

Publications

SCI-listed peer-reviewed papers: 28

First author/senior author: 11

Number of citations: 458

h-index: 14 (SCOPUS, Oct, 2017)

Peer-reviewed book chapters: 2

- [1] Schenkeveld, W. D. C., Kimber, R. L., Walter, M., **Oburger, E.**, Puschenreiter, M., and Kraemer, S. M., 2017. "Experimental considerations in metal mobilization from soil by chelating ligands: The influence of soil-solution ratio and pre-equilibration - a case study on Fe acquisition by phytosiderophores," *Science of the Total Environment*, 579, 1831-1842, <http://dx.doi.org/10.1016/j.scitotenv.2016.11.168>
- [2] Puschenreiter, M., Gruber, B., Wenzel, W. W., Schindlegger, Y., Hann, S., Spangl, B., Schenkeveld, W. D. C., Kraemer, S. M., and **Oburger, E.**, 2017. "Phytosiderophore-induced mobilization and uptake of Cd, Cu, Fe, Ni, Pb and Zn by wheat plants grown on metal-enriched soils," *Environmental and Experimental Botany*, 138, 67-76, <http://dx.doi.org/https://doi.org/10.1016/j.envexpbot.2017.03.011>
- [3] Walter, M., **Oburger, E.**, Schindlegger, Y., Hann, S., Puschenreiter, M., Kraemer, S. M., and Schenkeveld, W. D. C., 2016. "Retention of phytosiderophores by the soil solid phase - adsorption and desorption," *Plant and Soil*, 404, 85-97, <http://dx.doi.org/10.1007/s11104-016-2800-x>
- [4] **Oburger, E.** and Schmidt, H., 2016. "New methods to unravel rhizosphere processes," *Trends in Plant Science*, 21, 243-255, <http://dx.doi.org/10.1016/j.tplants.2015.12.005>
- [5] **Oburger, E.**, Jäger, A., Pasch, A., Dellantonio, A., Stampfer, K., and Wenzel, W. W., 2016. "Environmental impact assessment of wood ash utilization in forest road construction and maintenance - a field study," *Science of the Total Environment*, 544, 711-721, <http://dx.doi.org/10.1016/j.scitotenv.2015.11.123>
- [6] **Oburger, E.**, Gruber, B., Wanek, W., Watzinger, A., Stanetty, C., Schindlegger, Y., Hann, S., Schenkeveld, W. D. C., Kraemer, S. M., and Puschenreiter, M., 2016. "Microbial decomposition of ¹³C-labeled phytosiderophores in the rhizosphere of wheat: Mineralization dynamics and key microbial groups involved," *Soil Biology & Biochemistry*, 98, 196-207, <http://dx.doi.org/10.1016/j.soilbio.2016.04.014>
- [7] Glanville, H. C., Hill, P. W., Schnepf, A., **Oburger, E.**, and Jones, D. L., 2016. "Combined use of empirical data and mathematical modelling to better estimate the microbial turnover of isotopically labelled carbon substrates in soil," *Soil Biology & Biochemistry*, 94, 154-168, <http://dx.doi.org/10.1016/j.soilbio.2015.11.016>
- [8] Valentinuzzi, F., Mimmo, T., Cesco, S., Al Mamun, S., Santner, J., Hofer, C., **Oburger, E.**, Robinson, B., and Lehto, N., 2015. "The effect of lime on the rhizosphere processes and elemental uptake of white lupin," *Environmental and Experimental Botany*, 118, 85-94, <http://dx.doi.org/10.1016/j.envexpbot.2015.06.010>
- [9] Schindlegger, Y., **Oburger, E.**, Puschenreiter, M., Stingeder, G., Koellensperger, G., and Hann, S., 2015. "Speciation of ²-deoxymugineic acid-metal complexes in top soil extracts by multi-modal stationary phase LC-ICP-MS," *Journal of Analytical Atomic Spectrometry*, 30, 1345-1355, <http://dx.doi.org/10.1039/c5ja00018a>
- [10] Larsen, M., Santner, J., **Oburger, E.**, Wenzel, W. W., and Glud, R. N., 2015. "O₂ dynamics in the rhizosphere of young rice plants (*Oryza sativa* L.) as studied by planar optodes," *Plant and Soil*, 390, 279-292, <http://dx.doi.org/10.1007/s11104-015-2382-z>
- [11] Kloss, S., Zehetner, F., Buecker, J., **Oburger, E.**, Wenzel, W. W., Enders, A., Lehmann, J., and Soja, G., 2015. "Trace element biogeochemistry in the soil-water-plant system of a temperate

- agricultural soil amended with different biochars," *Environmental Science and Pollution Research*, 22, 4513-4526, <http://dx.doi.org/10.1007/s11356-014-3685-y>
- [12] Williams, P. N., Santner, J., Larsen, M., Lehto, N. J., **Oburger, E.**, Wenzel, W., Glud, R. N., Davison, W., and Zhang, H., 2014. "Localized flux maxima of arsenic, lead, and iron around root apices in flooded lowland rice," *Environmental Science & Technology*, 48, 8498-8506, <http://dx.doi.org/10.1021/es501127k>
- [13] Schindlegger, Y., **Oburger, E.**, Gruber, B., Schenkeveld, W. D. C., Kraemer, S. M., Puschenreiter, M., Koellensperger, G., and Hann, S., 2014. "Accurate LC-ESI-MS/MS quantification of 2-deoxymugineic acid in soil and root related samples employing porous graphitic carbon as stationary phase and a C-13(4)-labeled internal standard," *Electrophoresis*, 35, 1375-1385, <http://dx.doi.org/10.1002/elps.201300551>
- [14] Schenkeveld, W. D. C., Schindlegger, Y., **Oburger, E.**, Puschenreiter, M., Hann, S., and Kraemer, S. M., 2014. "Geochemical processes constraining iron uptake in strategy ii fe acquisition," *Environmental Science & Technology*, 48, 12662-12670, <http://dx.doi.org/10.1021/es5031728>
- [15] Schenkeveld, W. D. C., **Oburger, E.**, Gruber, B., Schindlegger, Y., Hann, S., Puschenreiter, M., and Kraemer, S. M., 2014. "Metal mobilization from soils by phytosiderophores - experiment and equilibrium modeling," *Plant and Soil*, 383, 59-71, <http://dx.doi.org/10.1007/s11104-014-2128-3>
- [16] **Oburger, E.**, Gruber, B., Schindlegger, Y., Schenkeveld, W. D. C., Hann, S., Kraemer, S. M., Wenzel, W. W., and Puschenreiter, M., 2014. "Root exudation of phytosiderophores from soil-grown wheat," *New Phytologist*, 203, 1161-1174, <http://dx.doi.org/10.1111/nph.12868>
- [17] Kloss, S., Zehetner, F., **Oburger, E.**, Buecker, J., Kitzler, B., Wenzel, W. W., Wimmer, B., and Soja, G., 2014. "Trace element concentrations in leachates and mustard plant tissue (*sinapis alba* L.) after biochar application to temperate soils," *Science of the Total Environment*, 481, 498-508, <http://dx.doi.org/10.1016/j.scitotenv.2014.02.093>
- [18] **Oburger, E.**, Dell'mour, M., Hann, S., Wieshammer, G., Puschenreiter, M., and Wenzel, W. W., 2013. "Evaluation of a novel tool for sampling root exudates from soil-grown plants compared to conventional techniques," *Environmental and Experimental Botany*, 87, 235-247, <http://dx.doi.org/10.1016/j.envexpbot.2012.11.007>
- [19] **Oburger, E.**, Leitner, D., Jones, D. L., Roose, T., and Schnepf, A., 2012. "Response to n. J. Barrow by e. Oburger*, d. Leitner, d. L. Jones, t. Roose, a. Schnepf," *European Journal of Soil Science*, 63, 528-530, <http://dx.doi.org/10.1111/j.1365-2389.2012.01458.x>
- [20] Iqbal, M., Puschenreiter, M., **Oburger, E.**, Santner, J., and Wenzel, W. W., 2012. "Sulfur-aided phytoextraction of cd and zn by *salix smithiana* combined with in situ metal immobilization by gravel sludge and red mud," *Environmental Pollution*, 170, 222-231, <http://dx.doi.org/10.1016/j.envpol.2012.07.008>
- [21] Dell'mour, M., Schenkeveld, W., **Oburger, E.**, Fischer, L., Kraemer, S., Puschenreiter, M., Lammerhofer, M., Koellensperger, G., and Hann, S., 2012. "Analysis of iron-phytosiderophore complexes in soil related samples: Lc-esi-ms/ms versus ce-ms," *Electrophoresis*, 33, 726-733, <http://dx.doi.org/10.1002/elps.201100466>
- [22] **Oburger, E.**, Leitner, D., Jones, D. L., Zygalkakis, K. C., Schnepf, A., and Roose, T., 2011. "Adsorption and desorption dynamics of citric acid anions in soil," *European Journal of Soil Science*, 62, 733-742, <http://dx.doi.org/10.1111/j.1365-2389.2011.01384.x>
- [23] **Oburger, E.**, Jones, D. L., and Wenzel, W. W., 2011. "Phosphorus saturation and ph differentially regulate the efficiency of organic acid anion-mediated p solubilization mechanisms in soil," *Plant and Soil*, 341, 363-382, <http://dx.doi.org/10.1007/s11104-010-0650-5>
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- [26] Dell'mour, M., Jaitz, L., **Oburger, E.**, Puschenreiter, M., Koellensperger, G., and Hann, S., 2010. "Hydrophilic interaction LC combined with electrospray MS for highly sensitive analysis of underivatized amino acids in rhizosphere research," *Journal of Separation Science*, 33, 911-922, <http://dx.doi.org/10.1002/jssc.200900743>
- [27] **Oburger, E.**, Kirk, G. J. D., Wenzel, W. W., Puschenreiter, M., and Jones, D. L., 2009. "Interactive effects of organic acids in the rhizosphere," *Soil Biology & Biochemistry*, 41, 449-457, <http://dx.doi.org/10.1016/j.soilbio.2008.10.034>
- [28] **Oburger, E.** and Jones, D. L., 2009. "Substrate mineralization studies in the laboratory show different microbial C partitioning dynamics than in the field," *Soil Biology & Biochemistry*, 41, 1951-1956, <http://dx.doi.org/10.1016/j.soilbio.2009.06.020>

Book chapters

- Wenzel, W.W., **Oburger, E.**, Puschenreiter, M., and Santner, J. (2011): Trace Element Biogeochemistry in the Rhizosphere. In: H. Magdi Selim (Ed.), Dynamics and Bioavailability of Heavy Metals in the Root Zone, 299; CRC Press, Boca Raton, London, New York; ISBN 978-1-4398-2622-5
- Jones, D.L., and **Oburger, E.** (2011). Solubilization of Phosphorus by Soil Microorganisms (Berlin, Heidelberg: Springer Berlin Heidelberg), pp. 169-198; ISBN 978-3-642-15270-2