List of Publications

Sebastian Zieba

January 4, 2024

4	First author publications
19	Refereed publications
545	Citations for 37 bibliographic references in the Astrophysics Data System
13	h-index (i.e., 13 publications with $\geq$ 13 citations)

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Refereed First Author Publications

[A1] **Sebastian Zieba**, Laura Kreidberg, Elsa Ducrot, et al., No thick carbon dioxide atmosphere on the rocky exoplanet TRAPPIST-1 c. Nature, 620(7975):746–749, August 2023. [Citations: 15]

[A2] **Sebastian Zieba** and Laura Kreidberg, PACMAN: A pipeline to reduce and analyze Hubble Wide Field Camera 3 IR Grism data. The Journal of Open Source Software, 7(80):4838, December 2022 [Citations: 0]

[A3] **S. Zieba**, M. Zilinskas, L. Kreidberg, et al., K2 and Spitzer phase curves of the rocky ultra-short-period planet K2-141 b hint at a tenuous rock vapor atmosphere. A&A, 664:A79, August 2022. [Citations: 26]

[A4] **S. Zieba**, K. Zwintz, M. A. Kenworthy, and G. M. Kennedy, Transiting exocomets detected in broadband light by TESS in the β Pictoris system. A&A, 625:L13, May 2019. [Citations: 41]

Other Publications

[B1] Andrew P. Lincowski, Victoria S. Meadows, **Sebastian Zieba**, et al., Potential Atmospheric Compositions of TRAPPIST-1 c constrained by JWST/MIRI Observations at 15 µm. ApJL, 955 L7, September 2023. [Citations: 6]

[B2] Eliza M. R. Kempton, Michael Zhang, Jacob L. Bean, et al., A reflective, metal-rich atmosphere for GJ 1214b from its JWST phase curve. Nature, 620(7972):67–71, August 2023. [Citations: 15]

[B3] Isabel Rebollido, **Sebastian Zieba**, Daniela Iglesias, et al., CHEOPS's hunt for exocomets: photometric observations of 5 Vul. MNRAS, 523(1):1441–1447, July 2023. [Citations: 0]

[B4] Maria E. Steinrueck, Tommi Koskinen, Panayotis Lavvas, et al., Photochemical Hazes Dramatically Alter Temperature Structure and Atmospheric Circulation in 3D Simulations of Hot Jupiters. ApJ, 951(2):117, July 2023. [Citations: 3]

[B5] Z. Rustamkulov, D. K. Sing, S. Mukherjee, et al., Early Release Science of the exoplanet WASP-39b with JWST NIRSpec PRISM. Nature, 614(7949):659–663, February 2023. [Citations: 77]

[B6] Eva-Maria Ahrer, Kevin B. Stevenson, Megan Mansfield, et al., Early Release Science of the exoplanet WASP-39b with JWST NIRCam. Nature, 614(7949):653–658, February 2023. [Citations: 51]

[B7] JWST Transiting Exoplanet Community Early Release Science Team, Eva-Maria Ahrer, Lili Alderson, et al., Identification of carbon dioxide in an exoplanet atmosphere. Nature, 614(7949):649–652, February 2023. [Citations: 92]

[B8] Thomas Barclay, Kyle B. Sheppard, Natasha Latouf, et al., The transmission spectrum of the potentially rocky planet L 98-59 c. arXiv e-prints, page arXiv:2301.10866, January 2023. [Citations: 6]

[B9] Taylor Bell, Eva-Maria Ahrer, Jonathan Brande, et al., Eureka!: An End-to-End Pipeline for JWST Time-Series Observations. The Journal of Open Source Software, 7(79):4503, November 2022. [Citations: 17]

[B10] Mario Damiano, Renyu Hu, Thomas Barclay, et al., A Transmission Spectrum of the Sub-Earth Planet L98-59 b in 1.1-1.7 µm. AJ, 164(5):225, November 2022. [Citations: 7]

[B11] M. Zilinskas, C. P. A. van Buchem, Y. Miguel, et al., Observability of evaporating lava worlds. A&A, 661:A126, May 2022. [Citations: 16]

[B12] Paul A. Strøm, Dennis Bodewits, Matthew M. Knight, et al., Exocomets from a Solar System Perspective. PASP, 132(1016):101001, October 2020. [Citations: 17]

[B13] Joseph E. Rodriguez, Andrew Vanderburg, **Sebastian Zieba**, et al., The First Habitable-zone Earth-sized Planet from TESS. II. Spitzer Confirms TOI700 d. AJ, 160(3):117, September 2020. [Citations: 38]

[B14] Emily A. Gilbert, Thomas Barclay, Joshua E. Schlieder, et al., The First Habitable-zone Earth-sized Planet from TESS. I. Validation of the TOI-700 System. AJ, 160(3):116, September 2020. [Citations: 84]

[B15] Daniela P. Iglesias, Johan Olofsson, Amelia Bayo, et al., An unusually large gaseous transit in a debris disc. MNRAS, 490(4):5218– 5227, December 2019. [Citations: 5]

[B16] K. Zwintz, D. R. Reese, C. Neiner, et al., Revisiting the pulsational characteristics of the exoplanet host star β Pictoris. A&A, 627:A28, July 2019. [Citations: 24]

Conference Proceedings etc.

[C1] **Sebastian Zieba**, Renyu Hu, Laura Kreidberg, et al., The search for regolith on the airless exoplanet LHS 3844 b. JWST Proposal. Cycle 2, ID. #4008, May 2023. [Citations: 0]

[C2] Kevin Stevenson, Taylor James Bell, Eva-Maria Ahrer, et al., Eureka!: An Open-Source Pipeline for JWST Time-Series Observa- tions. JWST Proposal. Cycle 2, ID. #3273, May 2023. [Citations: 0]

[C3] **Sebastian Zieba**, Laura Kreidberg, Yamila Miguel, et al., Exploring the boundary between rocky and gaseous planets with WASP-47 e. JWST Proposal. Cycle 2, ID. #3615, May 2023. [Citations: 0]

[C4] Michael Gillon, Elsa Ducrot, Eric Agol, et al., TRAPPIST-1 Planets: Atmospheres Or Not? JWST Proposal. Cycle 2, ID. #3077, May 2023. [Citations: 0]

[C5] Isabel Rebollido, **Sebastian Zieba**, Daniela Iglesias, et al., The search for exocomets in photometry using CHEOPS. In Highlights on Spanish Astrophysics XI, page 467, May 2023. [Citations: 0]

[C6] Megan Mansfield, Eva-Maria Ahrer, Kevin Stevenson, et al., JWST Transiting Exoplanet Early Release Science: A Transmission Spectrum of WASP-39b with NIRCam/F322W2. In American Astronomical Society Meeting Abstracts, volume 55 of American Astronomical Society Meeting Abstracts, page 124.03, January 2023. [Citations: 0]

[C7] Mantas Zilinskas, Christiaan van Buchem, Yamila Miguel, et al., Observability of Evaporating Lava Worlds. In Bulletin of the American Astronomical Society, volume 54, page 503.05, June 2022. [Citations: 0]

[C8] **Sebastian Zieba**, Mantas Zilinskas, Laura Kreidberg, et al., K2 and Spitzer phase curves of the rocky ultra-short-period planet K2-141 b hint at a tenuous rock vapor atmosphere. In Bulletin of the American Astronomical Society, volume 54, page 102.76, June 2022. [Citations: 0]

[C9] **Sebastian Zieba**, Mantas Zilinskas, Laura Kreidberg, et al., Optical and Infrared Phase Curves of the Lava Planet K2-141 b. In European Planetary Science Congress, pages EPSC2021–476, September 2021. [Citations: 0]

[C10] Zoe L. de Beurs, Andrew Vanderburg, Christopher J. Shallue, et al., A Machine Learning Inspired Method Reveals the Mass of K2-167 b. In Posters from the TESS Science Conference II (TSC2), page 134, July 2021. [Citations: 0]

[C11] Samuel Quinn, **Sebastian Zieba**, Nicolas B. Cowan, et al., Inside out: detecting a rock vapor atmosphere on the lava world TOI-2431 b. HST Proposal. Cycle 29, ID. #16660, June 2021. [Citations: 2]

[C12] Lisa Dang, Nicolas B. Cowan, Mark Hammond, et al., A Hell of a Phase Curve: Mapping the Surface and Atmosphere of a Lava Planet K2-141b. JWST Proposal. Cycle 1, ID. #2347, March 2021. [Citations: 0]

[C13] **S. Zieba**, K. Zwintz, M. A. Kenworthy, and G. M. Kennedy, Transiting exocomets detected in broadband light by TESS in the β Pictoris system. In C. Neiner, W. W. Weiss, D. Baade, R. E. Griffin, C. C. Lovekin, and A. F. J. Moffat, editors, Stars and their Variability Observed from Space, pages 439–440, January 2020. [Citations: 0]

[C14] K. Zwintz, R. Kuschnig, C. Arnold, et al., Science with BRITEConstellation at the University of Innsbruck. In C. Neiner, W. W. Weiss, D. Baade, R. E. Griffin, C. C. Lovekin, and A. F. J. Moffat, editors, Stars and their Variability Observed from Space, pages 119–120, January 2020. [Citations: 1]

[C15] S. N. Quinn, J. E. Rodriguez, A. Vanderburg, et al., Spitzer Observations of a Habitable-Zone Planet from TESS. In American Astronomical Society Meeting Abstracts #235, volume 235 of American Astronomical Society Meeting Abstracts, page 456.03, January 2020. [Citations: 0]

[C16] K. Zwintz, D. R. Reese, C. Neiner, et al., VizieR Online Data Catalog: beta Pic BRITE, bRing, SMEI light curves (Zwintz+, 2019). VizieR Online Data Catalog, pages J/A+A/627/A28, June 2019. [Citations: 0]

[C17] **S. Zieba**, K. Zwintz, M. Kenworthy, and G. M. Kennedy, VizieR Online Data Catalog: TESS light curve of beta Pictoris (Zieba+, 2019). VizieR Online Data Catalog, pages J/A+A/625/L13, April 2019. [Citations: 0]