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Orion's Dragon and other stories: Feedback by massive stars

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Bibliography

- Abdullah, A. & Tielens, A. G. G. M. 2020, *A&A*, 639, A110
- Abel, N. P., Brogan, C. L., Ferland, G. J., et al. 2004, *ApJ*, 609, 247
- Abel, N. P., Dudley, C., Fischer, J., Satyapal, S., & van Hoof, P. A. M. 2009, *ApJ*, 701, 1147
- Abel, N. P., Ferland, G. J., & O'Dell, C. R. 2019, *ApJ*, 881, 130
- Abel, N. P., Ferland, G. J., O'Dell, C. R., & Troland, T. H. 2016, *ApJ*, 819, 136
- Abel, N. P., Ferland, G. J., Shaw, G., & van Hoof, P. A. M. 2005, *ApJS*, 161, 65
- Abergel, A., Teyssier, D., Bernard, J. P., et al. 2003, *A&A*, 410, 577
- Allen, C., Costero, R., Ruelas-Mayorga, A., & Sánchez, L. J. 2017, *MNRAS*, 466, 4937
- Allers, K. N., Jaffe, D. T., Lacy, J. H., Draine, B. T., & Richter, M. J. 2005, *ApJ*, 630, 368
- Andrews, H., Peeters, E., Tielens, A. G. G. M., & Okada, Y. 2018, *A&A*, 619, A170
- Arab, H., Abergel, A., Habart, E., et al. 2012, *A&A*, 541, A19
- Arthur, S. J. 2012, *MNRAS*, 421, 1283
- Bakes, E. L. O. & Tielens, A. G. G. M. 1994, *ApJ*, 427, 822
- Balega, Y. Y., Chentsov, E. L., Rzaev, A. K., & Weigelt, G. 2015, in *Astronomical Society of the Pacific Conference Series*, Vol. 494, *Physics and Evolution of Magnetic and Related Stars*, ed. Y. Y. Balega, I. I. Romanyuk, & D. O. Kudryavtsev, 57
- Balick, B., Gammon, R. H., & Hjellming, R. M. 1974, *PASP*, 86, 616
- Bally, J. 2008, *Overview of the Orion Complex*, ed. B. Reipurth, Vol. 4, 459
- Bally, J., Chambers, E., Guzman, V., et al. 2018, *AJ*, 155, 80
- Bally, J., Langer, W. D., Stark, A. A., & Wilson, R. W. 1987, *ApJ*, 312, L45
- Balog, Z., Müller, T., Nielbock, M., et al. 2014, *Experimental Astronomy*, 37, 129
- Barinova, G., van Hemert, M., Krems, R., & Dalgarno, A. 2005, *ApJ*, 620, 537
- Bedijn, P. J. & Tenorio-Tagle, G. 1981, *A&A*, 98, 85
- Bennett, C. L., Fixsen, D. J., Hinshaw, G., et al. 1994, *ApJ*, 434, 587
- Bernard-Salas, J., Habart, E., Arab, H., et al. 2012, *A&A*, 538, A37
- Berné, O., Joblin, C., Deville, Y., et al. 2007, *A&A*, 469, 575
- Berné, O., Marcelino, N., & Cernicharo, J. 2010, *Nature*, 466, 947
- Berné, O., Marcelino, N., & Cernicharo, N. 2014, *ApJ*, 795, 13

- Berné, O. & Matsumoto, Y. 2012, *ApJ*, 761, L4
- Berné, O., Montillaud, J., & Joblin, C. 2015, *A&A*, 577, A133
- Bertoldi, F. 1989, *ApJ*, 346, 735
- Bischetti, M., Piconcelli, E., Feruglio, C., et al. 2018, *A&A*, 617, A82
- Bock, J. J., Hristov, V. V., Kawada, M., et al. 1993, *ApJ*, 410, L115
- Boersma, C., Rubin, R. H., & Allamandola, L. J. 2012, *ApJ*, 753, 168
- Bohlin, R. C., Savage, B. D., & Drake, J. F. 1978, *ApJ*, 224, 132
- Bolatto, A. D., Wolfire, M., & Leroy, A. K. 2013, *ARA&A*, 51, 207
- Boreiko, R. T. & Betz, A. L. 1996, *ApJ*, 467, L113
- Brisbin, D., Ferkinhoff, C., Nikola, T., et al. 2015, *ApJ*, 799, 13
- Bron, E., Agúndez, M., Goicoechea, J. R., & Cernicharo, J. 2018, arXiv e-prints, arXiv:1801.01547
- Buckle, J. V., Davis, C. J., di Francesco, J., et al. 2012, *MNRAS*, 422, 521
- Calzetti, D., Kennicutt, R. C., Engelbracht, C. W., et al. 2007, *ApJ*, 666, 870
- Capak, P. L., Carilli, C., Jones, G., et al. 2015, *Nature*, 522, 455
- Carlyle, J. & Hillier, A. 2017, *A&A*, 605, A101
- Castor, J., McCray, R., & Weaver, R. 1975, *ApJ*, 200, L107
- Chevalier, R. A., Blondín, J. M., & Emmering, R. T. 1992, *ApJ*, 392, 118
- Chevance, M., Madden, S. C., Leboutteiller, V., et al. 2016, *A&A*, 590, A36
- Churchwell, E., Povich, M. S., Allen, D., et al. 2006, *ApJ*, 649, 759
- Chuss, D. T., Andersson, B.-G., Bally, J., et al. 2019, *ApJ*, 872, 187
- Crawford, M. K., Genzel, R., Townes, C. H., & Watson, D. M. 1985, *ApJ*, 291, 755
- Croiset, B. A., Candian, A., Berné, O., & Tielens, A. G. G. M. 2016, *A&A*, 590, A26
- Croxall, K. V., Smith, J. D., Wolfire, M. G., et al. 2012, *ApJ*, 747, 81
- Cuadrado, S., Salas, P., Goicoechea, J. R., et al. 2019, *A&A*, 625, L3
- Cubick, M., Stutzki, J., Ossenkopf, V., Kramer, C., & Röllig, M. 2008, *A&A*, 488, 623
- Da Rio, N., Robberto, M., Soderblom, D. R., et al. 2009, *ApJ SS*, 183, 261
- Da Rio, N., Tan, J. C., & Jaehing, K. 2014, *ApJ*, 795, 55
- Dagdigian, P. J. 2019, *J. Chem. Phys.*, 151, 054306
- Dale, J. E., Ngoumou, J., Ercolano, B., & Bonnell, I. 2013, *MNRAS*, 436, 3430
- Dale, J. E., Ngoumou, J., Ercolano, B., & Bonnell, I. A. 2014, *MNRAS*, 442, 694

- Dalgarno, A. & McCray, R. A. 1972, *ARA&A*, 10, 375
- De Looze, I., Baes, M., Bendo, G. J., Cortese, L., & Fritz, J. 2011, *MNRAS*, 416, 2712
- Diaz-Miller, I. R., Franco, J., & Shore, S. N. 1998, *ApJ*, 501, 192
- Díaz-Santos, T., Armus, L., Charmandaris, V., et al. 2013, *ApJ*, 774, 68
- Draine, B. T. 2011, *Physics of the Interstellar and Intergalactic Medium* (Princeton University Press)
- Duffell, P. C. 2016, *ApJ*, 821, 76
- Dwek, E. & Arendt, R. G. 1992, *ARA&A*, 30, 11
- Elmegreen, B. G. & Lada, C. J. 1977, *ApJ*, 214, 725
- Evans, Neal J., I., Dunham, M. M., Jørgensen, J. K., et al. 2009, *ApJS*, 181, 321
- Extaluz, M., Goicoechea, J. R., Cernicharo, J., et al. 2013, *A&A*, 556, A137
- Federrath, C. & Klessen, R. S. 2012, *ApJ*, 761, 156
- Field, D., Lemaire, J. L., Pineau des Forets, G., et al. 1998, *A&A*, 333, 280
- Flower, D. R. & Pineau Des Forêts, G. 2010, *MNRAS*, 406, 1745
- Freyer, T., Hensler, G., & Yorke, H. 2006, *ApJ*, 638, 262
- Fuente, A., Rodríguez-Franco, A., García-Burillo, S., Martín-Pintado, J., & Black, J. H. 2003, *A&A*, 406, 899
- García-Díaz, M. T. & Henney, W. J. 2007, *AJ*, 133, 952
- García-Díaz, M. T., Henney, W. J., López, J. A., & Doi, T. 2008, *Rev. Mexicana Astron. Astrofis.*, 44, 181
- Gatto, A., Walch, S., Naab, T., et al. 2017, *MNRAS*, 466, 1903
- Geen, S., Pellegrini, E., Bieri, R., & Klessen, R. 2020, *MNRAS*, 492, 915
- Genzel, R. & Stutzki, J. 1989a, *ARA&A*, 27, 41
- Genzel, R. & Stutzki, J. 1989b, *ARA&A*, 27, 41
- Genzel, R., Tacconi, L. J., Gracia-Carpio, J., et al. 2010, *MNRAS*, 407, 2091
- Gerin, M., Ruaud, M., Goicoechea, J. R., Gusdorf, A., & Godard, B. 2015, *A&A*, 573, A30
- Goicoechea, J. R., Chavarría, L., Cernicharo, J., et al. 2015a, *ApJ*, 799, 102
- Goicoechea, J. R., Compiègne, M., Habart, E., & Goldsmith, P. 2009, *ApJ*, 699, L165
- Goicoechea, J. R., Cuadrado, S., Pety, J., et al. 2017, *A&A*, 601, L9
- Goicoechea, J. R., Pabst, C. H. M., Kabanovic, S., et al. 2020, *A&A*, 639, A1
- Goicoechea, J. R., Pety, J., Cuadrado, S., et al. 2016, *Nature*, 537, 207

- Goicoechea, J. R., Santa-Maria, M. G., Bron, E., et al. 2019, *A&A*, 622, A91
- Goicoechea, J. R., Teyssier, D., Etxaluze, M., Goldsmith, P. F., & Ossenkopf, V. 2015b, *ApJ*, 812, 75
- Goldsmith, P. F., Langer, W. D., Pineda, J. L., & Velusamy, T. 2012, *ApJ Supplement Series*, 203, 13
- Graciá-Carpio, J., Sturm, E., Hailey-Dunsheath, S., et al. 2011, *ApJ*, 728, L7
- Graf, U. U., Simon, R., Stutzki, J., et al. 2012, *A&A*, 542, L16
- Grellmann, R., Preibisch, T., Ratzka, T., et al. 2013, *A&A*, 550, A82
- Grenier, I. A., Casandjian, J.-M., & Terrier, R. 2005, *Science*, 307, 1292
- Griffin, M. J., Abergel, A., Abreu, A., et al. 2010, *A&A*, 518, L3
- Großschedl, J. E., Alves, J., Meingast, S., et al. 2018, *A&A*, 619, A106
- Großschedl, J. E., Alves, J., Teixeira, P. S., et al. 2019, *A&A*, 622, A149
- Gry, C., Lequeux, J., & Boulanger, F. 1992, *A&A*, 266, 457
- Guan, X., Stutzki, J., Graf, U. U., et al. 2012, *A&A*, 542, L4
- Güdel, M., Briggs, K. R., Montmerle, T., et al. 2008, *Science*, 319, 309
- Habart, E., Abergel, A., Boulanger, F., et al. 2011, *A&A*, 527, A122
- Habart, E., Abergel, A., Walmsley, C., Teyssier, D., & Pety, J. 2005, *A&A*, 437, 177
- Hacar, A., Alves, J., Tafalla, M., & Goicoechea, J. R. 2017, *A&A*, 602, L2
- Haid, S., Walch, S., Seifried, D., et al. 2018, *MNRAS*, 478, 4799
- Heays, A. N., Bosman, A. D., & van Dishoeck, E. F. 2017, *A&A*, 602, A105
- Heiles, C. 1994, *ApJ*, 436, 720
- Henney, W. J. & O'Dell, C. R. 1999, *AJ*, 118, 2350
- Henney, W. J., O'Dell, C. R., Zapata, L. A., et al. 2007, *AJ*, 133, 2192
- Herrera-Camus, R., Bolatto, A. D., Wolfire, M. G., et al. 2015, *ApJ*, 800, 1
- Herrera-Camus, R., Sturm, E., Graciá-Carpio, J., et al. 2018, *ApJ*, 861, 95
- Herrmann, F., Madden, S. C., Nikola, T., et al. 1997, *ApJ*, 481, 343
- Higgins, D. R. 2011, PhD thesis, -
- Hillenbrand, L. A. 1997, *ApJ*, 113, 1733
- Hohle, M. M., Neuhauser, R., & Schutz, B. F. 2010, *Astron. Nach.*, 331, 349
- Hollenbach, D., Kaufman, M. J., Neufeld, D., Wolfire, M., & Goicoechea, J. R. 2012, *ApJ*, 754, 105
- Hollenbach, D. J., Takahashi, T., & Tielens, A. G. G. M. 1991, *ApJ*, 377, 192

- Hollenbach, D. J. & Tielens, A. G. G. M. 1999, *RvMP*, 71, No. 1
- Hopkins, P. F., Quataert, E., & Murray, N. 2012, *MNRAS*, 421, 3488
- Howarth, I. D. & Prinja, R. K. 1989, *ApJS*, 69, 527
- Howe, J. E., Jaffe, D. T., Genzel, R., & Stacey, G. J. 1991, *ApJ*, 373, 158
- Hummer, D. G. & Storey, P. J. 1987, *MNRAS*, 224, 801
- Isobe, T., Feigelson, E. D., Akritas, M. G., & Babu, G. J. 1990, *ApJ*, 364, 104
- Jaffe, D., Zhou, S., Howe, J., Herrmann, F., & Madden, S. 1994, *ApJ*, 436, 203
- Jenkins, E. B. & Tripp, T. M. 2011, *ApJ*, 734, 65
- Joblin, C., Bron, E., Pinto, C., et al. 2018, *A&A*, 615, A129
- Johnstone, D. & Bally, J. 1999, *ApJ*, 510, L49
- Kaplan, K. F., Dinerstein, H. L., Oh, H., et al. 2017, *ApJ*, 838, 152
- Kaufman, M. J., Wolfire, M. G., & Hollenbach, D. J. 2006, *ApJ*, 644, 283
- Kennicutt, Robert C., J. 1998, *ApJ*, 498, 541
- Kennicutt, Robert C., J., Hao, C.-N., Calzetti, D., et al. 2009, *ApJ*, 703, 1672
- Kennicutt, R. & Evans, N. 2012, *ARA&A*, 50, 531
- Kester, D., Avruch, I., & Teyssier, D. 2014, in *American Institute of Physics Conference Series*, Vol. 1636, *Bayesian Inference and Maximum Entropy Methods in Science and Engineering*, 62–67
- Khusanova, Y., Béthermin, M., Le Fèvre, O., et al. 2020, *arXiv e-prints*, arXiv:2007.08384
- Kim, C.-G., Ostriker, E. C., & Kim, W.-T. 2013, *ApJ*, 776, 1
- Kim, J. S., Clarke, C. J., Fang, M., & Facchini, S. 2016, *ApJL*, 826, L15
- Kirk, H., Di Francesco, J., Johnstone, D., et al. 2016, *ApJ*, 817, 167
- Knudsen, K. K., Richard, J., Kneib, J.-P., et al. 2016, *MNRAS*, 462, L6
- Knyazeva, L. N. & Kharitonov, A. V. 1998, *ARep*, 42, 60
- Kounkel, M., Hartmann, L., Loinard, L., et al. 2017, *ApJ*, 834, 142
- Kovalenko, A., Dung Tran, T., Rednyk, S., et al. 2018, *ApJ*, 856, 100
- Kramer, C., Abreu-Vicente, J., García-Burillo, S., et al. 2013, *A&A*, 553, A114
- Kraus, S., Weigelt, G., Balega, Y. Y., et al. 2009, *A&A*, 497, 195
- Krumholz, M. R. & Matzner, C. D. 2009, *ApJ*, 703, 1352
- Lada, C. J., Forbrich, J., Lombardi, M., & Alves, J. F. 2012, *ApJ*, 745, 190
- Langer, W. D. & Penzias, A. A. 1990, *ApJ*, 357, 477

- Langer, W. D., Velusamy, T., Pineda, J. L., et al. 2010, *A&A*, 521, L17
- Lebouteiller, V., Cormier, D., Madden, S. C., et al. 2019, *A&A*, 632, A106
- Lehmann, H., Vitrichenko, E., Bychkov, V., Bychkova, L., & Klochkova, V. 2010, *A&A*, 514, A34
- Leitherer, C. 1988, *ApJ*, 334, 626
- Li, A. & Draine, B. T. 2001, *ApJ*, 544, 778
- Lique, F., Klos, J., Alexander, M. H., Le Picard, S. D., & Dagdigian, P. J. 2018, *MNRAS*, 474, 2313
- Lombardi, M., Bouy, H., Alves, J., & Lada, C. J. 2014, *A&A*, 566, A45
- Luhman, M. L., Satyapal, S., Fischer, J., et al. 2003, *ApJ*, 594, 758
- Mac Low, M.-M. & McCray, R. 1988, *ApJ*, 324, 776
- Magdis, G. E., Rigopoulou, D., Hopwood, R., et al. 2014, *ApJ*, 796, 63
- Malhotra, S., Kaufman, M. J., Hollenbach, D., et al. 2001, *ApJ*, 561, 766
- Mangum, J. G., Emerson, D. T., & Greisen, E. W. 2007, *A&A*, 474, 679
- Marconi, A., Testi, L., Natta, A., & Walmsley, C. M. 1998, *A&A*, 330, 696
- McCray, R. & Kafatos, M. 1987, *ApJ*, 317, 190
- McKee, C. F. & Ostriker, J. P. 1977, *ApJ*, 218, 148
- Megeath, S. T., Gutermuth, R., Muzerolle, J., et al. 2012, *AJ*, 144, 192
- Megeath, S. T., Gutermuth, R., Muzerolle, J., et al. 2016, *AJ*, 151, 5
- Megier, A., Strobel, A., Bondar, A., et al. 2005, *ApJ*, 634, 451
- Meixner, M., Haas, M. R., Tielens, A. G. G. M., Erickson, E. F., & Werner, M. 1992, *ApJ*, 390, 499
- Menten, K. M., Reid, M. J., Forbrich, J., & Brunthaler, A. 2007, *A&A*, 474, 515
- Meyer, M., Flaherty, K., Levine, J., et al. 2008, *Handbook of Star Forming Regions*, 1, 662
- Milam, S. N., Savage, C., Brewster, M. A., Ziurys, L., & Wyckoff, S. 2005, *ApJ*, 634, 1126
- Mookerjee, B., Sandell, G., Jarrett, H., & McMullin, J. 2009, *A&A*, 507, 1485
- Muench, A., Getman, K., Hillenbrand, L., & Preibisch, T. 2008, *Star Formation in the Orion Nebula I: Stellar Content*, ed. B. Reipurth, Vol. 4, 483
- Naab, T. & Ostriker, J. P. 2017, *ARA&A*, 55, 59
- Nagy, Z., Van der Tak, F. F. S., Ossenkopf, V., et al. 2013, *A&A*, 550, A96
- Naiman, J. P., Ramirez-Ruiz, E., & Lin, D. N. C. 2018, *MNRAS*, 478, 2794

- Nakamura, F., McKee, C. F., Klein, R. I., & Fisher, R. T. 2006, *ApJS*, 164, 477
- Neufeld, D. A. & Wolfire, M. G. 2016, *ApJ*, 826, 183
- Norman, C. A. & Ikeuchi, S. 1989, *ApJ*, 345, 372
- Ochsendorf, B. B., Brown, A. G. A., Bally, J., & Tielens, A. G. G. M. 2015, *ApJ*, 808, 111
- Ochsendorf, B. B., Cox, N. L. J., Krijt, S., et al. 2014, *A&A*, 563, A65
- O'Dell, C. R. 2001, *ARAA*, 39, 99
- O'Dell, C. R. 2018, *MNRAS*, 478, 1017
- O'Dell, C. R., Ferland, G. J., Porter, R. L., & van Hoof, P. A. M. 2011, *ApJ*, 733, 9
- O'Dell, C. R. & Goss, W. M. 2009, *AJ*, 138, 1235
- O'Dell, C. R. & Harris, J. A. 2010, *ApJ*, 140, 985
- O'Dell, C. R., Henney, W. J., Abel, N. P., Ferland, G. J., & Arthur, S. J. 2009, *ApJ*, 137, 367
- O'Dell, C. R., Kollatschny, W., & Ferland, G. J. 2017, *ApJ*, 837, 151
- O'Dell, C. R., Walter, D. K., & Dufour, R. J. 1992, *ApJ*, 399, L67
- O'Dell, C. R. & Yusef-Zadeh, F. 2000, *ApJ*, 120, 382
- Okada, Y., Higgins, R., Ossenkopf-Okada, V., et al. 2019, *A&A*, 631, L12
- Okada, Y., Pilleri, P., Berné, O., et al. 2013, *A&A*, 553, A2
- Orkisz, J. H., Pety, J., Gerin, M., et al. 2017, *A&A*, 599, A99
- Oskinova, L. M., Todt, H., Ignace, R., et al. 2011, *Mon. Not. R. Astron. Soc.*, 416, 1456
- Ossenkopf, V., Röllig, M., Neufeld, D. A., et al. 2013, *A&A*, 550, A57
- Osterbrock, D. E. 1989, *Astrophysics of gaseous nebulae and active galactic nuclei* (University Science Books)
- Ostriker, J. P. & McKee, C. F. 1988, *Reviews of Modern Physics*, 60, 1
- Pabst, C., Higgins, R., Goicoechea, J. R., et al. 2019, *Nature*, 565, 618
- Pabst, C. H. M., Goicoechea, J. R., Teyssier, D., et al. 2020, *A&A*, 639, A2
- Pabst, C. H. M., Goicoechea, J. R., Teyssier, D., et al. 2017, *A&A*, 606, A29
- Pauldrach, A. W. A., Hoffmann, T. L., & Lennon, M. 2001, *A&A*, 375, 161
- Peeters, E., Hony, S., Van Kerckhoven, C., et al. 2002, *A&A*, 390, 1089
- Pellegrini, E. W., Baldwin, J. A., Ferland, G. J., Shaw, G., & Heathcote, S. 2009, *ApJ*, 693, 285

- Pentericci, L., Carniani, S., Castellano, M., et al. 2016, *ApJL*, 829, L11
- Penzias, A. A., Jefferts, K. B., Wilson, R. W., Liszt, H. S., & Soloman, P. M. 1972, *ApJ*, 178, L35
- Peters, T., Naab, T., Walch, S., et al. 2017, *MNRAS*, 466, 3293
- Peterson, D. E. & Megeath, S. T. 2008, *Handbook of Star Forming Regions Vol. I*
- Petit, V., Owocki, S. P., Oksala, M. E., & the MiMeS Collaboration. 2012, *ASP Conference Series*, 465, 48
- Pety, J. 2005, in *SF2A-2005: Semaine de l’Astrophysique Francaise*, ed. F. Casoli, T. Contini, J. M. Hameury, & L. Pagani, 721–722
- Pety, J., Guzmán, V. V., Orkisz, J. H., et al. 2017, *A&A*, 599, A98
- Pety, J., Teyssier, D., Fossé, D., et al. 2005, *A&A*, 435, 885
- Pineda, J. L., Fischer, C., Kapala, M., et al. 2018, *ApJ*, 869, L30
- Pineda, J. L., Langer, W. D., & Goldsmith, P. F. 2014, *A&A*, 570, A121
- Pineda, J. L., Langer, W. D., Velusamy, T., & Goldsmith, P. F. 2013, *A&A*, 554, A103
- Poglitsch, A., Waelkens, C., Geis, N., et al. 2010, *A&A*, 518, L2
- Pound, M. W. & Wolfire, M. G. 2008, *Astronomical Society of the Pacific Conference Series*, Vol. 394, *The Photo Dissociation Region Toolbox*, ed. R. W. Argyle, P. S. Bunclark, & J. R. Lewis, 654
- Prosser, C. F., Stauffer, J. R., Hartmann, L., et al. 1994, *ApJ*, 421, 517
- Reipurth, B., Bally, J., Fesen, R., & Devine, D. 1998, *Nature*, 396, 343
- Risacher, C., Güsten, R., Stutzki, J., et al. 2016, *A&A*, 595, A34
- Rubin, R. H., Simpson, J. P., O’Dell, C. R., et al. 2011, *MNRAS*, 410, 1320
- Rybak, M., Hodge, J. A., Vegetti, S., et al. 2020a, *MNRAS*, 494, 5542
- Rybak, M., Zavala, J. A., Hodge, J. A., Casey, C. M., & Werf, P. v. d. 2020b, *ApJ*, 889, L11
- Salas, P., Oonk, J. B. R., Emig, K. L., et al. 2019, *A&A*, 626, A70
- Salgado, F., Berné, O., Adams, J. D., et al. 2016, *ApJ*, 830, 118
- Sandell, G., Mookerjea, B., Güsten, R., et al. 2015, *A&A*, 578, A41
- Schaye, J., Crain, R. A., Bower, R. G., et al. 2015, *MNRAS*, 446, 521
- Schneider, N., Simon, R., Guevara, C., et al. 2020, *PASP*, 132, 104301
- Schulz, N. S., Testa, P., Huenemoerder, D. P., Ishibashi, K., & Canizares, C. 2006, *ApJ*, 653, 636
- Sellgren, K. 1986, *ApJ*, 305, 399

- Seo, Y. M., Goldsmith, P. F., Walker, C. K., et al. 2019, *ApJ*, 878, 120
- Sheffer, Y. & Wolfire, M. G. 2013, *ApJ*, 774, L14
- Shibai, H., Okuda, H., Nakagawa, T., et al. 1991, *ApJ*, 374, 522
- Silich, S. & Tenorio-Tagle, G. 2013, *ApJ*, 765, 43
- Simón-Díaz, S., García-Rojas, J., Esteban, C., et al. 2011, *A&A*, 530, A57
- Simón-Díaz, S., Herrero, A., Esteban, C., & Najarro, F. 2006, *A&A*, 448, 351
- Smith, J. D. T., Croxall, K., Draine, B., et al. 2017, *ApJ*, 834, 5
- Sofia, U. J., Lauroesch, J. T., Meyer, D. M., & Cartledge, S. I. B. 2004, *ApJ*, 605, 272
- Sofia, U. J. & Parvathi, V. S. 2009, *ASP Conference Series*, 414, 236
- Sofia, U. J., Parvathi, V. S., Babu, B. R. S., & Murthy, J. 2011, *AJ*, 141, 22
- Soler, J. D., Beuther, H., Rugel, M., et al. 2019, *A&A*, 622, A166
- Spaans, M., Tielens, A. G. G. M., van Dishoeck, E. F., & Bakes, E. L. O. 1994, *ApJ*, 437, 270
- Spitzer, L. 1978, *Physical Processes in the Interstellar Medium* (New York: Wiley-Interscience)
- Stacey, G., Townes, C., Geis, N., et al. 1989, *BAAS*, 21, 1180
- Stacey, G. J., Geis, N., Genzel, R., et al. 1991, *ApJ*, 373, 423
- Stacey, G. J., Hailey-Dunsheath, S., Ferkinhoff, C., et al. 2010, *ApJ*, 724, 957
- Stahl, O., Kaufer, A., Rivinius, T., et al. 1996, *A&A*, 312, 539
- Stahl, O., Wade, G., Petit, V., Stober, B., & Schanne, L. 2008, *A&A*, 487, 323
- Sternberg, A., Hoffmann, T. L., & Pauldrach, A. W. A. 2003, *ApJ*, 599, 1333
- Stone, J. M. & Gardiner, T. 2007, *ApJ*, 671, 1726
- Storey, P. J. & Hummer, D. G. 1995, *MNRAS*, 272, 41
- Störzer, H. & Hollenbach, D. 1998, *ApJ*, 495, 853
- Störzer, H. & Hollenbach, D. 1999, *ApJ*, 515, 669
- Subrahmanyam, R., Goss, W. M., & Malin, D. F. 2001, *AJ*, 121, 399
- Taylor, M. B. 2005, in *Astronomical Society of the Pacific Conference Series*, Vol. 347, *Astronomical Data Analysis Software and Systems XIV*, ed. P. Shopbell, M. Britton, & R. Ebert, 29
- Tielens, A. G. G. M. 2008, *ARA&A*, 46, 289
- Tielens, A. G. G. M. 2010, *The Physics and Chemistry of the Interstellar Medium* (New York: Cambridge University Press)

- Tielens, A. G. G. M. & Hollenbach, D. J. 1985, *ApJ*, 291, 722
- Tielens, A. G. G. M., Meixner, M. M., van der Werf, P. P., et al. 1993, *Science*, 262, 86
- Townsley, L. K., Broos, P. S., Garmire, G. P., et al. 2014, *ApJS*, 213, 1
- Tran, T. D., Rednyk, S., Kovalenko, A., et al. 2018, *ApJ*, 854, 25
- Troland, T. H., Goss, W. M., Brogan, C. L., Crutcher, R. M., & Roberts, D. A. 2016, *ApJ*, 825, 2
- Vallini, L., Gallerani, S., Ferrara, A., Pallottini, A., & Yue, B. 2015, *ApJ*, 813, 36
- van der Werf, P. P. & Goss, W. M. 1989, *A&A*, 224, 209
- van der Werf, P. P., Goss, W. M., & O'Dell, C. R. 2013, *ApJ*, 762, 101
- van Dishoeck, E. F. & Black, J. H. 1986, *ApJS*, 62, 109
- Venemans, B. P., McMahon, R. G., Walter, F., et al. 2012, *ApJ*, 751, L25
- Vitrichenko, E. A. 2002, *AstL*, 28, 324
- Walch, S., Whitworth, A. P., Bisbas, T. G., Hubber, D. A., & Wünsch, R. 2015, *MNRAS*, 452, 2794
- Walch, S., Whitworth, A. P., Bisbas, T. G., Wünsch, R., & Hubber, D. 2013, *MNRAS*, 435, 917
- Walch, S. K., Whitworth, A. P., Bisbas, T., Wünsch, R., & Hubber, D. 2012, *MNRAS*, 427, 625
- Walter, F., Decarli, R., Carilli, C., et al. 2012, *ApJ*, 752, 93
- Wareing, C. J., Pittard, J. M., Wright, N. J., & Falle, S. A. E. G. 2018, *MNRAS*, 475, 3598
- Watkins, E. J., Peretto, N., Marsh, K., & Fuller, G. A. 2019, *A&A*, 628, A21
- Weaver, R., McCray, R., Castor, J., Shapiro, P., & Moore, R. 1977, *ApJ*, 218, 377
- Weilbacher, P. M., Monreal-Ibero, A., Kollatschny, W., et al. 2015, *A&A*, 582, A114
- Weingartner, J. C. & Draine, B. T. 2001, *ApJ*, 548, 296
- Welty, D. E., Xue, R., & Wong, T. 2012, *ApJ*, 745, 173
- Wiesenfeld, L. & Goldsmith, P. 2014, *ApJ*, 780, 183
- Williams, J. P. & McKee, C. F. 1997, *ApJ*, 476, 166
- Wilson, T. L., Filges, L., Codella, C., Reich, W., & Reich, P. 1997, *A&A*, 327, 1177
- Wolfire, M., McKee, C., Hollenbach, D., & Tielens, A. 2003, *ApJ*, 587, 278
- Wolfire, M. G., Hollenbach, D., & McKee, C. F. 2010, *ApJ*, 716, 1191

- Wolfire, M. G., Hollenbach, D., McKee, C. F., Tielens, A. G. G. M., & Bakes, E. L. O. 1995, *ApJ*, 443, 152
- Wolfire, M. G., Hollenbach, D., & Tielens, A. G. G. M. 1989, *ApJ*, 344, 770
- Wu, R., Bron, E., Onaka, T., et al. 2018, *A&A*, 618, A53
- Young, E. T., Becklin, E. E., Marcum, P. M., et al. 2012, *ApJ*, 749, L17
- Young Owl, R. C., Meixner, M. M., Fong, D., et al. 2002, *ApJ*, 578, 885
- Zari, E., Brown, A. G. A., de Bruijne, J., Manara, C. F., & de Zeeuw, P. T. 2017, *A&A*, 608, A148
- Zuckerman, B. 1973, *ApJ*, 183, 863

