

# Publicaciones Observatorio Astronómico Nacional

## Año 2022

Spezzano, S., **Fuente, A.**, Caselli, P., Vasyunin, A., Navarro-Almaida, D., **Rodríguez-Baras, M.**, Punanova, A., Vastel, C., and Wakelam, V.

Gas phase Elemental abundances in Molecular cloudS (GEMS) V. Methanol in Taurus.  
Astronomy and Astrophysics 657, A10, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202141971>

Agúndez, M., **Marcelino, N.**, Cabezas, C., Fuentetaja, R., **Tercero, B.**, de Vicente, P., and Cernicharo, J.

Detection of the propargyl radical at  $\lambda$  3 mm.

Astronomy and Astrophysics 657, A96, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202142678>

Cazaux, S., Carrascosa, H., Muñoz Caro, G. M., Caselli, P., **Fuente, A.**, Navarro-Almaida, D., and Rivière-Marichalar, P.

Photoprocessing of H<sub>2</sub>S on dust grains. Building S chains in translucent clouds and comets.

Astronomy and Astrophysics 657, A100, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202141861>

Cabezas, C., Agúndez, M., **Marcelino, N.**, **Tercero, B.**, Endo, Y., Fuentetaja, R., Pardo, J. R., de Vicente, P., and Cernicharo, J.

Discovery of the elusive thioketenylum, HCCS<sup>+</sup>, in TMC-1.

Astronomy and Astrophysics 657, L4, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202142815>

Cabezas, C., Fuentetaja, R., Roueff, E., Agúndez, M., **Tercero, B.**, **Marcelino, N.**, Pardo, J. R., de Vicente, P., and Cernicharo, J.

New deuterated species in TMC-1: Detection of CH<sub>2</sub>DC<sub>4</sub>H with the QUIJOTE line survey.

Astronomy and Astrophysics 657, L5, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202142814>

Cernicharo, J., Agúndez, M., Cabezas, C., Fuentetaja, R., **Tercero, B.**, **Marcelino, N.**, Endo, Y., Pardo, J. R., and de Vicente, P.

Discovery of C<sub>5</sub>H<sup>+</sup> and detection of C<sub>3</sub>H<sup>+</sup> in TMC-1 with the QUIJOTE line survey.

Astronomy and Astrophysics 657, L16, 01/2022

<http://dx.doi.org/10.1051/0004-6361/202142992>

Teng, Yu-Hsuan, Sandstrom, Karin M., Sun, Jiayi, Leroy, Adam K., Johnson, L. Clifton, Bolatto, Alberto D., Kruijssen, J. M. Diederik, Schruba, Andreas, **Usero, Antonio**,

Barnes, Ashley T., Bigiel, Frank, Blanc, Guillermo A., Groves, Brent, Israel, Frank P., Liu, Daizhong, Rosolowsky, Erik, Schinnerer, Eva, Smith, J. D., and Walter, Fabian  
Molecular Gas Properties and CO-to-H<sub>2</sub> Conversion Factors in the Central Kiloparsec of NGC 3351.

The Astrophysical Journal 925, 72, 01/2022

<http://dx.doi.org/10.3847/1538-4357/ac382f>

Lee, Janice C., Whitmore, Bradley C., Thilker, David A., Deger, Sinan, Larson, Kirsten L., Ubeda, Leonardo, Anand, Gagandeep S., Boquien, Médéric, Chandar, Rupali, Dale, Daniel A., Emsellem, Eric, Leroy, Adam K., Rosolowsky, Erik, Schinnerer, Eva, Schmidt, Judy, Lilly, James, Turner, Jordan, Van Dyk, Schuyler, White, Richard L., Barnes, Ashley T., Belfiore, Francesco, Bigiel, Frank, Blanc, Guillermo A., Cao, Yixian, Chevance, Melanie, Congiu, Enrico, Egorov, Oleg V., Glover, Simon C. O., Grasha, Kathryn, Groves, Brent, Henshaw, Jonathan D., Hughes, Annie, Klessen, Ralf S., Koch, Eric, Kreckel, Kathryn, Kruijssen, J. M. Diederik, Liu, Daizhong, Lopez, Laura A., Mayker, Ness, Meidt, Sharon E., Murphy, Eric J., Pan, Hsi-An, Pety, Jérôme, Querejeta, Miguel, Razza, Alessandro, Saito, Toshiki, Sánchez-Blázquez, Patricia, Santoro, Francesco, Sardone, Amy, Scheuermann, Fabian, Schruba, Andreas, Sun, Jiayi, Usero, Antonio, Watkins, E., and Williams, Thomas G.

The PHANGS-HST Survey: Physics at High Angular Resolution in Nearby Galaxies with the Hubble Space Telescope.

The Astrophysical Journal Supplement Series 258, 10, 01/2022

<http://dx.doi.org/10.3847/1538-4365/ac1fe5>

Rioja, María. J. and Dodson, Richard

Subkilometer scale ionospheric studies at the SKA-Low site, using MWA extended baselines.

Journal of Astronomical Telescopes, Instruments, and Systems 8, 011012, 01/2022

<http://dx.doi.org/10.1117/1.JATIS.8.1.011012>

Chevance, Mélanie, Kruijssen, J. M. Diederik, Krumholz, Mark R., Groves, Brent, Keller, Benjamin W., Hughes, Annie, Glover, Simon C. O., Henshaw, Jonathan D., Herrera, Cinthya N., Kim, Jaeyeon, Leroy, Adam K., Pety, Jérôme, Razza, Alessandro, Rosolowsky, Erik, Schinnerer, Eva, Schruba, Andreas, Barnes, Ashley T., Bigiel, Frank, Blanc, Guillermo A., Dale, Daniel A., Emsellem, Eric, Faesi, Christopher M., Grasha, Kathryn, Klessen, Ralf S., Kreckel, Kathryn, Liu, Daizhong, Longmore, Steven N., Meidt, Sharon E., Querejeta, Miguel, Saito, Toshiki, Sun, Jiayi, and Usero, Antonio

Pre-supernova feedback mechanisms drive the destruction of molecular clouds in nearby star-forming disc galaxies.

Monthly Notices of the Royal Astronomical Society 509, 272-288, 01/2022

<http://dx.doi.org/10.1093/mnras/stab2938>

Rebollido, Isabel, Ribas, Álvaro, de Gregorio-Monsalvo, Itziar, Villaver, Eva, Montesinos, Benjamín, Chen, Christine, Canovas, Héctor, Henning, Thomas, Moór, Attila, Perrin, Marshall, Rivièrre-Marichalar, Pablo, and Eiroa, Carlos

The search for gas in debris discs: ALMA detection of CO gas in HD 36546.

Monthly Notices of the Royal Astronomical Society 509, 693-700, 01/2022

<http://dx.doi.org/10.1093/mnras/stab2906>

Williams, Thomas G., Kreckel, Kathryn, Belfiore, Francesco, Groves, Brent, Sandstrom, Karin, Santoro, Francesco, Blanc, Guillermo A., Bigiel, Frank, Boquien, Médéric, Chevance, Mélanie, Congiu, Enrico, Emsellem, Eric, Glover, Simon C. O., Grasha, Kathryn, Klessen, Ralf S., Koch, Eric, Kruijssen, J. M. Diederik, Leroy, Adam K., Liu, Daizhong, Meidt, Sharon, Pan, Hsi-An, **Querejeta, Miguel**, Rosolowsky, Erik, Saito, Toshiki, Sánchez-Blázquez, Patricia, Schinnerer, Eva, Schruba, Andreas, and Watkins, Elizabeth J.

The 2D metallicity distribution and mixing scales of nearby galaxies.

Monthly Notices of the Royal Astronomical Society 509, 1303-1322, 01/2022

<http://dx.doi.org/10.1093/mnras/stab3082>

**Santander-García, M.**, Jones, D., **Alcolea, J.**, **Bujarrabal, V.**, and Wesson, R.

The ionised and molecular mass of post-common-envelope planetary nebulae. The missing mass problem.

Astronomy and Astrophysics 658, A17, 02/2022

<http://dx.doi.org/10.1051/0004-6361/202142233>

Kluska, J., Van Winckel, H., Coppée, Q., Oomen, G. -M., Dsilva, K., Kamath, D., **Bujarrabal, V.**, and Min, M.

A population of transition disks around evolved stars: Fingerprints of planets. Catalog of disks surrounding Galactic post-AGB binaries.

Astronomy and Astrophysics 658, A36, 02/2022

<http://dx.doi.org/10.1051/0004-6361/202141690>

Pardo, J. R., Cernicharo, J., **Tercero, B.**, Cabezas, C., Bermúdez, C., Agúndez, M., Gallego, J. D., Tercero, F., Gómez-Garrido, M., de Vicente, P., and López-Pérez, J. A.

Ultra-deep 31.0-50.3 GHz spectral survey of IRC+10216.

Astronomy and Astrophysics 658, A39, 02/2022

<http://dx.doi.org/10.1051/0004-6361/202142263>

Ramos Almeida, C., Bischetti, M., **García-Burillo, S.**, Alonso-Herrero, A., Audibert, A., Cicone, C., Feruglio, C., Tadhunter, C. N., Pierce, J. C. S., Pereira-Santaella, M., and Bessiere, P. S.

The diverse cold molecular gas contents, morphologies, and kinematics of type-2 quasars as seen by ALMA.

Astronomy and Astrophysics 658, A155, 02/2022

<http://dx.doi.org/10.1051/0004-6361/202141906>

Santoro, Francesco, Kreckel, Kathryn, Belfiore, Francesco, Groves, Brent, Congiu, Enrico, Thilker, David A., Blanc, Guillermo A., Schinnerer, Eva, Ho, I. -Ting, Kruijssen, J. M. Diederik, Meidt, Sharon, Klessen, Ralf S., Schruba, Andreas, **Querejeta, Miguel**, Pessa, Ismael, Chevance, Mélanie, Kim, Jaeyeon, Emsellem, Eric, McElroy, Rebecca, Barnes, Ashley T., Bigiel, Frank, Boquien, Médéric, Dale, Daniel A., Glover, Simon C. O., Grasha, Kathryn, Lee, Janice, Leroy, Adam K., Pan, Hsi-An, Rosolowsky, Erik, Saito, Toshiki, Sanchez-Blazquez, Patricia, Watkins, Elizabeth J., and Williams, Thomas G.

PHANGS-MUSE: The H II region luminosity function of local star-forming galaxies.  
Astronomy and Astrophysics 658, A188, 02/2022  
<http://dx.doi.org/10.1051/0004-6361/202141907>

Victoria-Ceballos, César Ivan, González-Martín, Omaira, Fritz, Jacopo, Ramos Almeida, Cristina, López-Rodríguez, Enrique, **García-Burillo, Santiago**, Alonso-Herrero, Almudena, Martínez-Paredes, Mariela, Esparza-Arredondo, Donaji, and Osorio-Clavijo, Natalia

The Complex Infrared Dust Continuum Emission of NGC 1068: Ground-based N- and Q-band Spectroscopy and New Radiative Transfer Models.

The Astrophysical Journal 926, 192, 02/2022

<http://dx.doi.org/10.3847/1538-4357/ac441a>

**Santander-García, Miguel**, Jones, David, **Alcolea, Javier**, **Bujarrabal, Valentín**, and Wesson, Roger

Lessons from the Ionised and Molecular Mass of Post-CE PNe.

Galaxies 10, 26, 02/2022

<http://dx.doi.org/10.3390/galaxies10010026>

Sánchez-García, M., Pereira-Santaella, M., **García-Burillo, S.**, Colina, L., Alonso-Herrero, A., Villar-Martín, M., Saito, T., Díaz-Santos, T., Piqueras López, J., Arribas, S., Bellocchi, E., Cazzoli, S., and Labiano, A.

Duality in spatially resolved star formation relations in local LIRGs.

Astronomy and Astrophysics 659, A102, 03/2022

<http://dx.doi.org/10.1051/0004-6361/202141963>

Gallardo Cava, I., **Bujarrabal, V.**, **Alcolea, J.**, Gómez-Garrido, M., and **Santander-García, M.**

Chemistry of nebulae around binary post-AGB stars: A molecular survey of mm-wave lines\*.

Astronomy and Astrophysics 659, A134, 03/2022

<http://dx.doi.org/10.1051/0004-6361/202142339>

Eibensteiner, C., Barnes, A. T., Bigiel, F., Schinnerer, E., Liu, D., Meier, D. S., **Usero, A.**, Leroy, A. K., Rosolowsky, E., Puschnig, J., Lazar, I., Pety, J., Lopez, L. A., Emsellem, E., Bešlić, I., **Querejeta, M.**, Murphy, E. J., den Brok, J., Schruba, A., Chevance, M., Glover, S. C. O., Gao, Y., Grasha, K., Hassani, H., Henshaw, J. D., **Jimenez-Donaire, M. J.**, Klessen, R. S., Kruijssen, J. M. D., Pan, H. -A., Saito, T., Sormani, M. C., Teng, Y. -H., and Williams, T. G.

A 2-3 mm high-resolution molecular line survey towards the centre of the nearby spiral galaxy NGC 6946.

Astronomy and Astrophysics 659, A173, 03/2022

<http://dx.doi.org/10.1051/0004-6361/202142624>

Emsellem, Eric, Schinnerer, Eva, Santoro, Francesco, Belfiore, Francesco, Pessa, Ismael, McElroy, Rebecca, Blanc, Guillermo A., Congiu, Enrico, Groves, Brent, Ho, I. -Ting, Kreckel, Kathryn, Razza, Alessandro, Sanchez-Blazquez, Patricia, Egorov, Oleg, Faesi,

Chris, Klessen, Ralf S., Leroy, Adam K., Meidt, Sharon, **Querejeta, Miguel**, Rosolowsky, Erik, Scheuermann, Fabian, Anand, Gagandeep S., Barnes, Ashley T., Bešlić, Ivana, Bigiel, Frank, Boquien, Médéric, Cao, Yixian, Chevance, Mélanie, Dale, Daniel A., Eibensteiner, Cosima, Glover, Simon C. O., Grasha, Kathryn, Henshaw, Jonathan D., Hughes, Annie, Koch, Eric W., Kruijssen, J. M. Diederik, Lee, Janice, Liu, Daizhong, Pan, Hsi-An, Pety, Jérôme, Saito, Toshiki, Sandstrom, Karin M., Schruba, Andreas, Sun, Jiayi, Thilker, David A., **Usero, Antonio**, Watkins, Elizabeth J., and Williams, Thomas G.  
The PHANGS-MUSE survey. Probing the chemo-dynamical evolution of disc galaxies.  
Astronomy and Astrophysics 659, A191, 03/2022  
<http://dx.doi.org/10.1051/0004-6361/202141727>

Bublitz, J., Kastner, J. H., Hily-Blant, P., Forveille, T., **Santander-García, M.**, **Alcolea, J.**, and **Bujarrabal, V.**  
Sampling molecular gas in the Helix planetary nebula: Variation in HNC/HCN with UV flux.  
Astronomy and Astrophysics 659, A197, 03/2022  
<http://dx.doi.org/10.1051/0004-6361/202141778>

Cabezas, C., Agúndez, M., **Marcelino, N.**, **Tercero, B.**, Fuentetaja, R., de Vicente, P., and Cernicharo, J.  
Discovery of a new molecular ion, HC<sub>7</sub>N, in TMC-1.  
Astronomy and Astrophysics 659, L8, 03/2022  
<http://dx.doi.org/10.1051/0004-6361/202142972>

Agúndez, M., Cabezas, C., **Marcelino, N.**, Fuentetaja, R., **Tercero, B.**, de Vicente, P., and Cernicharo, J.  
A new protonated molecule discovered in TMC-1: HCCNCH<sup>+</sup>.  
Astronomy and Astrophysics 659, L9, 03/2022  
<http://dx.doi.org/10.1051/0004-6361/202243396>

Pan, Hsi-An, Schinnerer, Eva, Hughes, Annie, Leroy, Adam, Groves, Brent, Barnes, Ashley Thomas, Belfiore, Francesco, Bigiel, Frank, Blanc, Guillermo A., Cao, Yixian, Chevance, Mélanie, Congiu, Enrico, Dale, Daniel A., Eibensteiner, Cosima, Emsellem, Eric, Faesi, Christopher M., Glover, Simon C. O., Grasha, Kathryn, Herrera, Cinthya N., Ho, I. -Ting, Klessen, Ralf S., Kruijssen, J. M. Diederik, Lang, Philipp, Liu, Daizhong, McElroy, Rebecca, Meidt, Sharon E., Murphy, Eric J., Pety, Jérôme, **Querejeta, Miguel**, Razza, Alessandro, Rosolowsky, Erik, Saito, Toshiki, Santoro, Francesco, Schruba, Andreas, Sun, Jiayi, Tomičić, Neven, **Usero, Antonio**, Utomo, Dyas, and Williams, Thomas G.

The Gas-Star Formation Cycle in Nearby Star-forming Galaxies. II. Resolved Distributions of CO and H $\alpha$  Emission for 49 PHANGS Galaxies.  
The Astrophysical Journal 927, 9, 03/2022  
<http://dx.doi.org/10.3847/1538-4357/ac474f>

Leroy, Adam K., Rosolowsky, Erik, **Usero, Antonio**, Sandstrom, Karin, Schinnerer, Eva, Schruba, Andreas, Bolatto, Alberto D., Sun, Jiayi, Barnes, Ashley T., Belfiore, Francesco, Bigiel, Frank, den Brok, Jakob S., Cao, Yixian, Chiang, I-Da, Chevance, Mélanie, Dale,

Daniel A., Eibensteiner, Cosima, Faesi, Christopher M., Glover, Simon C. O., Hughes, Annie, Jiménez Donaire, María J., Klessen, Ralf S., Koch, Eric W., Kruijssen, J. M. Diederik, Liu, Daizhong, Meidt, Sharon E., Pan, Hsi-An, Pety, Jérôme, Puschnig, Johannes, **Querejeta, Miguel**, Saito, Toshiki, Sardone, Amy, Watkins, Elizabeth J., Weiss, Axel, and Williams, Thomas G.

Low-J CO Line Ratios from Single-dish CO Mapping Surveys and PHANGS-ALMA.

The Astrophysical Journal 927, 149, 03/2022

<http://dx.doi.org/10.3847/1538-4357/ac3490>

**Alcolea, Javier**, Agúndez, Marcelino, **Bujarrabal, Valentín**, Castro-Carrizo, Arancha, Desmurs, Jean-François, Martínez-Fernández, John-Eduard, Sánchez Contreras, Carmen, and **Santander-García, Miguel**

M 1–92 Revisited: New Findings and Open Questions: New NOEMA Observations of Minkowski's Footprint.

Galaxies 10, 47, 03/2022

<http://dx.doi.org/10.3390/galaxies10020047>

Uscanga, Lucero, Rizzo, José R., **Santander-García, Miguel**, Gómez, José F., Miranda, Luis F., Suárez, Olga, Boumis, Panayotis, Rodríguez, Mónica I., Ramos-Larios, Gerardo, and Cala, Roldán A.

Millimetre Observations of Maser-Emitting Planetary Nebulae.

Galaxies 10, 48, 03/2022

<http://dx.doi.org/10.3390/galaxies10020048>

Sánchez-García, M., **García-Burillo, S.**, Pereira-Santaella, M., Colina, L., **Usero, A.**, **Querejeta, M.**, Alonso-Herrero, A., and **Fuente, A.**

Spatially resolved star-formation relations of dense molecular gas in NGC 1068.

Astronomy and Astrophysics 660, A83, 04/2022

<http://dx.doi.org/10.1051/0004-6361/202142396>

Caselli, Paola, Pineda, Jaime E., Sipilä, Olli, Zhao, Bo, Redaelli, Elena, Spezzano, Silvia, Maureira, María José, Alves, Felipe, Bizzocchi, Luca, Bourke, Tyler L., **Chacón-Tanarro, Ana**, Friesen, Rachel, Galli, Daniele, Harju, Jorma, Jiménez-Serra, Izaskun, Keto, Eric, Li, Zhi-Yun, Padovani, Marco, Schmiedeke, Anika, **Tafalla, Mario**, and Vastel, Charlotte

The Central 1000 au of a Prestellar Core Revealed with ALMA. II. Almost Complete Freeze-out.

The Astrophysical Journal 929, 13, 04/2022

<http://dx.doi.org/10.3847/1538-4357/ac5913>

Rivilla, Víctor M., Colzi, Laura, Jiménez-Serra, Izaskun, Martín-Pintado, Jesús, Megías, Andrés, Melosso, Mattia, Bizzocchi, Luca, López-Gallifa, Álvaro, Martínez-Henares, Antonio, Massalkhi, Sarah, **Tercero, Belén**, de Vicente, Pablo, Guillemín, Jean-Claude, García de la Concepción, Juan, Rico-Villas, Fernando, Zeng, Shaoshan, Martín, Sergio, Requena-Torres, Miguel A., Tonolo, Francesca, Alessandrini, Silvia, Dore, Luca, Barone, Vincenzo, and Puzzarini, Cristina

Precursors of the RNA World in Space: Detection of (Z)-1,2-ethenediol in the Interstellar Medium, a Key Intermediate in Sugar Formation.

The Astrophysical Journal 929, L11, 04/2022  
<http://dx.doi.org/10.3847/2041-8213/ac6186>

Rivilla, Víctor M., García De La Concepción, Juan, Jiménez-Serra, Izaskun, Martín-Pintado, Jesús, Colzi, Laura, **Tercero, Belén**, Megías, Andrés, López-Gallifa, Álvaro, Martínez-Henares, Antonio, Massalkhi, Sara, Martín, Sergio, Zeng, Shaoshan, De Vicente, Pablo, Rico-Villas, Fernando, Requena-Torres, Miguel A., and Cosentino, Giuliana

Ionize Hard: Interstellar PO+ Detection.

Frontiers in Astronomy and Space Sciences 9, 829288, 04/2022  
<http://dx.doi.org/10.3389/fspas.2022.829288>

Spezzano, S., Sipilä, O., Caselli, P., Jensen, S. S., Czakli, S., Bizzocchi, L., Chantzos, J., Esplugues, G., **Fuente, A.**, and Eisenhauer, F.

H<sub>2</sub>CS deuteration maps towards the pre-stellar core L1544.

Astronomy and Astrophysics 661, A111, 05/2022

<http://dx.doi.org/10.1051/0004-6361/202243073>

Titov, Oleg, Frey, Sándor, Melnikov, Alexey, Lambert, Sébastien, Shu, Fengchun, Xia, Bo, González, Javier, **Tercero, Belén**, Gulayev, Sergey, Weston, Stuart, and Natusch, Tim

Unprecedented change in the position of four radio sources.

Monthly Notices of the Royal Astronomical Society 512, 874-883, 05/2022

<http://dx.doi.org/10.1093/mnras/stac038>

Hogan, L., Rigopoulou, D., **García-Burillo, S.**, Alonso-Herrero, A., Barrufet, L., Combes, F., García-Bernete, I., Magdis, G. E., Pereira-Santaella, M., Thatte, N., and Weiß, A.

Unveiling the main sequence to starburst transition region with a sample of intermediate redshift luminous infrared galaxies.

Monthly Notices of the Royal Astronomical Society 512, 2371-2388, 05/2022

<http://dx.doi.org/10.1093/mnras/stac520>

Berné, Olivier, Habart, Émilie, Peeters, Els, Abergel, Alain, Bergin, Edwin A., Bernard-Salas, Jeronimo, Bron, Emeric, Cami, Jan, Dartois, Emmanuel, **Fuente, Asunción**, Goicoechea, Javier R., Gordon, Karl D., Okada, Yoko, Onaka, Takashi, Robberto, Massimo, Röllig, Markus, Tielens, Alexander G. G. M., Vicente, Sílvia, Wolfire, Mark G., Alarcón, Felipe, Boersma, C., Canin, Amélie, Chown, Ryan, Dicken, Daniel, Languignon, David, Le Gal, Romane, Pound, Marc W., Trahin, Boris, Simmer, Thomas, Sidhu, Ameek, Van De Putte, Dries, Cuadrado, Sara, Guilloteau, Claire, Maragkoudakis, Alexandros, Schefter, Bethany R., Schirmer, Thiébaut, Cazaux, Stéphanie, Aleman, Isabel, Allamandola, Louis, Auchettl, Rebecca, Baratta, Giuseppe Antonio, Bejaoui, Salma, Bera, Partha P., Bilalbegović, Goranka, Black, John H., Boulanger, Francois, Bouwman, Jordy, Brandl, Bernhard, Brechignac, Philippe, Brünken, Sandra, Burkhardt, Andrew, Candian, Alessandra, Cernicharo, Jose, Chabot, Marin, Chakraborty, Shubhadip, Champion, Jason, Colgan, Sean W. J., Cooke, Ilsa R., Coutens, Audrey, Cox, Nick L. J., Demyk, Karine, Donovan Meyer, Jennifer, Engrand, Cécile, Foschino, Sacha, García-Lario, Pedro, Gavilan, Lisseth, Gerin, Maryvonne, Godard, Marie, Gottlieb, Carl A.,

Guillard, Pierre, Gusdorf, Antoine, Hartigan, Patrick, He, Jinhua, Herbst, Eric, Hornekaer, Liv, Jäger, Cornelia, Janot-Pacheco, Eduardo, Joblin, Christine, Kaufman, Michael, Kemper, Francisca, Kendrew, Sarah, Kirsanova, Maria S., Klaassen, Pamela, Knight, Collin, Kwok, Sun, Labiano, Álvaro, Lai, Thomas S. -Y., Lee, Timothy J., Lefloch, Bertrand, Le Petit, Franck, Li, Aigen, Linz, Hendrik, Mackie, Cameron J., Madden, Suzanne C., Mascetti, Joëlle, McGuire, Brett A., Merino, Pablo, Micelotta, Elisabetta R., Misselt, Karl, Morse, Jon A., Mulas, Giacomo, Neelamkodan, Naslim, Ohsawa, Ryou, Omont, Alain, Paladini, Roberta, Palumbo, Maria Elisabetta, Pathak, Amit, Pendleton, Yvonne J., Petrignani, Annemieke, Pino, Thomas, Puga, Elena, Rangwala, Naseem, Rapacioli, Mathias, Ricca, Alessandra, Roman-Duval, Julia, Roser, Joseph, Roueff, Evelyne, Rouillé, Gaël, Salama, Farid, Sales, Dinalva A., Sandstrom, Karin, Sarre, Peter, Sciamma-O'Brien, Ella, Sellgren, Kris, Shannon, Matthew J., Shenoy, Sachindev S., Teyssier, David, Thomas, Richard D., Togi, Aditya, Verstraete, Laurent, Witt, Adolf N., Wootten, Alwyn, Ysard, Nathalie, Zettergren, Henning, Zhang, Yong, Zhang, Ziwei E., and Zhen, Junfeng

PDRs4All: A JWST Early Release Science Program on Radiative Feedback from Massive Stars.

Publications of the Astronomical Society of the Pacific 134, 054301, 05/2022

<http://dx.doi.org/10.1088/1538-3873/ac604c>

Esplugues, G., **Fuente, A.**, Navarro-Almaida, D., **Rodríguez-Baras, M.**, Majumdar, L., Caselli, P., Wakelam, V., Roueff, E., **Bachiller, R.**, Spezzano, S., **Rivière-Marichalar, P.**, Martín-Doménech, R., and Muñoz Caro, G. M.

Gas phase Elemental abundances in Molecular cloudS (GEMS). VI. A sulphur journey across star-forming regions: study of thioformaldehyde emission.

Astronomy and Astrophysics 662, A52, 06/2022

<http://dx.doi.org/10.1051/0004-6361/202142936>

den Brok, Jakob S., Bigiel, Frank, Sliwa, Kazimierz, Saito, Toshiki, **Usero, Antonio**, Schinnerer, Eva, Leroy, Adam K., **Jiménez-Donaire**, María J., Rosolowsky, Erik, Barnes, Ashley T., Puschnig, Johannes, Pety, Jérôme, Schruba, Andreas, Bešlić, Ivana, Cao, Yixian, Eibensteiner, Cosima, Glover, Simon C. O., Klessen, Ralf S., Kruijssen, J. M. Diederik, Meidt, Sharon E., Neumann, Lukas, Tomičić, Neven, Pan, Hsi-An, **Querejeta, Miguel**, Watkins, Elizabeth, Williams, Thomas G., and Wilner, David

A CO isotopologue Line Atlas within the Whirlpool galaxy Survey (CLAWS).

Astronomy and Astrophysics 662, A89, 06/2022

<http://dx.doi.org/10.1051/0004-6361/202142247>

Bianchi, E., Ceccarelli, C., Codella, C., López-Sepulcre, A., Yamamoto, S., Balucani, N., Caselli, P., Podio, L., Neri, R., **Bachiller, R.**, Favre, C., Fontani, F., Lefloch, B., Sakai, N., and Segura-Cox, D.

SOLIS. XV. CH<sub>3</sub>CN deuteration in the SVS13-A Class I hot corino.

Astronomy and Astrophysics 662, A103, 06/2022

<http://dx.doi.org/10.1051/0004-6361/202141893>

de A. Schutze, A., Rivera-Ortiz, P. R., Lefloch, B., Gusdorf, A., Favre, C., Segura-Cox, D., López-Sepulcre, A., Neri, R., Ospina-Zamudio, J., De Simone, M., Codella, C., Viti, S.,

Podio, L., Pineda, J., O'Donoghue, R., Ceccarelli, C., Caselli, P., Alves, F., **Bachiller, R.**, Balucani, N., Bianchi, E., Bizzocchi, L., Bottinelli, S., Caux, E., **Chacón-Tanarro, A.**, Dulieu, F., Enrique-Romero, J., Fontani, F., Feng, S., Holdship, J., Jiménez-Serra, I., Jaber Al-Edhari, A., Kahane, C., Lattanzi, V., Oya, Y., Punanova, A., Rimola, A., Sakai, N., Spezzano, S., Sims, I. R., Taquet, V., Testi, L., Theulé, P., Ugliengo, P., Vastel, C., Vasyunin, A. I., Vazart, F., Yamamoto, S., and Witzel, A.

SOLIS. XVI. Mass ejection and time variability in protostellar outflows: Cep E.

Astronomy and Astrophysics 662, A104, 06/2022

<http://dx.doi.org/10.1051/0004-6361/202142931>

Hyland, L. J., Reid, M. J., Ellingsen, S. P., **Rioja, M. J.**, Dodson, R., Orosz, G., Masson, C. R., and McCallum, J. M.

Inverse Multiview. I. Multicalibrator Inverse Phase Referencing for Microarcsecond Very Long Baseline Interferometry Astrometry.

The Astrophysical Journal 932, 52, 06/2022

<http://dx.doi.org/10.3847/1538-4357/ac6d5b>

Pessa, I., Schinnerer, E., Leroy, A. K., Koch, E. W., Rosolowsky, E., Williams, T. G., Pan, H. -A., Schruba, A., **Usero, A.**, Belfiore, F., Bigiel, F., Blanc, G. A., Chevance, M., Dale, D., Emsellem, E., Gensior, J., Glover, S. C. O., Grasha, K., Groves, B., Klessen, R. S., Kreckel, K., Kruijssen, J. M. D., Liu, D., Meidt, S. E., Pety, J., **Querejeta, M.**, Saito, T., Sanchez-Blazquez, P., and Watkins, E. J.

Variations in the  $\Sigma_{\text{SFR}}$  –  $\Sigma_{\text{mol}}$  –  $\Sigma_{\star}$  plane across galactic environments in PHANGS galaxies.

Astronomy and Astrophysics 663, A61, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202142832>

Jiménez-Serra, Izaskun, Rodríguez-Almeida, Lucas F., Martín-Pintado, Jesús, Rivilla, Víctor M., Melosso, Mattia, Zeng, Shaoshan, Colzi, Laura, Kawashima, Yoshiyuki, Hirota, Eizi, Puzzarini, Cristina, **Tercero, Belén**, de Vicente, Pablo, Rico-Villas, Fernando, Requena-Torres, Miguel A., and Martín, Sergio

Precursors of fatty alcohols in the ISM: Discovery of n-propanol.

Astronomy and Astrophysics 663, A181, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202142699>

Cabezas, C., Agúndez, M., Fuentetaja, R., Endo, Y., **Marcelino, N.**, **Tercero, B.**, Pardo, J. R., de Vicente, P., and Cernicharo, J.

Discovery of the cyclic C<sub>5</sub>H radical in TMC-1.

Astronomy and Astrophysics 663, L2, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202244063>

Fuentetaja, R., Cabezas, C., Agúndez, M., **Tercero, B.**, **Marcelino, N.**, Pardo, J. R., de Vicente, P., and Cernicharo, J.

Discovery of CH<sub>2</sub>CCHC<sub>4</sub>H and a rigorous detection of CH<sub>2</sub>CCHC<sub>3</sub>N in TMC-1 with the QUIJOTE line survey.

Astronomy and Astrophysics 663, L3, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202243857>

Cernicharo, J., Fuentetaja, R., Cabezas, C., Agúndez, M., **Marcelino, N.**, **Tercero, B.**, Pardo, J. R., and de Vicente, P.

Discovery of five cyano derivatives of propene with the QUIJOTE line survey.

Astronomy and Astrophysics 663, L5, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202244255>

Cernicharo, J., Fuentetaja, R., Agúndez, M., Kaiser, R. I., Cabezas, C., **Marcelino, N.**, **Tercero, B.**, Pardo, J. R., and de Vicente, P.

Discovery of fulvenallene in TMC-1 with the QUIJOTE line survey.

Astronomy and Astrophysics 663, L9, 07/2022

<http://dx.doi.org/10.1051/0004-6361/202244399>

Zabel, Nikki, Brown, Toby, Wilson, Christine D., Davis, Timothy A., Cortese, Luca, Parker, Laura C., Boselli, Alessandro, Catinella, Barbara, Chown, Ryan, Chung, Aeree, Deb, Tirna, Ellison, Sara L., **Jiménez-Donaire**, María J., Lee, Bumhyun, Roberts, Ian D., Spekkens, Kristine, Stevens, Adam R. H., Thorp, Mallory, Tonnesen, Stephanie, and Villanueva, Vicente

VERTICO II: How H I-identified Environmental Mechanisms Affect the Molecular Gas in Cluster Galaxies.

The Astrophysical Journal 933, 10, 07/2022

<http://dx.doi.org/10.3847/1538-4357/ac6e68>

Feng, S., Liu, H. B., Caselli, P., Burkhardt, A., Du, F., **Bachiller, R.**, Codella, C., and Ceccarelli, C.

A Detailed Temperature Map of the Archetypal Protostellar Shocks in L1157.

The Astrophysical Journal 933, L35, 07/2022

<http://dx.doi.org/10.3847/2041-8213/ac75d7>

Rivilla, Víctor M., Jiménez-Serra, Izaskun, Martín-Pintado, Jesús, Colzi, Laura, **Tercero, Belén**, de Vicente, Pablo, Zeng, Shaoshan, Martín, Sergio, García de la Concepción, Juan, Bizzocchi, Luca, Melosso, Mattia, Rico-Villas, Fernando, and Requena-Torres, Miguel A.

Molecular Precursors of the RNA-World in Space: New Nitriles in the G+0.693–0.027 Molecular Cloud.

Frontiers in Astronomy and Space Sciences 9, 876870, 07/2022

<http://dx.doi.org/10.3389/fspas.2022.876870>

Belloch, E., Pereira-Santaella, M., Colina, L., Labiano, A., Sánchez-García, M., Alonso-Herrero, A., Arribas, S., **García-Burillo, S.**, Villar-Martín, M., Rigopoulou, D., Valentino, F., Puglisi, A., Díaz-Santos, T., Cazzoli, S., and **Usero, A.**

Compact molecular gas emission in local LIRGs among low- and high-z galaxies.

Astronomy and Astrophysics 664, A60, 08/2022

<http://dx.doi.org/10.1051/0004-6361/202142802>

Galindo-Guil, F. J., Barrado, D., Bouy, H., Olivares, J., Bayo, A., Morales-Calderón, M., Huélamo, N., Sarro, L. M., **Rivière-Marichalar, P.**, Stoev, H., Montesinos, B., and Stauffer, J. R.

Lithium depletion boundary, stellar associations, and Gaia.

Astronomy and Astrophysics 664, A70, 08/2022

<http://dx.doi.org/10.1051/0004-6361/202141114>

Tristram, Konrad R. W., Impellizzeri, C. M. Violette, Zhang, Zhi-Yu, Villard, Eric, Henkel, Christian, Viti, Serena, Burtscher, Leonard, Combes, Françoise, **García-Burillo, Santiago**, Martín, Sergio, Meisenheimer, Klaus, and van der Werf, Paul P.

ALMA imaging of the cold molecular and dusty disk in the type 2 active nucleus of the Circinus galaxy.

Astronomy and Astrophysics 664, A142, 08/2022

<http://dx.doi.org/10.1051/0004-6361/202243535>

Sun, Jiayi, Leroy, Adam K., Rosolowsky, Erik, Hughes, Annie, Schinnerer, Eva, Schruba, Andreas, Koch, Eric W., Blanc, Guillermo A., Chiang, I-Da, Groves, Brent, Liu, Daizhong, Meidt, Sharon, Pan, Hsi-An, Pety, Jérôme, **Querejeta, Miguel**, Saito, Toshiki, Sandstrom, Karin, Sardone, Amy, **Usero, Antonio**, Utomo, Dyas, Williams, Thomas G., Barnes, Ashley T., Benincasa, Samantha M., Bigiel, Frank, Bolatto, Alberto D., Boquien, Médéric, Chevance, Mélanie, Dale, Daniel A., Deger, Sinan, Emsellem, Eric, Glover, Simon C. O., Grasha, Kathryn, Henshaw, Jonathan D., Klessen, Ralf S., Kreckel, Kathryn, Kruijssen, J. M. Diederik, Ostriker, Eve C., and Thilker, David A.

Molecular Cloud Populations in the Context of Their Host Galaxy Environments: A Multiwavelength Perspective.

The Astronomical Journal 164, 43, 08/2022

<http://dx.doi.org/10.3847/1538-3881/ac74bd>

Gallardo Cava, Iván, **Bujarrabal, Valentín, Alcolea, Javier**, Gómez-Garrido, Miguel, Castro-Carrizo, Arancha, Van Winckel, Hans, and **Santander-García, Miguel**

Rotating and Expanding Gas in Binary Post-AGB Stars.

Astronomy 1, 84-92, 08/2022

<http://dx.doi.org/10.3390/astronomy1020008>

**Rivière-Marichalar, P., Fuente, A., Esplugues, G., Wakelam, V., le Gal, R., Baruteau, C., Ribas, A., Macías, E., Neri, R., and Navarro-Almaida, D.**

AB Aur, a Rosetta stone for studies of planet formation. II. H<sub>2</sub>S detection and sulfur budget.

Astronomy and Astrophysics 665, A61, 09/2022

<http://dx.doi.org/10.1051/0004-6361/202142906>

Sanchez Contreras, C., **Alcolea, J.**, Rodriguez Cardoso, R., **Bujarrabal, V.**, Castro-Carrizo, A., Quintana-Lacaci, G., Velilla-Prieto, L., and **Santander-García, M.**

Dissecting the central regions of OH 231.8+4.2 with ALMA: A salty rotating disk at the base of a young bipolar outflow.

Astronomy and Astrophysics 665, A88, 09/2022

<http://dx.doi.org/10.1051/0004-6361/202243623>

Vollmer, B., Davies, R. I., Gratier, P., Lizée, Th., Imanishi, M., Gallimore, J. F., Impellizzeri, C. M. V., **García-Burillo, S.**, and Le Petit, F.

From the Circumnuclear Disk in the Galactic Center to thick, obscuring tori of AGNs. Modeling the molecular emission of a parsec-scale torus as found in NGC 1068.

Astronomy and Astrophysics 665, A102, 09/2022

<http://dx.doi.org/10.1051/0004-6361/202141684>

Pereira-Santaella, M., Álvarez-Márquez, J., García-Bernete, I., Labiano, A., Colina, L., Alonso-Herrero, A., Bellocchi, E., **García-Burillo, S.**, Hönig, S. F., Ramos Almeida, C., and Rosario, D.

Low-power jet-interstellar medium interaction in NGC 7319 revealed by JWST/MIRI MRS.

Astronomy and Astrophysics 665, L11, 09/2022

<http://dx.doi.org/10.1051/0004-6361/202244725>

Huang, K. -Y., Viti, S., Holdship, J., **García-Burillo, S.**, Kohno, K., Taniguchi, A., Martn, S., Aladro, R., **Fuente, A.**, and Sánchez-García, M.

The chemical footprint of AGN feedback in the outflowing circumnuclear disk of NGC 1068.

Astronomy and Astrophysics 666, A102, 10/2022

<http://dx.doi.org/10.1051/0004-6361/202142831>

García-Bernete, I., Rigopoulou, D., Alonso-Herrero, A., Donnan, F. R., Roche, P. F., Pereira-Santaella, M., Labiano, A., Peralta de Arriba, L., Izumi, T., Ramos Almeida, C., Shimizu, T., Hönig, S., **García-Burillo, S.**, Rosario, D. J., Ward, M. J., Bellocchi, E., Hicks, E. K. S., Fuller, L., and Packham, C.

A high angular resolution view of the PAH emission in Seyfert galaxies using JWST/MRS data.

Astronomy and Astrophysics 666, L5, 10/2022

<http://dx.doi.org/10.1051/0004-6361/202244806>

Kim, Jaeyeon, Chevance, Mélanie, Kruijssen, J. M. Diederik, Leroy, Adam K., Schruba, Andreas, Barnes, Ashley T., Bigiel, Frank, Blanc, Guillermo A., Cao, Yixian, Congiu, Enrico, Dale, Daniel A., Faesi, Christopher M., Glover, Simon C. O., Grasha, Kathryn, Groves, Brent, Hughes, Annie, Klessen, Ralf S., Kreckel, Kathryn, McElroy, Rebecca, Pan, Hsi-An, Pety, Jérôme, **Querejeta, Miguel**, Razza, Alessandro, Rosolowsky, Erik, Saito, Toshiki, Schinnerer, Eva, Sun, Jiayi, Tomičić, Neven, **Usero, Antonio**, and Williams, Thomas G.

Environmental dependence of the molecular cloud lifecycle in 54 main-sequence galaxies.

Monthly Notices of the Royal Astronomical Society 516, 3006-3028, 10/2022

<http://dx.doi.org/10.1093/mnras/stac2339>

Valdivia-Mena, M. T., Pineda, J. E., Segura-Cox, D. M., Caselli, P., Neri, R., López-Sepulcre, A., Cunningham, N., Bouscasse, L., Semenov, D., Henning, Th., Piétu, V.,

Chapillon, E., Dutrey, A., **Fuente, A.**, Guilloteau, S., Hsieh, T. H., Jiménez-Serra, I., Marino, S., Maureira, M. J., Smirnov-Pinchukov, G. V., **Tafalla, M.**, and Zhao, B.

PRODIGE - envelope to disk with NOEMA. I. A 3000 au streamer feeding a Class I protostar.

Astronomy and Astrophysics 667, A12, 11/2022

<http://dx.doi.org/10.1051/0004-6361/202243310>

Butterworth, J., Holdship, J., Viti, S., and **García-Burillo, S.**

Understanding if molecular ratios can be used as diagnostics of AGN and starburst activity: The case of NGC 1068.

Astronomy and Astrophysics 667, A131, 11/2022

<http://dx.doi.org/10.1051/0004-6361/202244563>

Fuentetaja, R., Agúndez, M., Cabezas, C., **Tercero, B.**, **Marcelino, N.**, Pardo, J. R., de Vicente, P., and Cernicharo, J.

Discovery of two new interstellar molecules with QUIJOTE: HCCCHCCC and HCCCCS.

Astronomy and Astrophysics 667, L4, 11/2022

<http://dx.doi.org/10.1051/0004-6361/202245018>

Lamperti, I., Pereira-Santaella, M., Perna, M., Colina, L., Arribas, S., **García-Burillo, S.**, González-Alfonso, E., Aalto, S., Alonso-Herrero, A., Combes, F., Labiano, A., Piqueras-López, J., Rigopoulou, D., and van der Werf, P.

Physics of ULIRGs with MUSE and ALMA: The PUMA project. IV. No tight relation between cold molecular outflow rates and AGN luminosities.

Astronomy and Astrophysics 668, A45, 12/2022

<http://dx.doi.org/10.1051/0004-6361/202244054>

Kim, Shinyoung, Lee, Chang Won, **Tafalla, Mario**, Gophinathan, Maheswar, Caselli, Paola, Myers, Philip C., Chung, Eun Jung, and Li, Shanghuo

The Role of Filamentary Structures in the Formation of Two Dense Cores, L1544 and L694-2.

The Astrophysical Journal 940, 112, 12/2022

<http://dx.doi.org/10.3847/1538-4357/ac96e0>

Villanueva, Vicente, Bolatto, Alberto D., Vogel, Stuart, Brown, Tobias, Wilson, Christine D., Zabel, Nikki, Ellison, Sara, Stevens, Adam R. H., Jiménez Donaire, María Jesús, Spekkens, Kristine, Tharp, Mallory, Davis, Timothy A., Parker, Laura C., Roberts, Ian D., Basra, Dhruv, Boselli, Alessandro, Catinella, Barbara, Chung, Aeree, Cortese, Luca, Lee, Bumhyun, and Watts, Adam

VERTICO. IV. Environmental Effects on the Gas Distribution and Star Formation Efficiency of Virgo Cluster Spirals.

The Astrophysical Journal 940, 176, 12/2022

<http://dx.doi.org/10.3847/1538-4357/ac9d3c>

Changala, P. B., Gupta, H., Cernicharo, J., Pardo, J. R., Agúndez, M., Cabezas, C., **Tercero, B.**, Guélin, M., and McCarthy, M. C.

Laboratory and Astronomical Discovery of Magnesium Dicarbide, MgC<sub>2</sub>.

The Astrophysical Journal 940, L42, 12/2022  
<http://dx.doi.org/10.3847/2041-8213/aca144>

Xu, Shuangjing, Imai, Hiroshi, Yun, Youngjoo, Zhang, Bo, **Rioja, María J.**, Dodson, Richard, Cho, Se-Hyung, Kim, Jaeheon, Cui, Lang, Sobolev, Andrey M., Chibueze, James O., Kim, Dong-Jin, Amada, Kei, Nakashima, Jun-ichi, Orosz, Gabor, Oyadomari, Miyako, Oh, Sejin, Yonekura, Yoshinori, Sun, Yan, Mai, Xiaofeng, Zhang, Jingdong, Wen, Shiming, and Jung, Taehyun

The Astrometric Animation of Water Masers toward the Mira Variable BX Cam.  
The Astrophysical Journal 941, 105, 12/2022  
<http://dx.doi.org/10.3847/1538-4357/ac9599>

Redaelli, Elena, **Chacón-Tanarro, Ana**, Caselli, Paola, **Tafalla, Mario**, Pineda, Jaime E., Spezzano, Silvia, and Sipilä, Olli  
A Large ( $\approx 1$  pc) Contracting Envelope Around the Prestellar Core L1544.  
The Astrophysical Journal 941, 168, 12/2022  
<http://dx.doi.org/10.3847/1538-4357/ac9d8b>

Williams, Thomas G., Sun, Jiayi, Barnes, Ashley T., Schinnerer, Eva, Henshaw, Jonathan D., Meidt, Sharon E., **Querejeta, Miguel**, Watkins, Elizabeth J., Bigiel, Frank, Blanc, Guillermo A., Boquien, Médéric, Cao, Yixian, Chevance, Mélanie, Egorov, Oleg V., Emsellem, Eric, Glover, Simon C. O., Grasha, Kathryn, Hassani, Hamid, Jeffreson, Sarah, **Jiménez-Donaire, María J.**, Kim, Jaeyeon, Klessen, Ralf S., Kreckel, Kathryn, Kruijssen, J. M. Diederik, Larson, Kirsten L., Leroy, Adam K., Liu, Daizhong, Pessa, Ismael, Pety, Jérôme, Pinna, Francesca, Rosolowsky, Erik, Sandstrom, Karin M., Smith, Rowan, Sormani, Mattia C., Stuber, Sophia, Thilker, David A., and Whitmore, Bradley C.  
PHANGS-JWST First Results: Spurring on Star Formation: JWST Reveals Localized Star Formation in a Spiral Arm Spur of NGC 628.  
The Astrophysical Journal 941, L27, 12/2022  
<http://dx.doi.org/10.3847/2041-8213/aca674>

De Marco, Orsola, Akashi, Muhammad, Akras, Stavros, **Alcolea, Javier**, Aleman, Isabel, Amram, Philippe, Balick, Bruce, De Beck, Elvire, Blackman, Eric G., Boffin, Henri M. J., Boumis, Panos, Bublitz, Jesse, Bucciarelli, Beatrice, **Bujarrabal, Valentin**, Cami, Jan, Chornay, Nicholas, Chu, You-Hua, Corradi, Romano L. M., Frank, Adam, García-Hernández, D. A., García-Rojas, Jorge, García-Segura, Guillermo, Gómez-Llanos, Verónica, Gonçalves, Denise R., Guerrero, Martín A., Jones, David, Karakas, Amanda I., Kastner, Joel H., Kwok, Sun, Lykou, Foteini, Manchado, Arturo, Matsuura, Mikako, McDonald, Iain, Miszalski, Brent, Mohamed, Shazrene S., Monreal-Ibero, Ana, Monteiro, Hektor, Montez, Rodolfo, Baez, Paula Moraga, Morisset, Christophe, Nordhaus, Jason, Mendes de Oliveira, Claudia, Osborn, Zara, Otsuka, Masaaki, Parker, Quentin A., Peeters, Els, Quint, Bruno C., Quintana-Lacaci, Guillermo, Redman, Matt, Ruiter, Ashley J., Sabin, Laurence, Sahai, Raghvendra, Contreras, Carmen Sánchez, **Santander-García, Miguel**, Seitenzahl, Ivo, Soker, Noam, Speck, Angela K., Stanghellini, Letizia, Steffen, Wolfgang, Toalá, Jesús A., Ueta, Toshiya, Van de Steene, Griet, Van Winckel, Hans, Ventura, Paolo, Villaver, Eva, Vlemmings, Wouter, Walsh, Jeremy R., Wesson, Roger, and Zijlstra, Albert A.

The messy death of a multiple star system and the resulting planetary nebula as observed by JWST.

Nature Astronomy 6, 1421-1432, 12/2022

<http://dx.doi.org/10.1038/s41550-022-01845-2>