

Publications of Franz Jirsa as of Dez 2020

- (60) Windisch J, Keppler BK, **Jirsa F: Aluminum in Coffee** ACS Omega (2020) 5, 15335–15343
<https://dx.doi.org/10.1021/acsomega.0c01410>
- (59) Pirkwieser P, López-López J, Schagerl M, Kandioller W, Keppler BK, Moreno C, **Jirsa F: Heavy Metal Extraction under Environmentally Relevant Conditions Using 3-Hydroxy-2-Naphthoate- Based Ionic Liquids: Extraction Capabilities vs. Acute Algal Toxicity** Applied Sciences (2020) 10, 3157; doi:10.3390/app10093157
- (58) Herce-Sesa B, Pirkwieser P, Lopez-Lopez J, **Jirsa F**, Moreno C: **Selective liquid phase micro-extraction of metal chloro-complexes from saline waters using ionic liquids** Journal of Cleaner Production 262 (2020) 121415
<https://doi.org/10.1016/j.jclepro.2020.121415>
- (57) Outa J, Sattmann H, Köhler M, Walochnik J, **Jirsa F: Diversity of digenean trematode larvae in snails from Lake Victoria, Kenya: First reports and bioindicative aspects** Acta Tropica 206 (2020) 105437 <https://doi.org/10.1016/j.actatropica.2020.105437>
- (56) Outa J, Kowenje Ch, Avenant-Oldewage A, **Jirsa F: Trace Elements in Crustaceans, Mollusks and Fish in the Kenyan Part of Lake Victoria: Bioaccumulation, Bioindication and Health Risk Analysis** Archives of Environmental Contamination and Toxicology 78 (2020) 589–603 <https://doi.org/10.1007/s00244-020-00715-0>
- (55) Outa J, Kowenje Ch, Plessl Ch & **Jirsa F: Distribution of arsenic, silver, cadmium, lead and other trace elements in water, sediment and macrophytes in the Kenyan part of Lake Victoria: spatial, temporal and bioindicative aspects** Environmental Science and Pollution Research (2019) <https://doi.org/10.1007/s11356-019-06525-9>
- (54) Plessl Ch, Gilbert BM, Sigmund MF, Theiner S, Avenant-Oldewage A, Keppler BK, **Jirsa F: Mercury, silver, selenium and other trace elements in three cyprinid fish species from the Vaal Dam, South Africa, including implications for fish consumers** Science of the Total Environment 659 (2019) 1158–1167
- (53) Valiente N, Gómez-Aldaya J, **Jirsa F: Spectrophotometric determination of nitrate in hypersaline waters after optimization based on the Box-Behnken design** Microchemical Journal 145 (2019) 951–958
- (52) Pirkwieser P, López-López J, Kandioller W, Keppler BK, Moreno C, **Jirsa F: Solvent Bar Micro-Extraction of Heavy Metals from Natural Water Samples Using 3-Hydroxy-2-Naphthoate-Based Ionic Liquids** Molecules 2018, 23, 3011
- (51) López-López J, Pirkwieser P, Leyma R, Kandioller W, Krachler R, Keppler BK, **Jirsa F**, Moreno C: **Solvent bar micro-extraction for greener application of task specific ionic liquids in multi-elemental extraction** Journal of Cleaner Production 201 (2018) 22–27
- (50) **Jirsa F: Blei in frühbronzezeitlichen Muschelschalen aus Stillfried** Fundberichte aus Österreich, Band 55, 2016, D220-D222 Bundesdenkmalamt (2018)

- (49) Pirkwieser P, López-López JA, Kandioller W, Keppler BK, Moreno C, Jirsa F: **Novel 3-Hydroxy-2-Naphthoate-Based Task-Specific Ionic Liquids for an Efficient Extraction of Heavy Metals** Front. Chem. 6:172 (2018) doi: 10.3389/fchem.2018.00172
- (48) Valiente N, Carrey R, Otero N, Soler A, Sanz D, Muñoz-Martín A, Jirsa F, Wanek W, Gómez-Alday JJ: **A multi-isotopic approach to investigate the influence of land use on nitrate removal in a highly saline lake-aquifer system** Sci Total Environ 631-632 (2018) 649–659
- (47) Orłowska E, Enyedy E, Pignitter M, Jirsa F, Krachler R, Kandioller W, Keppler BK: **b-O-4 type dilignol compounds and their iron complexes for modeling of iron binding to humic acids: synthesis, characterization, electrochemical studies and algal growth experiments** New J. Chem (2017) DOI: 10.1039/c7nj02328f
- (46) Platzer S, Leyma R, Wolske S, Kandioller W, Heid E, Schröder Ch, Schagerl M, Krachler R, Jirsa F, Keppler BK: **Thioglycolate-based task-specific ionic liquids: Metal extraction abilities vs acute algal toxicity** J. of Hazardous Materials 340 (2017) 113–119
- (45) Plessl Ch, Otachi E, Körner W, Avenant-Oldewage A, Jirsa F: **Fish as bioindicators for trace element pollution from two contrasting lakes in the Eastern Rift Valley, Kenya: spatial and temporal aspects** Environ Sci Pollut Res (2017) 24:19767–19776
- (44) Gilbert BM, Hussain E, Jirsa F, Avenant-Oldewage A: **Evaluation of Trace Element and Metal Accumulation and Edibility Risk Associated with Consumption of *Labeo umbratus* from the Vaal Dam, South Africa** Int. J. Environ. Res. Public Health (2017) 14 678
- (43) Plessl C, Jandrisits P, Krachler R, Keppler BK, Jirsa F: **Heavy metals in the mallard *Anas platyrhynchos* from eastern Austria**, Science of the Total Environment 580 (2017) 670–676
- (42) Platzer S, Kar M, Leyma R, Chib S, Roller A, Jirsa F, Krachler R, MacFarlane D, Kandioller W, Keppler BK **Task-specific thioglycolate ionic liquids for heavy metal extraction: Synthesis, extraction efficacies and recycling properties** J. of Hazardous Materials (2017) 324 241–249
- (41) Orłowska E, Roller A, Pignitter M, Jirsa F, Krachler R, Kandioller W, Keppler BK: **Synthetic iron complexes as models for natural iron-humic compounds: Synthesis, characterization and algal growth experiments** Science of the Total Environment 577 (2017) 94–104
- (40) Gruber-Brunhumer MR, Jerney J, Zohar E, Nussbaumer M, Hieger C, Bromberger P, Bochmann G, Jirsa F, Schagerl M, Obbard JP, Fuchs W, Drosig B: **Associated effects of storage and mechanical pre-treatments of microalgae biomass on biomethane yields in anaerobic digestion** Biomass and Bioenergy (2016) 93 259-268
- (39) Lynch LP, Jirsa F, Avenant-Oldewage A: **Trace element accumulation and human health risk assessment of *Labeo capensis* (Smith, 1841) from the Vaal Dam reservoir, South Africa** Water South Africa (2016) <http://dx.doi.org/10.4314/wsa.v42i2.16>
- (38) Leyma R, Platzer S, Jirsa F, Kandioller W, Krachler R, Keppler BK: **Novel thiosalicylate-based ionic liquids for heavy metal extractions** J Hazard Mater (2016) 314 164-171

- (37) Orlowska E, Roller A, Pignitter M, Wiesinger H, Jirsa F, Krachler R, Kandioller W, Keppler BK: **Benzoic hydroxamates-based iron complexes as model compounds for humic substances: synthesis, characterization and algal growth experiments** RSC Adv (2016) 6 40238–40249
- (36) Blazevic A, Orlowska E, Kandioller W, Jirsa F, Keppler BK, Tafili-Kryeziu M, Linert W, Krachler RF, Krachler R, Rompel A: **Photoreduction of Terrigenous Fe-Humic Substances Leads to Bioavailable Iron in Oceans** Angew Chem Int Ed (2016) 55 1 – 7
- (35) Krachler R, Krachler RF, Wallner G, Steier P, El Abiead Y, Wiesinger H, Jirsa F, Keppler BK: **Sphagnum-dominated bog systems are highly effective, yet variable sources of bioavailable iron to marine waters** Sci Total Environ 556 (2016) 53–62
- (34) Otachi EO, Plessl C, Körner W, Avenant-Oldewage A, Jirsa F: **Trace Elements in Water, Sediments and the Elongate Tigerfish *Hydrocynus forskahlii* (Cuvier 1819) from Lake Turkana, Kenya Including a Comprehensive Health Risk Analysis** Bull Environ Contam Toxicol (2015) 95(3):286-91
- (33) Krachler R, Krachler RF, Wallner G, Hann S, Laux M, Cervantes Recalde M, Jirsa F, Neubauer E, von der Kammer F, Hofmann T, Keppler BK: **River-derived humic substances as iron chelators in seawater** Marine Chemistry, Volume 174, 20 August 2015, Pages 85-93
- (32) Pignitter M, Stolze K, Jirsa F, Gille L, Goodman BA, Somoza V: **Effect of Copper on Fatty Acid Profiles in Non- and Semifermented Teas Analyzed by LC-MS-Based Nontargeted Screening** J Agric Food Chem. (2015) 63(38):8519-26
- (31) Shaygan Nia A, Rana S, Döhler D, Jirsa F, Meister A, Guadagno L, Koslowski E, Bron M, Binder WH: **Carbon Supported Copper Nanomaterials: Recyclable Catalysts for Huisgen [3+2] Cycloaddition Reactions** Chemistry (2015) 21(30):10763-70
- (30) Otachi O, Szostakowska B, Jirsa F, Fellner-Frank C: **Parasite communities of the elongate tigerfish *Hydrocynus forskahlii* (Cuvier 1819) and redbelly tilapia *Tilapia zillii* (Gervais 1848) from Lake Turkana, Kenya: influence of host sex and size.** Acta Parasitologica (2015) 60(1), 9–20
- (29) Kaintz C, Mayer R, Jirsa F, Halbwirth H, Rompel A: **Site-directed mutagenesis around the CuA site of a polyphenol oxidase from *Coreopsis grandiflora* (cgAUS1)** FEBS letters (2015) 589 (7) 789–797
- (28) Platzer S, Sap O, Leyma R, Wallner G, Jirsa F, Kandioller W, Krachler R, Keppler B.K: **Extraction of natural radionuclides from aqueous solutions by novel maltolate-based task-specific ionic liquids** J Radioanal Nucl Chem. (2015) 303(3):2483-2488
- (27) Degefu F, Herzig A, Jirsa F, Schagerl M: **First limnological records of highly threatened tropical high-mountain crater lakes in Ethiopia** Tropical Conservation Science 2014 7(3):366-382
- (26) Jirsa F, Pirker D, Krachler R, Keppler BK: **Total Mercury in Sediments, Macrophytes and Fish from a shallow Steppe Lake in Eastern Austria** Chemistry and Biodiversity 2014, 11 1263 – 1275

- (25) Pignitter M, Dumhart B, Gartner S, Jirsa F, Steiger G, Kraemer K, Somoza V: **Vitamin A is Rapidly Degraded in Retinyl Palmitate-Fortified Soybean Oil Stored under Household Conditions** *J. Agric. Food Chem.* 2014, 62, 7559–7566
- (24) Otachi EO, Locke SA, Jirsa F, Fellner-Frank C, Marcogliese DJ: **Morphometric and molecular analyses of *Tylodelphys* sp. metacercariae (Digenea: Diplostomidae) from the vitreous humour of four fish species from Lake Naivasha, Kenya.** *J Helminthol* (2015) 89(4):404-14
- (23) Otachi EO, Korner W, Avenant-Oldewage A, Fellner-Frank C, Jirsa F: **Trace elements in sediments, blue spotted tilapia *Oreochromis leucostictus* (Trewavas, 1933) and its parasite *Contracaecum multipapillatum* from Lake Naivasha, Kenya, including a comprehensive health risk analysis.** *Environ Sci Pollut Res Int.* (2014) 21(12):7339-49
- (22) Otachi E, Magana AM, Jirsa F, Fellner-Frank C: **Parasites of commercially important fish from Lake Naivasha, Rift Valley, Kenya.** *Parasitol Res.* (2014) 113(3):1057-67
- (21) Kretschmer J, Savoye J, Jirsa F: **Schwermetalle in Sedimenten: Nachhaltige Reduktion mittels task-spezifischer Ionischer Flüssigkeiten.** In: *Gemeinsam für nachhaltige Entwicklung* Edited by Dürrstein H, Siegele P. Innsbruck: Studienverlag GmbH; 2014.
- (20) Jirsa F, Neubauer E, Kittinger R, Hofmann T, Krachler R, von der Kammer F, Keppler BK: **Natural organic matter and iron export from the Tanner Moor, Austria.** *Limnologica - Ecology and Management of Inland Waters* 2013, 43 (4) 239-244.
- (19) Jirsa F, Gruber M, Stojanovic A, Omondi SO, Mader D, Körner W, Schagerl M: **Major and trace element geochemistry of Lake Bogoria and Lake Nakuru, Kenya, during extreme draught.** *Chemie der Erde - Geochemistry* 2013, 73(275-282)
- (18) Krachler R, von der Kammer F, Jirsa F, Suphandag A, Krachler RF, Plessl C, Vogt M, Keppler BK, Hofmann T: **Nanoscale lignin particles as sources of dissolved iron to the ocean.** *Global Biogeochem Cy* 2012, 26.
- (17) Zhang Y, Kogelnig D, Morgenbesser C, Stojanovic A, Jirsa F, Lichtscheidl-Schultz I, Krachler R, Li Y, Keppler BK: **Preparation and characterization of immobilized [A336][MTBA] in PVA-alginate gel beads as novel solid-phase extractants for an efficient recovery of Hg (II) from aqueous solutions.** *J Hazard Mater* 2011, 196:201-209.
- (16) Kogelnig D, Regelsberger A, Stojanovic A, Jirsa F, Krachler R, Keppler B: **A polymer inclusion membrane based on the ionic liquid trihexyl(tetradecyl)phosphonium chloride and PVC for solid-liquid extraction of Zn(II) from hydrochloric acid solution.** *Monatshefte für Chemie - Chemical Monthly* 2011, 142(8):769-772.
- (15) Jirsa F: **Parasiten der Nase *Chondrostoma nasus* (L. 1758) aus der Rosegger Schleife der Drau in Kärnten: ökologische Aspekte.** *Carinthia II* 2010, 200./120.:361-368.
- (14) Muhlegger JM, Jirsa F, Konecny R, Frank C: **Parasites of *Apollonia melanostoma* (Pallas 1814) and *Neogobius kessleri* (Guenther 1861) (Osteichthyes, Gobiidae) from the Danube River in Austria.** *J Helminthol* 2010, 84(1):87-92.
- (13) Krachler R, Krachler RF, von der Kammer F, Suphandag A, Jirsa F, Ayromlou S, Hofmann T, Keppler BK: **Relevance of peat-draining rivers for the riverine input of dissolved iron into the ocean.** *Sci Total Environ* 2010, 408(11):2402-2408.

- (12) Kogelnig D, Stojanovic A, von der Kammer F, Terzieff P, Galanski M, **Jirsa F**, Krachler R, Hofmann T, Keppler BK: **Tetrachloroferrate containing ionic liquids: Magnetic- and aggregation behavior.** *Inorg Chem Commun* 2010, **13**(12):1485-1488.
- (11) Kogelnig D, Stojanovic A, **Jirsa F**, Korner W, Krachler R, Keppler BK: **Transport and separation of iron(III) from nickel(II) with the ionic liquid trihexyl(tetradecyl)phosphonium chloride.** *Sep Purif Technol* 2010, **72**(1):56-60.
- (10) **Jirsa F**, Winiwarter V: **[Intestinal helminths in the works of Galen].** *Wien Klin Wochenschr* 2010, **122 Suppl 3**:14-18.
- (9) **Jirsa F**, Konecny R, Frank C, Sures B: **The parasite community of the nase *Chondrostoma nasus* (L. 1758) from Austrian rivers.** *J Helminthol* 2011, **85** (3) 255 - 262
- (8) Stojanovic A, Kogelnig D, Mitteregger B, Mader D, **Jirsa F**, Krachler R, Krachler R: **Major and trace element geochemistry of superficial sediments and suspended particulate matter of shallow saline lakes in Eastern Austria.** *Chem Erde-Geochem* 2009, **69**(3):223-234.
- (7) Muhlegger JM, **Jirsa F**, Konecny R, Sattmann H, Frank C: **Bucephalus polymorphus Baer, 1827-a new fish parasite in Austria?** *Wien Klin Wochenschr* 2009, **121**:50-52
- (6) **Jirsa F**, Schachner O, Frank C: **Parasiten des Aitels *Leuciscus cephalus* (L.1758) aus den benachbarten Flüssen Melk und Pielach, Niederösterreich - bioindikative Aspekte.** *Österreichs Fischerei* 2009, **62**:88-95.
- (5) Kogelnig D, Stojanovic A, Galanski M, Groessl M, **Jirsa F**, Krachler R, Keppler BK: **Greener synthesis of new ammonium ionic liquids and their potential as extracting agents.** *Tetrahedron Lett* 2008, **49**(17):2782-2785.
- (4) **Jirsa F**, Leodolter-Dvorak M, Krachler R, Frank C: **Heavy metals in the nase, *Chondrostoma nasus* (L. 1758), and its intestinal parasite *Caryophyllaeus laticeps* (Pallas 1781) from Austrian rivers: Bioindicative aspects.** *Arch Environ Contam Toxicol* 2008, **55**(4):619-626.
- (3) **Jirsa F**, Konecny R, Frank C: **The occurrence of *Caryophyllaeus laticeps* in the nase *Chondrostoma nasus* from Austrian rivers: possible anthropogenic factors.** *J Helminthol* 2008, **82**(1):53-58.
- (2) **Jirsa F**, Zitek A, Schachner O: **First record of *Lamproglana pulchella* Nordmann 1832 in the Pielach and Melk rivers, Austria.** *J Appl Ichthyol* 2006, **22**(5):404-406.
- (1) Krachler R, **Jirsa F**, Ayromlou S: **Factors influencing the dissolved iron input by river water to the open ocean.** *Biogeosciences* 2005, **2**(4):311-315.