

Omnarayani Nayak

Publication List

Number of First Author Papers: 6

Number of Total Papers: 19

H-Index of all Papers: 10

Papers In Preparation

“Initial Results from MIRI and NIRCcam Photometry and MIRI MRS Spectroscopy in the N79 Region of the Large Magellanic Cloud,” Nayak O., Meixner M., et al., in prep

“Catalog of Dusty Sources in N79 Using James Webb Data,” Nayak O., Meixner M., et al., in prep

“Studying Young Stellar Objects Down to 1 Solar Mass With MIRI and NIRCcam,” Nayak O., Meixner M., et al., in prep

“JWST Medium Resolution Spectrometer Reveals Secrets to Stellar Clusters in the Large Magellanic Cloud,” Nayak O., Meixner M., et al., in prep

“High Mass Star Formation in the Low-Metallicity NGC 346 Region of the Small Magellanic Cloud,” Nayak O., Meixner M., et al., in prep

First Author Refereed Papers

“Massive Star Formation in the Tarantula Nebula,” Nayak O., Wong T., Meixner M., et al., submitted

“Stellar Feedback at the Earliest Stage of Massive Star Formation,” Nayak O., Meixner M., Okada Y., et al. 2021, *ApJ*, 907, 106

“ALMA Reveals Kinematics of Potential Super Star Cluster H72.97-69.39 in N79,” Nayak O., Meixner M., Indebetouw R., et al. 2019, *ApJ*, 877, 135

“Large Magellanic Cloud: Extreme Star Formation in a Low-Metallicity Environment,” Nayak O., 2018, PhD Thesis

“Molecular Cloud Structures and Massive Star Formation in N159,” Nayak O., Meixner M., Fukui Y., et al. 2018, *ApJ*, 854, 154

“Studying Relation Between Star Formation and Molecular Clumps on Sub-parsec Scales in 30 Doradus,” Nayak O., Meixner M., Indebetouw R., et al. 2016, *ApJ*, 831, 32

Other Refereed Papers

“The Lick Observatory Supernova Search Follow-Up Program: Photometry Data Release of 70 Stripped-Envelope Supernovae,” Zheng W., Stahl B. E., de Jaeger T., et al. submitted

Authors: W. Zheng, B. E. Stahl, T. de Jaeger, A. V. Filippenko, S. Wang, W. Gan, T. G. Brink, I. Altunin, R. Baer-Way, A. Bigley, K. Blanchard, P. K. Blanchard, J. Bradley, S. K. Cargill, C. Casper, T. Chapman, V. Chander, S. Channa, B. Choi, N. Choksi, M. Chu, K. I. Clubb, D. P. Cohen, P. A. Dalba, A. de Graw, M. Ellison, E. Falcon, O. D. Fox, K. Fuller, M. Ganeshalingam, N. Girish, C. Gould, J. R. Gross, G. Halevi, A. Halle, K. T. Hayakawa, R. Hardy, H. Hestenes, A. M. Hoffman, M. Hyland, T. Lowe, B. T. Jeffers, C. Jennings, M. T. Kandrashoff, A. Khodanlian, M. Kim, H. Kim, M. E. Kislak, M. de Kouchkovsky, D. Krishnan, S. Kumar, S. G. Kumar, J. Leja, K. J. Leonard, G. Z. Li, W. Li, J. Lian, E. Liu, P. Lu, E. Ma, M. N. Mason, M. May, K. McAllister, E. McGinness, S. Modak, J. Molloy, Y. S. Murakami, **O. Nayak**, D. Perera, K. Pina, D. Punjabi, A. Rikhter, T. W. Ross, J. Sipple, C. Soler, A. Springmann, S. Stegman, H. Stephens, H. Sunseri, K. Tang, S. Taylor, P. Trasher, S. D. Van Dyk, X. Wang, J. Wayland, A. Wilkins, A. Yagubyan, H. Yuk, S. Yunus, K. D. Zhang

“An ALMA study of the $\sim 10^4 M_{\odot}$ molecular clump N159W-North in the Large Magellanic Cloud: A possible gas flow penetrating one of the most massive protocluster systems in the Local Group,” Tokuda K., Minami T., Fukui Y., et al. submitted
Authors: K. Tokuda, T. Minami, Y. Fukui, T. Inoue, T. Nishikora, K. Tsuge, S. Zahorecz, H. Sano, A. Konishi, R. Chen, M. Sewilo, S. C. Madden, **O. Nayak**, K. Saigo, A. Nishimura, K. E. I. Tanaka, T. Sawada, K. Tachihara, A. Kawamura, T. Onishi

“The 30 Doradus Molecular Cloud at 0.4 Parsec Resolution with ALMA: Physical Properties and the Boundedness of CO Emitting Structures,” Wong T., Oudshoorn L., Sofovitch E., et al. submitted

Authors: T. Wong, L. Oudshoorn, E. Sofovitch, A. Green, C. Shah, R. Indebetouw, M. Meixner, A. Hacar, **O. Nayak**, K. Tokuda, A. D. Bolatto, M. Chevance, G. De Marchi, Y. Fukui, A. Hirschauer, K. E. Jameson, V. Kalari, V. Lebouteiller, L. W. Looney, S. C. Madden, T. Onishi, J. Roman-Duval, M. Rubio, A. G. G. M. Tielens

“Evolution of Feedback in HII Regions,” Oliver G. M., Lopez L. A., Rosen A. L., et al. 2021, ApJ, 908, 68

Authors: G. M. Olivier, L. A. Lopez, A. L. Rosen, **O. Nayak**, M. Reiter, M. R. Krumholz, A. D. Bolatto

“The Stellar Content of H72.97-69.39, a Potential Super Star Cluster in the Making,” Morten A., Zinnecker H., Hirschauer A., et al. 2021, AJ, 161, 206

Authors: M. Andersen, H. Zinnecker, A. Hirschauer, **O. Nayak**, M. Reiter, M. R. Krumholz, A. D. Bolatto

“An ALMA View of Molecular Filaments in the Large Magellanic Cloud II: An Early Stage of High Mass Star Formation Embedded at Colliding Clouds in N159W-South,” Tokuda K., Fukui Y., Harada R., et al. 2019, ApJ, 886, 16

Authors: K. Tokuda, Yasuo Fukui, R. Harada, K. Saigo, K. Tachihara, K. Tsuge, T. Inoue, K. Torii, A. Nishimura, S. Zahorecz, **O. Nayak**, M. Meixner, T. Minamidani, A. Kawamura, N. Mizuno, R. Indebetouw, M. Sewilo, S. Madden, M. Galametz, V. Lebouteiller, R. Chen, T. Onishi

“An ALMA View of Molecular Filaments in the Large Magellanic Cloud I: Formation of High-Mass Stars and Pillars in the N159E Papillon Nebula Triggered by a Cloud-Cloud Collision,” Fukui Y., Tokuda K., Kazuya S., et al. 2019, ApJ, 886, 14

Authors: Y. Fukui, K. Tokuda, K. Saigo, R. Harada, K. Tachihara, K. Tsuge, T. Inoue, K. Torii, A. Nishimura, S. Zahorecz, **O. Nayak**, M. Meixner, T. Minamidani, A. Kawamura, N. Mizuno, R. Indebetouw, M. Sewilo, S. Madden, M. Galametz, V. Lebouteiller, R. Chen, T. Onishi

“Formation of High-Mass Stars in an Isolated Environment in the Large Magellanic Cloud,” Harada R., Onishi T., Tokuda K., et al. 2019, PASJ, 71, 44

Authors: R. Harada, T. Onishi, K. Tokuda, S. Zahorecz, A. Huges, M. Meixner, M. Sewilo, R. Indebetouw, **O. Nayak**, Y. Fukui, A. Kawamura, K. Saigo, T. Wong, J. P. Bernard, I. W. Stephens

“Unveiling the Nature of Candidate High-Mass Young Stellar Objects in the Magellanic Clouds with near-IR spectroscopy,”

Reiter M., Nayak O., Meixner M., et al. 2019, MNRAS, 483, 5211

Authors: M. Reiter, **O. Nayak**, M. Meixner, O. Jones

“The Star Forming Complex LMC-N79 as a Future Rival to 30 Doradus,” Ochsendorf B., Zinnecker H., Nayak O., et al. 2017, NatAs, 1E, 260

Authors: B. Ochsendorf, H. Zinnecker, **O. Nayak**, J. Bally, M. Meixner, O. Jones, R. Indebetouw, M. Rahman

“Kinematic Structure of Molecular Gas around High-mass Star YSO, Papillon Nebula, in N159 East in the Large Magellanic Cloud,” Saigo K., Onishi T., Nayak, O., et al. 2017, ApJ, 835, 108

Authors: K. Saigo, T. Onishi, **O. Nayak**, M. Meixner, K. Tokuda, R. Harada, Y. Morioka, M. Sewilo, R. Indebetouw, K. Torii, A. Kawamura, A. Ohama, Y. Hattori, H. Yamamoto, K. Tachihara, T. Minamidani, T. Inoue, S. Madden, M. Galametz, V. Lebouteiller, R. Chen, N. Mizuno, Y. Fukui

“Radiative and mechanical feedback into the molecular gas in the Large Magellanic Cloud. I. N159W,” Lee M. Y., Madden S., Lebouteiller V., et al. 2016, A&A, 596, A85

Authors: M. Y. Lee, S. Madden, V. Lebouteiller, A. Gusdorf, B. Godard, R. Wu, M. Galametz, D. Cormier, F. Le Petit, E. Roueff, E. Bron, L. Carlson, M. Chevance, Y. Fukui, G. Galliano, S. Hony, A. Huges, R. Indebetouw, F. Israel, A. Kawamura, J. Le Bourlot, P. Lesaffre, M. Meixner, E. Muller, **O. Nayak**, T. Onishi, J. Roman-Duval, M. Sewilo

“High Mass Star Formation Triggered by Collisions between CO Filaments in N159 West in the Large Magellanic Cloud,” Fukui Y., Harada R., Tokuda K., et al. 2015, ApJ, 807, L4

Authors: Y. Fukui, R. Harada, K. Tokuda, Y. Morioka, T. Onishi, K. Torii, A. Ohama, Y. Hattori, **O. Nayak**, M. Meixner, M. Sewilo, R. Indebetouw, A. Kawamura, K. Saigo, H. Yamamoto, K. Tachihara, T. Minamidani, T. Inoue, S. Madden, M. Galametz, V. Lebouteiller, N. Mizuno, R. Chen