

Refereed Publications

1. Lobo, A.*, **Shields, A. L.**, Palubski, I., Wolf, E.T. (2023) [Terminator Habitability: the Case for Limited Water Availability on M-dwarf Planets](#), ApJ, 945, 161.
2. Kossakowski, D., Kürster M., Trifonov, T., Henning, Th., Kemmer, J., Callabero, J.A., Burn, R., Sabotta, S. Crouse, J.S., Fauchez, T.J., Nagel, E., Kaminski, A., Herrero, E., Rodríguez, E., González-Álvarez E., Quirrenbach, A., Amado, P.J., Ribas, I., Reiners, A., Aceituno, J., Béjar, V.J.S., Baroch D., Bastelberger, S.T., Chaturvedi, P., Cifuentes, C., Dreizler, S., Jeffers, S.V., Kopparapu, R., Lafarga, M., López-González, M.J., Martín-Ruiz, S., Montes, D., Morales, J.C., Pallé, E., Pavlov, A., Schlecker, M., Schöfer, P., Schweitzer, A., Shan, Y., **Shields, A.**, Stock, S., Wolf, E., Zapatero Osorio, M.R., and Zechmeister, M. (2023) [The CARMENES search for exoplanets around M dwarfs Wolf 1069 b: Earth-mass planet in the habitable zone of a nearby, very low-mass star](#), Astronomy & Astrophysics.
3. Haqq-Misra, J., Wolf, E.T., Fauchez, T.J., **Shields, A.L.**, and Kopparapu, R.K. (2022) [The Sparse Atmospheric Model Sampling Analysis \(SAMOSA\) Intercomparison: Motivations and Protocol Version 1.0: A CUISINES Model Intercomparison Project](#), Planet. Sci. J., 3, 260.
4. Rushby, A.*, **Shields, A. L.**, Wolf, E. T., Lague, M, Burgasser, A. (2020) [The Effect of Land Albedo on the Climate of Land-dominated Planets in the TRAPPIST-1 System](#), ApJ, 904, 124.
5. Palubski, I.*, **Shields, A. L.**, and Deitrick, R. (2020) [Habitability and Water Loss Limits on Eccentric Planets Orbiting Main-sequence Stars](#), ApJ, 890, 30.

6. **Shields, A. L.**, Bitz, C.M. and Palubski, I.* (2019) [Energy Budgets for Terrestrial Extrasolar Planets](#), ApJL, 884, 2.
7. Rushby, A.*, **Shields, A. L.**, and Joshi, M. (2019) [The Effect of Land Fraction and Host Star Spectral Energy Distribution on the Planetary Albedo of Terrestrial Worlds](#), ApJ, 887, 29.
8. **Shields, A.L.**, Carns, R.C., (2018) [Hydrohalite Salt-albedo Feedback Could Cool M-dwarf Planets](#), ApJ, 867,1.
9. Wolf, E.T., **Shields, A. L.**, Kopparapu, R. K., Haqq-Misra, J., Toon, O. B. (2017) [Constraints on Climate and Habitability for Earth-like Exoplanets Determined from a General Circulation Model](#), ApJ, 837, 2.
10. **Shields, A. L.**, Barnes, R., Agol, E., Charnay, B., Bitz, C. M., Meadows, V. S.(2016) [The Effect of Orbital Configuration on the Possible Climates and Habitability of Kepler-62f](#), Astrobiology, 16, 6.
11. **Shields, A. L.**, Bitz, C. M., Meadows, V. S., Joshi, M. M., Robinson, T. D. (2014) [Spectrum- driven Planetary Deglaciation Due to Increases in Stellar Luminosity](#), AspJL, 785, 9.
12. **Shields, A. L.**, Meadows, V. S., Bitz, C. M., Pierrehumbert, R. T., Joshi, M. M., Robinson, T. D. (2013) [The Effect of Host Star Spectral Energy Distribution and Ice-Albedo Feedback on the Climate of Extrasolar Planets](#), Astrobiology, 13, 8.

13. Cowan, N. B., Robinson, T., Livengood, T. A., Deming, D., Agol, E., A'Hearn, M. F., Charbonneau, D., Lisse, C. M., Meadows, V. S., Seager, S., **Shields, A. L.**, Wellnitz, D. (2011) [Rotational Variability of Earth's Polar Regions: Implications for Detecting Snowball Planets](#), ApJ, 731, 76.
- 2011 *Former name: Aomawa L. Baker*
14. Hunter, D. A., Elmegreen, B. G., **Baker, A. L.** [The Relationship between Gas, Stars, and Star Formation in Irregular Galaxies: A Test of Simple Models](#), ApJ, 493, 595.
- 1998
15. Haqq-Misra, J., Wolf, E.T., Fauchez, T.J., **Shields, A.L.**, and Kopparapu, R.K. (2022) [The Sparse Atmospheric Model Sampling Analysis \(SAMOSA\) Intercomparison: Motivations and Protocol Version 1.0: A CUISINES Model Intercomparison Project](#), Planet. Sci. J., 3, 260.
16. Kossakowski, D., Kürster M., Trifonov, T., Henning, Th., Kemmer, J., Callabero, J.A., Burn, R., Sabotta, S. Crouse, J.S., Fauchez, T.J., Nagel, E., Kaminski, A., Herrero, E., Rodríguez, E., González-Álvarez E., Quirrenbach, A., Amado, P.J., Ribas, I., Reiners, A., Aceituno, J., Béjar, V.J.S., Baroch D., Bastelberger, S.T., Chaturvedi, P., Cifuentes, C., Dreizler, S., Jeffers, S.V., Kopparapu, R., Lafarga, M., López-González, M.J., Martín-Ruiz, S., Montes, D., Morales, J.C., Pallé, E., Pavlov, A., Schlecker, M., Schöfer, P., Schweitzer, A., Shan, Y., **Shields, A.L.**, Stock, S., Wolf, E.T., Zapatero Osorio, M.R., and Zechmeister, M. (2023) [The CARMENES search for exoplanets around M dwarfs Wolf 1069 b: Earth-mass planet in the habitable zone of a nearby, very low-mass star](#), Astronomy & Astrophysics.

Invited Reviews

1. **Shields, A. L. (2019)** The Climates of Other Worlds: [**A Review of the Emerging Field of Exoplanet Climatology**](#), ApJS, 243, 2.
2. **Shields, A. L., Ballard, S., Johnson, J. (2016)** [**The Habitability of Planets Orbiting M-dwarf Stars**](#), Physics Reports, 663:1-38.