Patel, N. A., Torrelles, J. M., Rodríguez, L. F., Trinidad, M. A., Cantó, J., Hernández, L., Gómez, J. F., **Garay, G.**, Anglada, G., 2006 "Large Proper Motions in the Jet of the High-Mass YSO Cepheus A HW2". *The Astrophysical Journal*, 638, 878-886.
78. Rodríguez, L. F., Torrelles, J. M., Raga, A. C., Cantó, J., Curiel, S., **Garay, G.**, 2006 "Proper Motions in Cepheus A". *Revista Mexicana de Astronomía y Astrofísica*, 41, 435-442.
79. **Garay, G.**, Brooks, K. J., Mardones, D., Norris, R. P., 2006 "A Multiwavelength Study of Young Massive Star-forming Regions. I. The Ionized Gas Content". *The Astrophysical Journal*, 651, 914-932.
80. **Garay, G.**, Mardones, D., Bronfman, L., Brooks, K. J., Rodríguez, L. F., Güsten, R., Nyman, L.-Å., Franco-Hernández, R., Moran, J. M., 2007 "Discovery of an energetic bipolar molecular outflow towards IRAS 16547-4247". *Astronomy and Astrophysics*, 463, 217-224.
81. Nikolic, S., **Garay, G.**, Rubio, M., Johansson, L. E. B., 2007 "CO and CS in the Magellanic Clouds: a χ^2 -analysis of multitransitional data based on the MEP radiative transfer model". *Astronomy and Astrophysics*, 471, 561-571
82. **Garay, G.**, Rodríguez, L. F., de Gregorio-Monsalvo, I., 2007 "Very Large Array Observations of Candidate High-Mass Protostellar Objects at 7 Millimeters". *The Astronomical Journal*, 134, 906-911.
83. **Garay, G.**, Mardones, D., Brooks, K. J., Videla, L., Contreras, Y., 2007 "A Multiwavelength Study of Young Massive Star Forming Regions. II. The Dust Environment". *The Astrophysical Journal*, 666, 309-320.
84. Torrelles, J. M., Patel, N. A., Curiel, S., Ho, P. T. P., **Garay, G.**, Rodríguez, L. F., 2007 "The Circumstellar Structure and Excitation Effects around the Massive Protostar Cepheus A HW 2". *The Astrophysical Journal*, 666, L37-L40.

85. Muñoz, D. J., Mardones, D., **Garay, G.**, Rebolledo, D., Brooks, K., Bontemps, S., 2007 "Massive Clumps in the NGC 6334 Star-forming Region".
The Astrophysical Journal, 668, 906-917.
86. Lo, N., Cunningham, M., Bains, I., Burton, M. G., **Garay, G.**, 2007 "Detection of SiO emission from a massive dense cold core".
Monthly Notices of the Royal Astronomical Society: Letters, 381, L30-L34.
87. Brooks, K. J., **Garay, G.**, Voronkov, M., Rodríguez, L. F., 2007 "Continuum Observations at 3 and 12 mm of the High-Mass Protostellar Jet IRAS 16547-4247".
The Astrophysical Journal, 669, 459-463.
88. Araya, E., Hofner, P., Sewilo, M., Goss, W. M., Linz, H., Kurtz, S., Olmi, L., Churchwell, E., Rodríguez, L. F., **Garay, G.**, 2007 "An H₂CO 6 cm Maser Pinpointing a Possible Circumstellar Torus in IRAS 18566+0408".
The Astrophysical Journal, 669, 1050-1057.
89. Bronfman, L., **Garay, G.**, Merello, M., Mardones, D., May, J., Brooks, K., Nyman, L., Güsten, R., 2008 "Discovery of an Extremely High Velocity, Massive, and Compact Molecular Outflow in Norma".
The Astrophysical Journal, 672, 391-397.
90. Minamidani, T., Mizuno, N., Mizuno, Y., Kawamura, A., Onishi, T., Hasegawa, T., Tatematsu, K., Ikeda, M., Moriguchi, Y., Yamaguchi, N., Ott, J., Wong, T., Muller, E., Pineda, J., Hughes, A., Staveley-Smith, L., Klein, U., Mizuno, A., Nikolic, S., Booth, R., Heikkilä, A., Nyman, L., Lerner, M., **Garay, G.**, Kim, S., Fujishita, M., Kawase, T., Rubio, M., Fukui, Y., 2008 "Submillimeter Observations of Giant Molecular Clouds in the Large Magellanic Cloud: Temperature and Density as Determined from J=3-2 and J=1-0 Transitions of CO".
The Astrophysical Journal Supplement Series, 175, 485-508.
91. Rodríguez, L. F., Moran, J. M., Franco-Hernández, R., **Garay, G.**, Brooks, K., Mardones, D., 2008 "The Collimated Jet Source in IRAS 16547-4247: Time Variation, Possible Precession, and Upper Limits to the Proper Motions Along the Jet Axis".
The Astronomical Journal, 135, 2370-2379.