

Journals:

L. Böttcher, S. Silvestri, Multi-perspective analysis of sustainability metrics characterising the debris environment, *Acta Astronautica*, 2024, 219, 17-23, doi:<https://doi.org/10.1016/j.actaastro.2024.03.002>

M. Schubert, L. Böttcher, E. Gamper, P. Wagner, E. Stoll, Detectability of space debris objects in the infrared spectrum, *Acta Astronautica*, 2022, 195(1), 41-51, doi:<https://doi.org/10.1016/j.actaastro.2022.02.030>

Book Chapters:

C. Wiedemann, A. Horstmann, L. Böttcher, K. Soggeberg, E. Gamper, J. Lorenz, M. Schubert, E. Stoll, Space Debris: Technical Aspects, in: Benkő, M., Schrogl, K. (eds.), Outer Space – Future for Humankind, Issues of Law and Policy, Series: Essential Air and Space Law, No. 26, ISBN 9789462362253, November 2021, Eleven International Publishing, pp. 191-211.

Proceedings:

F. Letizia, C. Colombo, A. Rossi, A. Muciaccia, L. Giudici, R. Harada, S. Kawamoto, L. Böttcher, V. Ruch, C. Taillan, Mission-based and environment-based approaches for assessing the severity of a space debris evolution scenario from a sustainability perspective, 75th International Astronautical Congress 2024 (IAC 2024), Milan, Italy, paper IAC-24-A6.10-E9.4.6

A. Horstmann, V. Braun, L. Böttcher, X. Oikonomidou, S. Azzi, S. Lemmens, Towards a new space debris population update for ESA's MASTER Model, 73rd International Astronautical Congress 2022 (IAC 2022), Paris, France, paper IAC-22,A6,IP,70,x71270

V. Braun, A. Horstmann, S. Lemmens, C. Wiedemann, L. Böttcher, Recent developments in space debris environment modelling, verification and validation with MASTER, in: Flohrer, T., Lemmens, S. (Ed.), Proc. 8th European Conference on Space Debris, 20-23 April 2021, Darmstadt, Germany, published by ESA Space Debris Office, SDC8-paper28 (<https://conference.sdo.esoc.esa.int/proceedings/sdc8/paper/28/SDC8-paper28.pdf>).

Theses:

L. Böttcher, Modelling and calculation of the received electron-dose for orbiting objects in space, Master's thesis, TU Braunschweig, 2019

L. Böttcher, Investigation of optical space debris detections considering infrared emission, Study work, TU Braunschweig, 2018

L. Böttcher, Analysis of the influence of the solar and geomagnetic activity on the prediction of satellite orbits, Bachelor's thesis, TU Braunschweig, 2016