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I Publications in peer-reviewed journals

• Original research articles

- (40) Monei N, Hitch M, Heim J, Pourret O, Heilmeier H, **Wiche O** (2022) Effect of substrate properties and P-supply on on facilitating the uptake of rare earth elements (REE) in in mixed-culture cropping systems of *Hordeum vulgare*, *Lupinus albus* and *Lupinus angustifolius*. Environmental Science and Pollution Research (in press).
- (39) Vu H, Merkel B, **Wiche O** (2022) Major ions, trace elements and evidence of groundwater contamination in Hanoi, Vietnam. Environmental Earth Sciences 81(11), 305.
- (38) Okoroafor PU, Mann L, Ngu KA, Zaffar N, Monei N, Boldt C, Reitz T, Heilmeier H, **Wiche O** (2022) Phytoaccumulation of nutrients, germanium, rare earth elements, potentially toxic elements and bacterial community structure in the rhizosphere as affected by *Bacillus amyloliquefaciens* FZB42. Plants 022, 11(3), 341.
- (37) Okoroafor PU, Kunisch N, Epede MN, Ogunkunle CO, Heilmeier H, **Wiche O** (2022) phytoextraction of germanium, rare earth elements and potentially toxic elements as affected by fertilization and liming. Environmental Technology and Innovation 28, 102607.
- (36) Okoroafor PU, Ikwuka G, Zaffar N, Epede MN, Mensah MK, Johann H, Golde A, Heilmeier H, **Wiche O** (2022) Field Studies on the Effect of Bioaugmentation with *Bacillus amyloliquefaciens* FZB42 on Plant Accumulation of Rare Earth Elements and Selected Trace Elements. Minerals 12(4), 409.
- (35) Okoroafor PU, Ogunkunle CO, Heilmeier H, **Wiche O** (2022) Phytoaccumulation potential of nine plant species for selected nutrients, rare earth elements (REEs), germanium (Ge), and potentially toxic elements (PTEs) in soil. International Journal of Phytoremediation 2022.
- (34) Pourret O, van der Ent A, Hursthouse A, Irwan DE, Liu H, **Wiche O** (2021) The ‘europium anomaly’ in plants: facts and fiction. Plant and Soil (in press).
- (33) **Wiche O**, Albrecht A, Galinsky B, Lehmann L, Prüb P, Schreck M (2021) Biogeochemical characterization of surface substrates and selected plant species on the Spülhalde Münzbachtal. Freiberg Ecology online 8, 19–32.
- (32) Schilling L, Döring S, Kunz L-S, **Wiche O** (2021) Accumulation of trace elements in crop plants as affected by substrate properties, soil solution chemistry, and N-fertilization. Freiberg Ecology online 8, 1–18.
- (31) Schwabe R, Dittrich C, Kadner J, Senges CHR, Bandow JE, Tischler D, Schlömann M, Levicán G, **Wiche O** (2021) Secondary metabolites released by the rhizosphere bacteria *Arthrobacter oxydans* and *Kocuria rosea* enhance plant availability and soil–plant transfer of germanium (Ge) and rare earth elements (REEs). Chemosphere 285, 131466.
- (30) Abdulameer A, Thabit J, Kanoua W, **Wiche O**, Merkel B (2021) Possible sources of salinity in the upper Dibdibba Aquifer, Basrah, Iraq. Water 13.
- (29) Schreiter N, **Wiche O**, Aubel I, Roode-Gutzmer Q, Bertau M (2021) Determination of germanium in plant and soil samples using high-resolution continuum-source graphite furnace atomic absorption spectrometry (HR-CS GFAAS) with solid sampling. Journal of Geochemical Exploration 220, 106674.

- (28) Schwabe R, Senges CHR, Bandow, JE, Heine T, Lehmann H, **Wiche O**, Schlömann M, Levican G, Tischler D (2020) Cultivation dependent formation of siderophores by *Gordonia rubripertincta* CWB2. *Microbiological Research* 238, 126481.
- (27) Schwabe R, Senges CHR, Bandow, JE, Heine T, Lehmann H, **Wiche O**, Schlömann M, Levican G, Tischler D (2020) Data on metal-chelating, -immobilisation and biosorption properties by *Gordonia rubripertincta* CWB2 in dependency on rare earth adaptation. *Data in Brief* 31, 105739.
- (26) Balinski A, **Wiche O**, Kelly N, Reuter MA, Scharf C (2020) Separation of rare earth elements from contaminants and valuable components by in-situ precipitation during the hydrometallurgical processing of eudialyte concentrate. *Hydrometallurgy* 194, 105345.
- (25) Moneron-Enaud B., **Wiche O.**, Schlömann M. (2020) Biodismantling, a Novel Application of Bioleaching in Recycling of Electronic Wastes. *Recycling* 5, 22.
- (24) Dittrich C, Gustav K, Benyr V, Drechsler L, Häuser L, Kadner J, Kunisch N, Leucht T, Opitz T, Rom A, Röder E, Schmidt E, Schramm S, Zerbs M, Oettel P, Meißner S, **Wiche O** (2020): Bioverfügbarkeit von potentiell toxischen Spurenelementen im Oberboden der Schlackenhalde Hohe Esse (Halsbrücke). *Freiberg Ecology online* 7, 1–20.
- (23) Kaiser S, Wagner S, Moschner C, Funke C, **Wiche O** (2020) Accumulation of germanium (Ge) in plant tissues of grasses is not solely driven by its incorporation in phytoliths. *Biogeochemistry* 148, 49–68.
- (22) Moschner C, Feuerstein U, Heilmeier H, Zaffar N, **Wiche O** (2020) Effect of substrate properties on the mobility of selected trace elements in soil and concentrations in shoots of *Phalaris arundinacea*. *Carpathian Journal of Earth and Environmental Sciences* 15, 49–56.
- (21) Zaffar N, Ferchau E, Feuerstein U, Heilmeier H, Moschner C, **Wiche O** (2020) Concentration of selected plant nutrients and target elements for phytoremediation and phytomining in biogas digestate. *Carpathian Journal of Earth and Environmental Sciences* 15, 43–48.
- (20) Balinski A, Atanasova P, **Wiche O**, Kelly N, Reuter M, Scharf C (2019) Selective leaching of rare earth elements (REEs) from eudialyte concentrate after sulfation and thermal decomposition of non-REE sulfates. *Minerals* 9, 522.
- (19) Alkinani M, **Wiche O**, Kanoua W, Merkel B (2019) Sequential extraction analysis of U, Sr, V, Ni, Cr, B, and Mo in sediments from the Al-Batin Alluvial Fan, Southern Iraq. *Environmental Earth Sciences* 78.
- (18) **Wiche O**, Heilmeier H (2019) Editorial to the Special Issue „Ecophysiology of the root zone“. *Freiberg Ecology online* 6, 1–2.
- (17) Schwabe R, Obst B, Mehnert M, Tischler D, **Wiche O** (2019): Mobilisierung von Spurenelementen in Bodenextrakten durch bakterielle Siderophore in Abhängigkeit des pH-Wertes. *Freiberg Ecology online* 6, 17–23.
- (16) Kaiser S, Moschner C, **Wiche O** (2019) Accumulation of germanium in grasses. *Freiberg Ecology online* 6, 9–15.
- (15) Balinski A, Atanasova P, **Wiche O**, Kelly N, Reuter M, Scharf C (2019) Recovery of REEs, Zr(+Hf), Mn and Nb by H₂SO₄ leaching of eudialyte concentrate. *Hydrometallurgy* 186, 176–186.
- (14) Giebner F, Kaden L, **Wiche O**, Tischler J, Schopf S, Schlömann M (2019) Bioleaching of cobalt from an arsenidic ore. *Minerals Engineering* 131, 73–78.
- (13) Schwabe R, Anke MK, Szymańska K, **Wiche O**, Tischler D (2018) Analysis of desferrioxamine-like siderophores and their capability to selectively bind metals and metalloids: development of a robust analytical RP-HPLC method. *Research in Microbiology* 169, 598–607.
- (12) **Wiche O**, Dreier F, Ehrhardt A, Gerisch MK, Jodoin R, Keßler S, Mißfeldt T, Röder M, Rumberg C, Schulte MG, Westhäuser E (2018) Mobilität von potentiell toxischen Spurenelementen in oberflächennahen Spülsanden der Spülhalde Davidschacht, Freiberg und deren Verlagerung in umliegende Flächen. *Freiberg Ecology online* 4, 1–19.

- (11) Anke MK, Szymańska K, Schwabe R, **Wiche O**, Tischler D (2017) On the immobilisation of desferrioxamine-like siderophores for selective metal binding. *Solid State Phenomena* 262, 517–520.
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- (9) Midula P, **Wiche O**, Wiese P, Andráš P (2017) Concentration and bioavailability of heavy metals, germanium, and rare earth elements in the contaminated area of the Davidschacht dump field in Freiberg (Saxony). *Freiberg Ecology online* 2, 101–112.
- (8) Schwabe R, Obst B, Mehnert M, Tischler D, **Wiche O** (2017) Gallium Mobilization in Soil by Bacterial Metallophores. *Solid State Phenomena* 262, 513–516.
- (7) **Wiche O**, Tischler D, Fauser C, Lodemann J, Heilmeier H (2017a) Effects of citric acid and the siderophore desferrioxamine B (DFO-B) on the mobility of germanium and rare earth elements in soil and uptake in *Phalaris arundinacea*. *International Journal of Phytoremediation* 19, 746–754.
- (6) **Wiche O**, Zertani V, Hentschel W, Achtziger R, Midula P (2017b) Germanium and rare earth elements in topsoil and soil-grown plants on different land use types in the mining area of Freiberg (Germany). *Journal of Geochemical Exploration* 175, 120–129.
- (5) **Wiche O**, Heilmeier H (2016) Germanium (Ge) and rare earth element (REE) accumulation in selected energy crops cultivated on two different soils. *Minerals Engineering* 92, 208–215.
- (4) **Wiche O**, Kummer N-A, Heilmeier H (2016a) Interspecific root interactions between white lupin and barley enhance the uptake of rare earth elements (REEs) and nutrients in shoots of barley. *Plant and Soil* 402, 235–245.
- (3) Heilmeier H, Achtziger R, Günther A, Richert E, **Wiche O** (2016) 20 Jahre ökologische Forschung und Lehre an der TU Bergakademie Freiberg – eine Analyse der studentischen Arbeiten (1996 – 2016). *Freiberg Ecology online* 1, 4–20 [ISSN 2366-9551].
- (2) Heilmeier H, Achtziger R, Günther A, Richert E, **Wiche O** (2016) Editorial zur ersten Ausgabe von „Freiberg Ecology online“ (FECO). – *Freiberg Ecology online* 1, 1–3 [ISSN 2366-9551].
- (1) **Wiche O**, Székely B, Kummer N-A, Moschner CH, Heilmeier H (2016b) Effects of intercropping of oat (*Avena sativa* L.) with white lupin (*Lupinus albus* L.) on the mobility of target elements for phytoremediation and phytomining in soil solution. *International Journal of Phytoremediation* 18, 900–907.

• Review articles

- (3) Heilmeier H, **Wiche O** (2020) The PCA of phytomining: principles, challenges and achievements. *Carpathian Journal of Earth and Environmental Sciences* 15, 37–42.
- (2) Pourret O, Hursthouse A, Irawan DE, Johannesson KH, Liu H, Poujol M, Tartese R, van Hullebusch ED, **Wiche O** (2020) Open Access publishing practice in geochemistry: overview of current state and look to the future. *Heliyon* 6.
- 1 **Wiche O**, Székely B, Moschner C, Heilmeier H (2018) Germanium in the soil-plant system—a review. *Environmental Science and Pollution Research* 25, 31938–31956.

II Book contributions and proceedings

- (39) Wiche O, Feuerstein U, Heilmeier H (2021) Reed canary grass as a potential agent for phytoremediation and phytomining of strategic elements. *Proceedings of the 3rd International Conference on the Utilisation of Wetland Plants*, Greifswald Mire Centre, 03–11 March.

- (38) Okoroafor P, Mann L, Wiche O (2021) Effect of Plant Growth Promoting Rhizobacteria on Phytoextraction of Critical Raw Materials and Potentially Toxic Elements in Soil, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-14825, <https://doi.org/10.5194/egusphere-egu21-14825>.
- (37) Monei N, Wiche O, Hitch M, Heilmeier H (2021) Mixed cultures, a sustainable way to accelerate phytomining of rare earth elements, is there a future here?, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-13690, <https://doi.org/10.5194/egusphere-egu21-13690>.
- (36) Zaffar N, Ferchau E, Heilmeier H, Wiche O (2021) Influence of mesophilic and thermophilic on enrichment and chemical speciation of toxic and valuable elements in digestate. vPICO presentation (online), EGU21-11277, <https://doi.org/10.5194/egusphere-egu21-11277>
- (35) Soudani L, Maamar B, Chafaa M, Nouar B, Wiche O (2020) The effect of sludge from the wastewater treatment plant of Tiaret (Algeria) on the growth of turnip "*Brassica rapa*"; Morphological responses and potential efficacy of phytoremediation. <https://doi.org/10.5194/egusphere-egu2020-815>
- (34) Okoroafor P, Wiche O (2020) Screening of plants of different species and functional groups for phytomining of rare earth elements in soil. <https://doi.org/10.5194/egusphere-egu2020-1021>
- (33) Zaffar N, Ferchau E, Heilmeier H, Wiche O (2020) Chemical fractionation of germanium (Ge) and rare earth elements (REEs) in biogas residue by a two-step sequential extraction procedure. <https://doi.org/10.5194/egusphere-egu2020-727>
- (32) Moschner C, Schwabe R, Wiche O (2020) Effect of soil pH, compost amendment and plant genotype on the accumulation of target elements in phytoremediation and phytomining research in shoots of *Phalaris arundinacea*. <https://doi.org/10.5194/egusphere-egu2020-4199>
- (31) Kaiser S, Moschner C, Wiche O (2020) Accumulation of germanium (Ge) in plant tissues of grasses is not solely driven by its incorporation in phytoliths. <https://doi.org/10.5194/egusphere-egu2020-2469>
- (30) Wiche O, Heilmeier H, Pourret, O (2020) Below-ground functional traits during nutrient-acquisition affect the availability of rare earth elements to plants. <https://doi.org/10.5194/egusphere-egu2020-5831>
- (29) Wiche O, Zaffar N, Moschner C, Ferchau E, Herrmann A, Feuerstein U, Heilmeier H, Krause H (2019) Optimierung des Biogaspotenzials von *Phalaris arundinacea* (Rohrglanzgras) unter besonderer Berücksichtigung der Anreicherung von Germanium und Seltenen Erden in Gärresten. Biogas in der Landwirtschaft – Stand und Perspektiven. FNR/KTBL-Kongress.
- (28) Moschner C, Feuerstein U, Wiche O (2019) Genotypic variability of germanium (Ge) and rare earth element (REE) accumulation in *Phalaris arundinacea* L. (red canary grass). Geophysical Research Abstracts 21, EGU2019-4928-1.
- (27) Ngalle M, Defo C, Wiche O, Heilmeier H (2019) Remediation of tropical urban soils under metallic pollution using local plants species in Yaoundé, Sub-Saharan Africa. Geophysical Research Abstracts 21, EGU2019-1820.
- (26) Okoroafor P, Kunisch N, Ogunkunle C, Wiche O (2019) Effects of different soil treatments on the availability of toxic elements, germanium and rare earth elements. Geophysical Research Abstracts 21, EGU2019-8095.
- (25) Schwabe R, Dittrich C, Kadner J, Wiche O (2019) The effect of the application of cell cultures and supernatants of PGPR (*Arthrobacter oxydans*) as soil additives on the phytoextraction of germanium and rare earth elements Geophysical Research Abstracts 21, EGU2019-3375.
- (24) Zaffar N, Ferchau E, Heilmeier H, Wiche O (2019) Evaluation of anaerobic digestion process from *Phalaris arundinacea* with special consideration to enrichment of germanium and rare earth elements in digestate. Geophysical Research Abstracts 21, EGU2019-18123-1.
- (23) Epede M, Assan E, Wiche O (2018) Time-resolved accumulation of essential and strategic elements in different bioenergy plants. Geophysical Research Abstracts 20, EGU2018-7433.
- (22) Wiche O, Heilmeier H (2018) The PCA of Phytomining: Principles, Challenges and Advances. Proceedings of the International Conference “Applied Biotechnology in Mining” April 25 – 27, 2018, Dnipro, Ukraine.

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- (20) Wiche O, Székely B, Moschner C, Heilmeier H (2018) Bioavailability of elements for effective phytoremediation and phytomining: the role of rhizosphere processes. Proceedings of the 3rd International Conference on Plant Biology, June 9 – 12, 2018, Belgrade.
- (19) Klimkina I, Kharytonov M, Wiche O, Heilmeier H (2017) Phytoremediation of spoil coal dumps in Western Donbass (Ukraine). Geophysical Research Abstracts 19, EGU2017-1312.
- (18) Wiche O, Moschner C (2017) Einfluss von Citronensäure auf die Pflanzenverfügbarkeit von Germanium im Boden. In: Merbach W., Wiche O., Augustin J. (eds.): Bodenmikroben, Pflanzenwachstum und Humusfunktion. Mitteilungen Agrarwissenschaften 31, 31–39.
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- (16) Heilmeier H, Wiche O, Tesch S, Aubel I, Schreiter N, Bertau M (2016) Germaniumgewinnung aus Biomasse – PhytoGerm. In: Thomé-Kozmiensky, K.J., Goldmann, D. (eds.): Recycling und Rohstoffe, Band 9 TK Verlag Karl Thomé-Kozmiensky, Neuruppin. ISBN: 978-3-944310-27-5, pp. 177–192.
- (15) Heilmeier H, Wiche O, Tesch S, Schreiter N, Aubel I, Bertau M (2016) PhytoGerm – Germaniumgewinnung aus Biomasse. In: Dürkoop A, Brandstetter CP, Gräbe G, Rentsch L (eds.): Innovative Technologien für Ressourceneffizienz – Strategische Metalle und Mineralien. Ergebnisse der r3-Fördermaßnahme. Fraunhofer Verlag, Stuttgart. ISBN: 978-3-8396-1102-9, pp. 221–235.
- (14) Hentschel W, Wiche O (2016) Exudation of organic acids by *Lupinus albus* and *Lupinus angustifolius* as affected by phosphorus supply. Geophysical Research Abstracts 18, EGU2016-16986.
- (13) Lovinska V, Wiche O (2016) Heavy metals accumulation in wood tissues of the forest-forming species grown in the Steppe technogenic landscapes in Ukraine. Geophysical Research Abstracts 18, EGU2016-647.
- (12) Midula P, Wiche O (2016) Bioavailability of heavy metals, germanium and rare earth elements at Davidschacht dump-field in mine affected area of Freiberg (Saxony). Geophysical Research Abstracts 18, EGU2016-5989-1.
- (11) Sytnyk S, Wiche O (2016) The decreasing of corn root biomembrane penetration for acetochlor with vermicompost amendment. Geophysical Research Abstracts 18, EGU2016-655.
- (10) Hentschel W, Wiche O (2015) Bioavailable concentrations of germanium and rare earth elements in soil fractions. Geophysical Research Abstracts 17, EGU2015-12017-2.
- (9) Achtziger R, Alexander C, Nigmann U, Wiche O (2014) Monitoring habitat quality in fruit orchards – a promising example for the application of remote sensing and GIS. – In: Pfeifer, N. & Zlinszky, A. (Ed.): Proceedings of the International Workshop on Remote Sensing and GIS for Monitoring of Habitat Quality, Vienna, 24-25 September 2014: 150–153. [ISBN 978-3-200-03727-4].
- (8) Wiche O, Heinemann U, Schreiter N, Aubel I, Tesch S, Fuhrland M, Bertau M, Heilmeier H (2014) Phytomining von Germanium - Bioakkumulation und Gewinnung von Germanium aus Biomasse von Pflanzen. In: Teipel U & Reller A (Hrsg.): Symposium Rohstoffeffizienz und Rohstoffinnovationen 2014. Fraunhofer Verlag, Stuttgart 495 S.
- (7) Wiche O, Hoffmann J, Gößner M (2014) Bioverfügbarkeit von Germanium und Seltenen Erden im Pflanze-Boden-System. Mitteilungen Agrarwissenschaften 25: 35–41. ISBN 978-3-89574-849-3.
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- (5) Wiche O, Székely B, Kummer N-A, Heinemann U, Tesch S, Heilmeier H (2014) Bioavailable concentrations of germanium and rare earth elements in soil as affected by low molecular weight organic acids and root exudates. Geophysical Research Abstracts 16, EGU2014-5572-2.

- (4) Wiche O, Zehnsdorf A, Schlenker U (2014) Naturnahe Rohstoffgewinnung aus kontaminierten Böden und Sedimenten – Forschung im BRZ Hirschfeld. Tagungsband zum 23. Sächsischen Altlastenkolloquium 6./7.11.2014 in Dresden
- (3) Heinemann U, Wiche O, Tesch S, Heilmeier H, Wiesel M, Otto M (2013) Investigations on germanium speciation in plant materials after bioaccumulation by ETV-ICP OES. Proceedings of the Colloquium Analytische Atomspektroskopie (CANAS) 2013, Freiberg.
- (2) Wiche O, Achtziger R (2012) Zikaden als Indikatoren zur naturschutzfachlichen Bewertung und Erfolgskontrolle in Streuobstwiesen. DGaaE-Nachrichten 26(2): 106–108.
- (1) John H, Claus S, Wiche O, Winkler C, Achtziger R, Richert E (2011) Naturschutzfachliche Erfolgskontrolle einer Maßnahme zur Förderung der Lebensgemeinschaften auf trockengefallenen Teichböden im Bierwiesenteich bei Pfaffroda. – Mitteilungen des Naturschutzzinstitutes Freiberg 6/7 (2011): 2–24.

III Oral and poster presentations

- (31) Wiche O, Pourret O, Lambers H (2022) Rare earth elements as potential tracers of carboxylate-based plant nutrition strategies. *Oral presentation* at the EGU General Assembly 2022, Vienna.
- (30) Wiche O, Feuerstein U, Heilmeier H (2021) Reed canary grass as a potential agent for phytoremediation and phytomining of strategic elements. *Oral presentation* at the 3rd International Conference on the Utilisation of Wetland Plants, Greifswald Mire Centre, 03–11 March.
- (29) Soudani L, Maamar B, Chafaa M, Nouar B, Wiche O (2020) The effect of sludge from the wastewater treatment plant of TIARET (ALGERIA) on the growth of turnip "Brassica rapa"; Morphological responses and potential efficacy of phytoremediation. *Poster presentation*, EGU EGU General Assembly 2020 (online).
- (28) Okoroafor P, Wiche O (2020) Screening of plants of different species and functional groups for phytomining of rare earth elements in soil. *Poster presentation*, EGU EGU General Assembly 2020 (online).
- (27) Zaffar N, Ferchau E, Heilmeier H, Wiche O (2020) Chemical fractionation of germanium (Ge) and rare earth elements (REEs) in biogas residue by a two-step sequential extraction procedure. *Poster presentation*, EGU EGU General Assembly 2020 (online).
- (26) Moschner C, Schwabe R, Wiche O (2020) Effect of soil pH, compost amendment and plant genotype on the accumulation of target elements in phytoremediation and phytomining research in shoots of *Phalaris arundinacea*. *Poster presentation*, EGU EGU General Assembly 2020 (online).
- (23) Kaiser S, Moschner C, Wiche O (2020) Accumulation of germanium (Ge) in plant tissues of grasses is not solely driven by its incorporation in phytoliths. *Poster presentation*, EGU General Assembly 2020 (online).
- (22) Wiche O, Heilmeier H, Pourret, O (2020) Below-ground functional traits during nutrient-acquisition affect the availability of rare earth elements to plants. *Poster presentation*, EGU General Assembly 2020 (online).
- (21) Wiche O (2019) Phytomining of germanium and rare earth elements - the role of rhizosphere processes. *Oral presentation*, International Conference on Environmental topics in country restoration - July 04, 2019 (Banská Bystrica, Slovakia)
- (20) Giebner F, Helmich J, Wiche O, Kaden L, Schlömann M, Schopf S (2019) Bioleaching of a natural arsenide ore. *Oral presentation*, EGU General Assembly 2019, Vienna.
- (19) Wiche O (2018) Einfluss von Rhizosphärenprozessen auf die Pflanzenverfügbarkeit von nicht-essentiellen Elementen. *Oral presentation*, 28. Wissenschaftliche Arbeitstagung Ökophysiologie des Wurzelraumes, Freiberg.
- (18) Wiche O (2018) Genotypic variation in the accumulation of rare earth elements (REE) in *Phalaris arundinacea* L. (Reed Canary Grass). *Oral presentation*, International Conference „Applied biotechnology in mining“, Dnipro.

- (17) Wiche O, Moschner C, Schwabe R, Feuerstein U (2018) Genotypic variation in the accumulation of rare earth elements (REEs) in *Phalaris arundinacea* L. (reed canary grass). *Oral presentation*, EGU General Assembly 2018, Vienna.
- (16) Ferchau E, Herrmann A, Wiche O, Heilmeyer H, Krause H (2017) Rohrglanzgras als Bioenergiegras Optimierung der Biomasseausnutzung und der Bioakkumulation von Wertstoffen (Phalaris II). *Poster presentation*, 7th Statuskonferenz Energetische Biomassenutzung (Leipzig).
- (15) Kaiser S, Wiche O, Wagner S (2017) Uptake of Si and Ge in grasses and accumulation in plant tissue and phytoliths. *Poster presentation*, XIV. International Symposium on Biomineralization (Japan).
- (14) Wiche O (2017) Rhizosphäreneffekte auf die Pflanzenverfügbarkeit von Germanium und Seltenen Erden. *Oral presentation*, 27. Wissenschaftliche Arbeitstagung Ökophysiologie des Wurzelraumes, Freiberg.
- (13) Wiche O (2017) Understanding rhizosphere processes to enhance phytoextraction of germanium and rare earth elements. *Oral presentation*, EGU General Assembly 2017, Vienna.
- (12) Wiche O (2016) Phytomining for Germanium. *Oral presentation*, Berg- und Hüttenmännischer Tag, June 09, 2016, Freiberg.
- (11) Wiche O (2016). Enhanced phytoextraction of germanium and rare earth elements – a rhizosphere-based approach. *Oral presentation*, EGU General Assembly 2016, Vienna.
- (10) Wiche O, Kummer N-A, Heilmeyer H (2016) Rhizosphere processes in phytomining. *Poster presentation*, EcoSummit 2016, Montpellier.
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