

## Wolfgang Wanek

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### Publications in peer-reviewed journals

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1. Knight C.G., Nicolitch O., Griffiths R.I., Goodall T., Jones B., Weser C., Langridge H., Davison J., Dellavalle A., Eisenhauer N., Gongalsky K.B., Hector A., Jardine E., Kardol P., Maestre F.T., Schädler M., Semchenko M., Stevens C., Tsiafouli M.A., Vilhelmsson O., **Wanek W.**, de Vries F.T. (2024) Soil microbiomes show consistent and predictable responses to extreme events across climates. *Nature* **X**, YY. doi: 10.1038/s41586-024-08185-3.
2. Liu M., Xu X., **Wanek W.**, Sun J., Bardgett R., Yuqiang T., Cui X., Jiang L., Ma Z., Kuzyakov Y., Song M., Wang Y. (2024) Nitrogen availability in soil controls uptake of different nitrogen forms by plants. *New Phytologist* **X**, YY. doi: zzz.
3. Ma S.L., Zhu W.Z., Wang W.W., Li X., Sheng Z.L., **Wanek W.** (2024) Increased microbial carbon use efficiency and turnover rate drive soil organic carbon storage in old-aged forest on the southeastern Tibetan Plateau. *Biology and Fertility of Soils* **X**, YY. doi: 10.1007/s00374-024-01877-y.
4. Nemetschek D., Fortunel C., Marcon E., Auer J., Badouard V., Baraloto C., Boisseaux M., Bonal D., Coste S., Dardevette E., Heuret P., Hietz P., Levionnois S., Maréchaux I., Stahl C., Vleminckx J., **Wanek W.**, Ziegler C., Derroire G. (2024) Love thy neighbour? Tropical tree growth and its response to climate anomalies is mediated by neighbourhood hierarchy and dissimilarity in carbon and water related traits. *Ecology Letters* **X**, YY. doi: 10.22541/au.171366417.71658960/v1.
5. Lee U.-J., Gwak J.-H., Choi S., Jung M.-Y., Lee T.K., Ryu H., Awala S.I., **Wanek W.**, Wagner M., Quan Z.-X., and Rhee S.-K. (2024) "Ca. Nitrosocosmicus" members are the dominant archaea associated with plant rhizospheres. *mSphere* **X**, YY. doi: 10.1101/2024.01.08.574571.
6. Zhu Z., **Wanek W.**, Gao K., Fang Y., Li D. (2024) Increasing plant species diversity benefits soil protein accumulation in a subtropical forest. *Journal of Applied Ecology* **X**, YY. doi: 10.1111/1365-2664.14793.
7. Spohn M., **Wanek W.** (2024) Quantifying element fluxes using radioisotopes. *New Phytologist* **X**: YY. doi: 10.1111/nph.20203.
8. Liu X., Heinzle J., Tian Y., Salas E., Kwatcho-Kengdo S., Borken W., Schindlbacher A., **Wanek W.** (2024) Long-term soil warming changes the profile of primary metabolites in fine roots of Norway Spruce in a temperate montane forest. *Plant Cell Environment* **47**:4212-4226. doi: 10.1111/pce.15019.
9. Shi K., Liao J., Zou X., Chen H.Y.H., Delgado-Baquerizo M., **Wanek W.**, Ni J., Ren T., Zhang C., Yan Z., Ruan H. (2024) Forest development induces soil aggregate formation and stabilization: implications for sequestration of soil carbon and nitrogen. *Catena* **246**: 108363. doi: 10.1016/j.catena.2024.108363.
10. Liu X., Tian Y., Heinzle J., Salas E., Kwatcho-Kengdo S., Borken W., Schindlbacher A., **Wanek W.** (2024) Long-term soil warming decreases soil microbial necromass carbon by adversely affecting its production and decomposition. *Global Change Biology* **30**: e17379. doi: 10.1111/gcb.17379
11. Tang S., Pan W., Ma Q., **Wanek W.**, Marsden K.A., Kuzyakov Y., Chadwick D.R., Wu L., Gregory A., Jones D.L. (2024) Soil nitrogen and phosphorus regulate decomposition of organic nitrogen compounds in the Rothamsted experiment. *Soil Biology and Biochemistry* **196**: 109502. doi: 10.1016/j.soilbio.2024.109502.
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14. Mao X., Sun T., Zhu L., **Wanek W.**, Cheng Q., Wang X., Zhou J., Liu X., Ma Q., Wu L., Jones D.L. (2024) Microbial adaptation to stoichiometric imbalances regulated the size of soil mineral-associated organic carbon pool under continuous organic amendments. *Geoderma* **445**: 16883. doi: 10.1016/j.geoderma.2024.116883
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19. Nemetschek D., Derroire G., Marcon E., Aubry-Kientz M., Auer J., Badouard V., Baraloto C., Bauman D., Le Blaye Q., Boisseaux M., Bonal D., Coste S., Dardevet E., Heuret P., Hietz P., Levionnois S., Maréchaux I., McMahon S., Stahl C., Vleminckx J., **Wanek W.**, Ziegler C., Fortunel C. (2024) Climate anomalies and neighbourhood crowding interact in shaping tree growth in old-growth and selectively-logged tropical forests. *Journal of Ecology* **112**: 590-612. doi: 10.1111/1365-2745.14256
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  31. Maxwell T.L., Augusto L., Tian Y., **Wanek W.**, Fanin N. (2023) Water availability is a stronger driver of soil microbial processing of organic nitrogen than tree species composition. *European Journal of Soil Science* **74**: e13350. doi: 10.1111/ejss.13350
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