

Publications List

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Books or Book Chapters

- [3] Petrus, A., Wildi, T., & Müller, S. (2022) Swiss Virtual Natural History Collection (SVNHC). In: *Digitale Transformation an der Fachhochschule Graubünden. Case Studies aus Forschung und Lehre*. Forster, M., Alt, S., Hanselmann, M., Deflorin, P. (Eds.). p. 119-124. Fachhochschule Graubünden. Chur. ISBN: 978-3-907247-20-4
- [2] Engelhardt, Claudia; Biernacka, Katarzyna; Coffey, Aoife; Cornet, Ronald; Danciu, Alina; Demchenko, Yuri; Downes, Stephen; Erdmann, Christopher; Garbuglia, Federica; Germer, Kerstin; Helbig, Kerstin; Hellström, Margareta; Hettne, Kristina; Hibbert, Dawn; Jetten, Mijke; Karimova, Yulia; Kryger Hansen, Karsten; Kuusniemi, Mari Elisa; Letizia, Viviana; McCutcheon, Valerie; McGillivray, Barbara; Ostrop, Jenny; Petersen, Britta; Petrus, Ana; Reichmann, Stefan; Rettberg, Najla; Reverté, Carmen; Rochlin, Nick; Saenen, Bregt; Schmidt, Birgit; Scholten, Jolien; Shanahan, Hugh; Straube, Armin; Van den Eynden, Veerle; Vandendorpe, Justine; Venkataram, Shanmugasundaram; Wiljes, Cord; Wuttke, Ulrike; Yeomans, Joanne; Zhou, Biru. (2022) How to be FAIR with your data. A teaching and training handbook for higher education institutions. *Göttingen University Press*. Göttingen. pp. 206. ISBN 978-3-86-395539-7 [DOI: 10.17875/gup2022-1915](https://doi.org/10.17875/gup2022-1915)
- [1] Engelhardt, C.; Biernacka, K.; Coffey, A.; Cornet, R.; Danciu, A.; Demchenko, Y.; Downes, S.; Erdmann, C.; Garbuglia, F.; Germer, K.; Helbig, K.; Hellström, M.; Hettne, K.; Hibbert, D.; Jetten, M.; Karimova, Y.; Kryger Hansen, K.; Kuusniemi, M. E.; Letizia, V.; McCutcheon, V.; McGillivray, B.; Ostrop, J.; Petersen, B.; Petrus, A.; Reichmann, S.; Rettberg, N.; Reverté, C.; Rochlin, N.; Saenen, B.; Schmidt, B.; Scholten, J.; Shanahan, H.; Straube, A.; Van den Eynden, V.; Vandendorpe, J.; Venkataram, S.; Wiljes, C.; Wuttke, U.; Yeomans, J.; Zhou, B. (2021). D7.4 How to be FAIR with your data. A teaching and training handbook for higher education institutions. *Zenodo*. [DOI: 10.5281/zenodo.5665492](https://doi.org/10.5281/zenodo.5665492)

Refereed Journal Articles

- [14] Jurinjak Tušek, A., Petrus, A., Weichselbraun, A., Mundani, R.-P., Müller, S. M., Barkow, I., Bucić-Kojić, A., Planinić, M., Tišma, M. (2024) Systematic review of machine-learning techniques to support development of lignocellulose biorefineries. *Chemical and Biochemical Engineering Quarterly*, 38 (3) 241-263. [DOI: 10.15255/CABEQ.2023.2273](https://doi.org/10.15255/CABEQ.2023.2273)
- [13] Petrus, A., Wildi, T., Müller, S., Preproject 'Swiss Virtual Natural History Collection', Database, Volume 2023, 2023, baado72, [DOI: 10.1093/database/baado72](https://doi.org/10.1093/database/baado72)

- [12] Schuldt, K., Müller, S., Petrus, A., Schiller, D. H. (2023) Praxis von ORD unterstützenden Infrastrukturen in schweizerischen Hochschul- und Forschungseinrichtungen, *Bausteine Forschungsdatenmanagement*, Nr. 2 (May). DOI: [10.17192/bfdm.2023.2.8524](https://doi.org/10.17192/bfdm.2023.2.8524)
- [11] Barillari, C., Lütcke, H., Sesartic Petrus, A., Töwe, M., Wüst, T., Rinn, B. (2020) Supporting Scientists with FAIR Research Data Management - Initiatives at ETH Zurich and beyond. *VSH-Bulletin*. Nr. 2, August 2020. pp. 22-27. https://vsh-aeu.ch/download/275/VSH_Bulletin_August_2020_WEB.pdf
- [10] Sesartic Petrus, A., & Töwe, M. (2019). Forschungsdatenmanagement an der ETH Zürich: Ansätze und Wirkung, *Bibliothek Forschung und Praxis*, 43(1), 49-60. DOI: [10.1515/bfp-2019-2002](https://doi.org/10.1515/bfp-2019-2002)
- [9] Salvatori, L., Sesartic Petrus, A., Lambeng, N., & Blumer, E. (2018). Keep calm and fill in your DMP: Lessons Learned from a Swiss DMP-template initiative. *International Journal of Digital Curation*. 13. 215-222. DOI: [10.2218/ijdc.v13i1.617](https://doi.org/10.2218/ijdc.v13i1.617)
- [8] Wullschleger, M., & Sesartic, A. (2017). Finding the Best of Both Worlds: Bridging Research and Archives at ETH Zurich. *ARC magazine* 332. 21-22. DOI: [10.3929/ethz-b-000164852](https://doi.org/10.3929/ethz-b-000164852)
- [7] Gastl, A., Geisser, F., Sesartic, A., Suri, R., & Töwe, M. (2016). iPRES 2016 in Bern 13th International Conference on Digital Preservation. *b.i.t. Online*, 19(6), 578-583. <https://www.b-i-t-online.de/heft/2016-06-reportage-gastl.pdf>
- [6] Sesartic, A., & Töwe, M. (2016). Research Data Services at ETH-Bibliothek. *IFLA Journal*, 42(4), 284-291. DOI: [10.1177/0340035216674971](https://doi.org/10.1177/0340035216674971) (Open Access Version of Paper: https://www.ifla.org/files/assets/hq/publications/ifla-journal/ifla-journal-42-4_2016.pdf#page=36)
- [5] Sesartić, A., Fischlin, A., & Töwe, M. (2016). Towards Narrowing the Curation Gap—Theoretical Considerations and Lessons Learned from Decades of Practice. *ISPRS International Journal of Geo-Information*, 5(6), 91. DOI: [10.3390/ijgi5060091](https://doi.org/10.3390/ijgi5060091)
- [4] Sesartic, A., Lohmann, U., & Storelvmo, T. (2013). Modelling the impact of fungal spore ice nuclei on clouds and precipitation. *Environmental Research Letters*, 8(1). 014029. DOI: [10.1088/1748-9326/8/1/014029](https://doi.org/10.1088/1748-9326/8/1/014029)
- [3] Sesartic, A., Lohmann, U., & Storelvmo, T. (2012). Bacteria in the ECHAM5-HAM global climate model. *Atmos. Chem. Phys.*, 12, 8645-8661. DOI: [10.5194/acp-12-8645-2012](https://doi.org/10.5194/acp-12-8645-2012)
- [2] Sesartic, A. & Dallafior, T. N. (2011). Global fungal spore emissions, review and synthesis of literature data. *Biogeosciences*, 8, 1181-1192. DOI: [10.5194/bg-8-1181-2011](https://doi.org/10.5194/bg-8-1181-2011)
- [1] Perch-Nielsen, S., Sesartic, A., & Stucki, M. (2010). The greenhouse gas intensity of the tourism sector: The case of Switzerland. *Environmental Science & Policy*, 13(2), 131-140. DOI: [10.1016/j.envsci.2009.12.002](https://doi.org/10.1016/j.envsci.2009.12.002)

Conference Proceedings

- [9] Barkow, I., Petrus, A., Pfeiffer, M., Wildi, T. (2023). RetroLab. Das Bündner Kompetenzzentrum für Retro-Computing. In: W. Semar (Hrsg.): Nachhaltige Information — Information für Nachhaltigkeit. Tagungsband des 17. Internationalen Symposiums für Informationswissenschaft (ISI 2023), Chur, Schweiz, 7.—9. November 2023. Glückstadt: Verlag Werner Hülsbusch, S. 382—386. DOI:[DOI: 10.5281/zenodo.10009337](https://doi.org/10.5281/zenodo.10009337)
- [8] Sesartic, A. & Dieudé, A. (2017). Research Data Management training and support services at both ETH Zurich and EPF Lausanne. In J. Kratzke, & V. Heuveline (Eds.) *E-Science-Tage 2017: Forschungsdaten managen* (pp. 5-12). Heidelberg: heiBOOKS. DOI: [10.11588/heibooks.285.377](https://doi.org/10.11588/heibooks.285.377)
- [7] Burgi, P.-Y., Blumer, E., Jelacic, A., Dieudé, A., & Sesartic, A. (2017). Innovative approach for project viability: from a diversity of business models to harmonized and scalable national services. In S. Hara, S. Sugimoto, & M. Goto (Eds.) *Proceedings of the 14th International Conference on Digital Preservation* (pp. 264-265). Kyoto (Japan)
- [6] Burgi, P.-Y., Blumer, E., Dieudé, A. & A. Sesartic. (2016). Workshop 05 Innovative Practices in Digital Preservation, Data Life Cycle Management (DLCM): A Swiss Initiative. In B. Signori, S. Knight, & N. Milic-Frayling (Eds.) *Proceedings of the 13th International Conference on Digital Preservation* (pp. 306). Swiss National Library, Bern. [HANDLE: 11353/10.502767](https://nbn-resolving.org/HANDLE/11353/10.502767)
- [5] Sesartic, A., Lohmann, U. and T. Storelmo. (2013). Bioaerosols in ECHAM5-HAM. *Goldschmidt2013 Conference Abstracts* (pp. 2108). European Association of Geochemistry, Geochemical Society. <https://goldschmidtabstracts.info/2013/2181.pdf>
- [4] Sesartic, A., Storelmo, T. & U. Lohmann. (2009). Sensitivity studies of freezing efficiencies of ice nucleating bacteria versus mineral dust using the ECHAM5-HAM global climate model. In J. Smolík, & C. O'Dowd (Eds.) *Proceedings of the 18th International Conference on Nucleation & Atmospheric Aerosols*. Prague, Czech Republic
- [3] Sesartić, M., Glasnović, Z., Glasnović, A., Dörig, T., Matijašević, L., Filipan, V., Jukić, A., Margeta, K., Dejanović, I., Sesartić, A. (2008). Novi standard za energetske učinkovite zgrade u Hrvatskoj (A new standard for energy efficient buildings in Croatia). In B. Franković (Ed.) *Proceedings of the International Congress Energy and the Environment* (pp. 149-159). Opatija: Croatian Solar Energy Association
- [2] Sesartić, A. (2007). Opportunities for implementation of low-energy building standards in Croatia and the resulting benefits. In N. Koprivanac & H. Kušić (Eds.) *Proceedings of the 2nd International Symposium on Environmental Management*, Zagreb: Inter-Ing.
- [1] Glasnović, Z., A. Sesartić & M. Sesartić. (2006). Solar hydrogen conversion in Croatian solar House. In B. Franković (Ed.) *Proceedings of the International Congress Energy and the Environment* (pp. 199-208). Opatija: Croatian Solar Energy Association

Conference Posters

Presenting authors indicated by *

- [14] Chandrakumar, S.*, Klessascheck, F., Wiedmer, S.*, Petrus, A*. Graph me up Scotty! Automated RDF Triple Extraction from Unstructured Text Using Fine-Tuned Large Language Models. LIBER 2025, Lausanne, Switzerland, 2-4 July 2025
- [13] Barkow, I.*, Petrus, A.*, Pfeiffer, M.*, Wildi, T.* RetroLab. Das Bündner Kompetenzzentrum für Retro-Computing. In: W. Semar (Hrsg.): Nachhaltige Information — Information für Nachhaltigkeit. Tagungsband des 17. Internationalen Symposiums für Informationswissenschaft (ISI 2023), Chur, Schweiz, 7.—9. November 2023. Glückstadt: Verlag Werner Hülsbusch, S. 382—386. DOI:[DOI: 10.5281/zenodo.10009337](https://doi.org/10.5281/zenodo.10009337)
- [12] Sesartic, A.* Beratungs- und Schulungsangebote im Bereich Forschungsdatenmanagement für Forschende der ETH Zürich. 18. DINI-Jahrestagung "Forschungsdaten - von der Produktion bis zur Langzeitarchivierung", Göttingen, Germany, 4-5 October 2017.
- [11] Dieudé, A.*, Blumer, E.*, Krause, J.*, Salvatori, L.*, Sesartic, A.* Visible data, invisible disparities: the politics of research data management in Switzerland. 11th International Digital Curation Conference. Amsterdam, The Netherlands, 22-25 February 2016.
- [10] Sesartic, A.* Datenmanagement als Voraussetzung für Open Access - Ein Fallbeispiel. Open-Access-Tage 2015, Zurich, Switzerland, 7-8 September 2015. [DOI: 10.5281/zenodo.30763](https://doi.org/10.5281/zenodo.30763)
- [9] Dallafor, T.*, Folini, D., Sesartic, A., Wild, M., and R. Knutti. Modelling Anthropogenic Aerosol Radiative Impacts on Oceanic Surface Energy Fluxes. Symposium *The Water Cycle in a Changing Climate*, Zurich, Switzerland, 1-2 July 2013.
- [8] Dallafor, T.*, Folini, D., Sesartic, A., Wild, M. and R. Knutti. Identification of Remote Regions with Significant Anthropogenic Aerosol Forcing and its Climate Implications. *European Geosciences Union General Assembly 2013*, Vienna, Austria, 7-12 April 2013.
- [7] Bretl, S.*, P. Reutter, C.C. Raible, A. Sesartic, and U. Lohmann. Dust and Hurricanes. *Third International Conference on Earth System Modelling*, Hamburg, Germany, 17-21 September 2012.
- [6] Sesartic, A.*, Lohmann, U., Storelvmo, T. and T. Dallafor. Modelling global emissions of bacteria and fungal spores acting as ice nuclei. *3rd iLEAPS Science Conference*, Garmisch-Partenkirchen, Germany, 18-23 September, 2011.
- [5] Sesartic, A.*, Lohmann, U. and T. Storelvmo. Bacteria in the ECHAM5-HAM global climate model. *COMBINE General Assembly*. Zurich, Switzerland, 9-11 June 2010.
- [4] Sesartic, A.*, Lohmann, U. and T. Storelvmo. Bacteria in the ECHAM5-HAM global climate Model. *11th Swiss Global Climate Change Day*. Bern, Switzerland, 20 April 2010.
- [3] Sesartic, A.*, T. Storelvmo and U. Lohmann. Bioaerosol in the ECHAM5-HAM global climate model. *10th Swiss Global Climate Change Day*. Bern, Switzerland, 31 March 2009.

- [2] Sesartic, A.*, M. Stucki and S. Perch-Nielsen. How Climate Efficient is Tourism in Switzerland? *9th Swiss Global Climate Change Day*. Bern, Switzerland, 1 April 2008.
- [1] Sesartic, A., M. Stucki and S. Perch-Nielsen*. How Climate Efficient is Tourism in Switzerland? *CLITOP: International Conference on Climate Change Impacts on Tourism*. Lisbon, Portugal, 7-8 September 2007.

Web-based Publications

- [10] Petrus, A. (2024) Highlights from the Swiss Research Data Day. FHGR Blog. 10 December 2024 <https://blog.fhgr.ch/blog/swiss-research-data-day-2024>
- [9] Petrus, A. (2022) Handbuch zur Anwendung und Unterricht von FAIR Prinzipien an Hochschulen. FHGR Blog. 1 March 2022 <https://blog.fhgr.ch/blog/fair-prinzipien-an-hochschulen/>
- [8] Petrus, Ana & Wildi, Tobias (2021) Erfassung der Bedürfnisse und Erarbeitung von Szenarien für die Swiss Virtual Natural History Collection (SVNHC). FHGR News. 19. November 2021 <https://www.fhgr.ch/news/newsdetail/swiss-virtual-natural-history-collection-projekt/>
- [7] Petrus, Ana (2021) Agiles Bücherschreiben Online - Ein Erlebnisbericht. FHGR Blog. 27 July 2021. <https://blog.fhgr.ch/blog/agiles-bucherschreiben-online/>
- [6] Sesartic, A. (2018, February 9). We love data. Why data management matters. *Explora*. DOI: [10.22010/ethz-exp-0006-en](https://doi.org/10.22010/ethz-exp-0006-en)
- [5] Sesartic, A. (2018, February 9). Wir lieben Daten. Warum Datenmanagement wichtig ist. *Explora*. DOI: [10.22010/ethz-exp-0006-de](https://doi.org/10.22010/ethz-exp-0006-de)
- [4] Sesartic, A. (2017, February 27). Surfing the sea of data. Handling data storage and preventing degradation. *Explora*. DOI: [10.22010/ethz-exp-0002-en](https://doi.org/10.22010/ethz-exp-0002-en)
- [3] Sesartic, A. (2017, February 27). Surfen im Datenmeer. Datenspeicherung und Schutz vor Datenverfall. *Explora*. DOI: [10.22010/ethz-exp-0002-de](https://doi.org/10.22010/ethz-exp-0002-de)
- [2] Sesartic, A. (2016, July 25). Bridging the Curation Gap between Research and Libraries – A Case Study. *Innovation@ETH-Bibliothek*. <https://blogt.ethz.ch/innovethbib/en/2016/07/25/fallstudie-zu-curation-gap-zwischen-forschungs-und-bibliothekspraxis/>
- [1] Sesartic, A. (2016, July 25). Fallstudie zu “Curation Gap” zwischen Forschung und Bibliothekspraxis. *Innovation@ETH-Bibliothek*. <https://blogt.ethz.ch/innovethbib/2016/07/25/fallstudie-zu-curation-gap-zwischen-forschungs-und-bibliothekspraxis/>

Theses

- [4] Sesartić, A. (2011). *Bacteria and fungal spores in the global climate model ECHAM5-HAM*. (DISS. ETH NO. 19574) [Doctoral dissertation, ETH Zurich]. ETH Zurich Research Collection. [DOI: 10.3929/ethz-a-006541186](https://doi.org/10.3929/ethz-a-006541186)
- [3] Sesartic, A. & Stucki, M. (2007). *How Climate Efficient is Tourism in Switzerland? An Assessment of Tourism's Carbon Dioxide Emissions in Relation to Its Added Value*. [Diploma Thesis, Department of Environmental Sciences, ETH Zurich].
- [2] Sesartic, A. (2006). *Label for exemplary energy management in tenant households webconcept (EnergieWG)*. [Semester Thesis, Department of Environmental Sciences, ETH Zurich].
- [1] Sesartic, A. (2006). *Opportunities for implementation of low-energy building standards in Croatia and the resulting benefits*. [Semester Thesis, Department of Environmental Sciences, ETH Zurich].

Reports and Other Publications

- [12] LIBER Research Data Management Working Group. (2024). A guide to FAIR practices in research libraries. https://libereurope.eu/wp-content/uploads/A-Guide-to-FAIR-Practices-in-Research-Libraries_2024.pdf
- [11] Milijković, N., Colomb, J., Maxeiner, M., Mies, R., Petrus, A., Milovanović, V., Panighel, M., Struck, A. (2024) Research Hardware Definition. A report by the RDA FAIR4RH Interest Group, Subgroup 1: FAIR4RH-Definition. Research Data Alliance. [DOI: 10.15497/RDA00105](https://doi.org/10.15497/RDA00105)
- [10] LIBER Research Data Management Working Group. (2023). Report on outputs on LIBER Winter Event Workshop "Data management skills and training development for libraries" https://libereurope.eu/wp-content/uploads/2023/04/Report-on-Winter-Event-Workshop_PDF-1.pdf
- [9] LIBER Research Data Management Working Group. (2022) A Practical Guide to FAIR Practices in Research Libraries <https://libereurope.eu/wp-content/uploads/2022/09/A-Practical-Guide-to-FAIR-Practices-in-Research-Libraries-2022.pdf>
- [8] Petrus, A.; Wildi, T. (2021). Preproject "Swiss Virtual Natural History Collection". report mandated by Swiss Academy of Sciences (SCNAT). Chur, 22. December 2021. confidential.
- [7] Barkow, I.; Schiller, D.; Petrus, A.; Schuldt, K.; Calisto, M. (2021) ORD (open research data) landscape in Switzerland. report mandated by swissuniversities. Chur, 7. December 2021. confidential.
- [6] ETH Library (lead author at ETH Library, Sesartic, A.) & EPFL Library. (2017) DLCM Template for the SNSF Data Management Plan. https://www.dlcm.ch/download_file/force/77/281

- [5] Perch-Nielsen, S., Sesartic, A., & Stucki, M. (2010). The greenhouse gas intensity of the tourism sector: The case of Switzerland. In G. Müller-Ferch (Ed.) *Global Change Abstracts* 10.3, *The Swiss Contribution* (pp. 204-205). ProClim
- [4] Sesartic, A., & Stucki, M. (2007). How Climate Efficient is Tourism in Switzerland? *Studio!Sus - the student guide on sustainability*, (9), 47-49.
- [3] Desnica, U. and Sesartić, A. (2006). *Roadmap for a wide-scale integration of renewable energy sources in isolated regions of Croatia*. WP6 – Projection to future large-scale integration of RES in isolated regions – economic and environmental aspects. A part of the 6th Framework European project RISE (Renewables for isolated systems - Energy supply and waste water treatment. Ruđer Bošković Institute, Zagreb.
- [2] Environmental Sciences Master Students. (2006). *Environment bio-security of genetically modified plants*. Environmental Sciences study case study, Working Group: consumer choice for non-food product sector. Institute of Integrative Biology. Plant Ecology. ETH Zurich.
- [1] Sesartic, A., Stemmler, S., & Stucki, M. (2006) *Anthropogene Lichtemissionen - Ein Umweltproblem im Verkehrskorridor*. Praktikumsbericht System Anthroposphäre "Mobilitätskorridore im urbanen System". ETH Zurich