

# Publication List of Dr. Daniel Odermatt

## PEER-REVIEWED JOURNALS (IN REVISION)

- [1] Calamita, E., Lever, J. J., Albergel, C., Woolway, R., Odermatt, D., in revision. Detecting climate-related shifts in lakes: what is the role of Earth Observation satellites? *Limnology and Oceanography*.

## PEER-REVIEWED JOURNALS (REVISED)

- [2] Ruppen, D., Runnalls, J., Tshimanga, R., Wehrli, B., Odermatt, D., revised. Optical remote sensing of large-scale water pollution caused by the Catoca Mine tailings spill. *Hydrology and Earth System Sciences*.
- [3] Ehrenfels, B., Baumann, K., Niederdorfer, R., Mbonde, A.S., Kimirei, I.A., Kuhn, T., Magyar, P., Mohr, W., Odermatt, D., Schubert, C.J., Bürgmann, H., Lehmann, M.F., Wehrli, B., Callbeck, C.M., revised. Hydrodynamic regimes modulate nitrogen fixation and the mode of diazotrophy in Lake Tanganyika. *Science Advances*.
- [4] La Cecilia, D., Tom, M., Stamm, C., Odermatt, D., revised. Pixel-based mapping of open field and protected agriculture using constrained Sentinel-2 data. *ISPRS Open Journal of Photogrammetry and Remote Sensing*.

## PEER-REVIEWED JOURNALS (PUBLISHED)

- [5] McFadden, I.R., Sendek, A., Brosse, M., Bach, P.M., Baity-Jesi, M., Bolliger, J., Bollmann, K., Brockerhoff, E.G., Donati, G., Gebert, F., Ghosh, S., Ho, H.-C., Khaliq, I., Lever, J.J., Logar, I., Moor, H., Odermatt, D., Pellissier, L., de Queiroz, L.J., Rixen, C., Schuwirth, N., Shipley, J.R., Twining, C.W., Vitasse, Y., Vorburger, C., Wong, M.K.L., Zimmermann, N.E., Seehausen, O., Gossner, M.M., Matthews, B., Graham, C.H., Altermatt, F., Narwani, A., 2023. Linking human impacts to community processes in terrestrial and freshwater ecosystems. *Ecol. Lett.* 26. <https://doi.org/10.1111/ele.14153>
- [6] Many, G., Escoffier, N., Ferrari, M., Jacquet, P., Odermatt, D., Mariethoz, G., Perolo, P., Perga, M.-E., 2022. Long-Term Spatiotemporal Variability of Whittings in Lake Geneva from Multispectral Remote Sensing and Machine Learning. *Remote Sens.* 14. <https://doi.org/10.3390/rs14236175>
- [7] Gupana, R.S., Damm, A., Rahaghi, A.I., Minaudo, C., Odermatt, D., 2022. Non-photochemical quenching estimates from in situ spectroradiometer measurements: implications on remote sensing of sun-induced chlorophyll fluorescence in lakes. *Opt Express* 30, 46762–46781. <https://doi.org/10.1364/OE.469402>
- [8] Werther, M., Odermatt, D., Simis, S.G.H., Gurlin, D., Lehmann, M.K., Kutser, T., Gupana, R., Varley, A., Hunter, P.D., Tyler, A.N., et al. (2022). A Bayesian approach for remote sensing of chlorophyll-a and associated retrieval uncertainty in oligotrophic and mesotrophic lakes. *Remote Sens. Environ.* 283, 113295. [10.1016/j.rse.2022.113295](https://doi.org/10.1016/j.rse.2022.113295).
- [9] Gilarranz, L.J., Narwani, A., Odermatt, D., Siber, R., Dakos, V., 2022. Regime shifts, trends, and variability of lake productivity at a global scale. *Proceedings of the National Academy of Sciences* 119, e2116413119. <https://doi.org/10.1073/pnas.2116413119>
- [10] Werther, M., Odermatt, D., Simis, S.G.H., Gurlin, D., Jorge, D.S.F., Loisel, H., Hunter, P.D., Tyler, A.N., Spyarakos, E., 2022. Characterising retrieval uncertainty of chlorophyll-a algorithms in oligotrophic and mesotrophic lakes and reservoirs. *ISPRS Journal of Photogrammetry and Remote Sensing* 190, 279–300. <https://doi.org/10.1016/j.isprsjprs.2022.06.015>
- [11] Li, C., Odermatt, D., Bouffard, D., Wüest, A., and Kohn, T. (2022). Coupling remote sensing and particle tracking to estimate trajectories in large water bodies. *Int. J. Appl. Earth Obs. Geoinformation* 110, 102809.

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#### BOOK CHAPTERS (PUBLISHED)

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- [41] Greb, S., Odermatt, D., Schaeffer, B., Spyrakos, E., Wang, M. (2018): Complementarity of in-situ and satellite measurements. In: *Earth observations in support of global water quality monitoring*, Greb, S., Dekker, A., Binding, C., eds. (IOCCG Report no. 17).
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## CONFERENCE PROCEEDINGS

- [47] Odermatt, D., Stelzer, K., Koponen, S., Philipson, P., Brockmann, C., Saile, P., and Koetz, B. (2016). Water quality remote sensing in support of the UN Sustainable Development Goals. In: Proc. ESA Living Planet Symposium, Prague, Czech Republic: ESA/ESRIN, p. 5.
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#### SOFTWARE

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#### DATA

- [65] Mölg, N., Allen, S., Odermatt, D. (2021): Inventory and evolution of glacial lakes in Switzerland since the Little Ice Age. PANGAEA, <https://doi.org/10.1594/PANGAEA.934190>.
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