

*Schriftenverzeichnis/Publications*

Researcher ID Buettner: E-2510-2011, <http://orcid.org/0000-0002-6205-5125>  
H-Index (Google Scholar): 26

**1. Publikationen in referierten Journalen/Peer-reviewed articles**

1. Schalk P, Kohl M, Herrmann H, Schwappacher R, Rimmeli M, Buettner A, Siebler J, Neurath M, Zopf Y. Influence of cancer and acute inflammatory disease on taste perception: a clinical pilot study. *Support Care Cancer* 2017 Sep 25. doi: 10.1007/s00520-017-3898-y. IF 2.698
2. A. Pinar, D. Rauhut, E. Ruehl, A. Buettner. Quantification of the changes in potent wine odorants as induced by bunch rot (*Botrytis cinerea*) and powdery mildew (*Erysiphe necator*). *Frontiers in Chemistry, Food Chem. section* 2017, doi: 10.3389/fchem.2017.00057. (c) IF 3.994
3. P. Denk, C. Velasco-Schön, A. Buettner. Resolving the chemical structures of off-odorants and potentially harmful substances in toys – example of children swords. *Anal. Bioanal. Chem.* 2017, 409, 5249-5258, doi: 10.1007/s00216-017-0469-5. IF 3.125
4. S. Milanos, S. Elsharif, D. Janzen, A. Buettner, Carmen Villmann. Metabolic products of linalool and modulation of GABA receptors. *Frontiers in Chemistry, Food Chem. section* 2017, doi: 10.3389/fchem.2017.00046. IF 3.994
5. M. Denzer-Lippmann, S. Bachlechner, J. Wielopolski, M. Fischer, A. Buettner, A. Doerfler, C. Schöfl, G. Muench, J. Kornhuber, N. Thuerauf. The effects of a normal rate versus a slow intervalled rate of oral nutrient intake and intravenous low rate macronutrient application on psychophysical function – two pilot studies. *Frontiers in Psychology, section Percept. Sci.* 2017, 8, 1031, doi: 10.3389/fpsyg.2017.01031. IF 2.323
6. P. Denk, A. Buettner. Sensory characterization and identification of odorous constituents in acrylic adhesives. *Int. J. Adhesion Adhesives* 2017, doi: 10.1016/j.ijadhadh.2017.06.020. (c) IF 2.199
7. C. Wiedmer, C. Velasco-Schön, A. Buettner. Characterization of off-odours and potentially harmful substances in a fancy dress accessory handbag for children. *Sci. Reports* 2017, 7, Article number: 1807, doi: 10.1038/s41598-017-01720-5. (c) IF 5.525
8. M Schranz, K. Lorber, K. Klos, J. Kerschbaumer, A. Buettner. Influence of the chemical structure on the odor qualities and odor thresholds of guaiacol-derived odorants, Part 1: alkylated, alkenylated and methoxylated derivatives. *Food Chem.* 2017, 232, 808-819, doi: 10.1016/j.foodchem.2017.04.070. (c) IF 4.232
9. S. Elsharif, A. Buettner. Influence of the Chemical Structure on the Odor Characters of β-Citronellol and its Oxygenated Derivatives. *Food Chem.* 2017, 232, 704–711, doi: 10.1016/j.foodchem.2017.04.053. (c) IF 4.232
10. E. Kroener, A. Buettner. Unravelling important odorants in horseradish (*Armoracia rusticana*). *Food Chem.* 2017, 232, 455-465, doi: 10.1016/j.foodchem.2017.04.042. (c) IF 4.232
11. C. Wiedmer, C. Velasco-Schön, A. Buettner. Characterization of odorants in inflatable aquatic toys and swimming learning devices – which substances are causative for the characteristic odour and potentially harmful? *Anal. Bioanal. Chem.* 2017, doi: 10.1007/s00216-017-0330-x, paper in forefront. (c) IF 3.125

12. L. Schreiner, H. Loos, A. Buettner. Identification of odorants in wood of *Calocedrus decurrens* (Torr.) Florin by aroma extract dilution analysis and two-dimensional gas chromatography-mass spectrometry/olfactometry. *Anal. Bioanal. Chem.* 2017, doi: 10.1007/s00216-017-0314-x, paper in forefront. <sup>(c)</sup> IF 3.125
13. A. Pinar, D. Rauhut, E. Ruehl, A. Buettner. Effects of bunch rot (*Botrytis cinerea*) and powdery mildew (*Erysiphe necator*) fungal diseases on wine aroma. *Frontiers in Chemistry, Food Chem. section* 2017, 5, 20, doi: 10.3389/fchem.2017.00020. <sup>(c)</sup> IF 3.994
14. M. Strangl, T. Fell, M. Schlummer, A. Maeurer, A. Buettner. Characterization of odorous contaminants in post-consumer plastic packaging waste using multi-dimensional gas chromatographic separation coupled with olfactometric resolution. *J. Sep. Sci.* 2017, 40, 7, 1500-1507, doi: 10.1002/jssc.201601077. <sup>(c)</sup> IF 2.741
15. K. Lorber, G. Zeh, J. Regler, A. Buettner. Structure-Odor Relationships of (Z)-3-Alken-1-ols, (Z)-3-Alkenals, and (Z)-3-Alkenoic acids. *J. Agric. Food Chem.* 2017, doi: 10.1021/acs.jafc.6b04780, accepted. <sup>(c)</sup> IF 2.857
16. H. Loos, S. Doucet, F. Védrines, C. Sharapa, R. Soussignan, K. Durand, P. Sagot, A. Buettner, B. Schaal. Responses of human neonates to highly diluted odorants from sweat. *J. Chem. Ecol.* 2017, 43, 106-117. doi: 10.1007/s10886-016-0804-x. IF 3.151.
17. L. Scheffler, Y. Sauermann, A. Heinlein, C. Sharapa, A. Buettner. Detection of volatile metabolites derived from garlic (*Allium sativum*) in human urine. *Metabolites* 2016, 6, 43; doi:10.3390/metabo6040043. <sup>(c)</sup>
18. S. Elsharif, A. Buettner. Structure-odor relationship study on geraniol, nerol and their synthesized oxygenated derivatives. *J. Agric. Food Chem.* 2016, doi: 10.1021/acs.jafc.6b04534, accepted. <sup>(c)</sup> IF 2.857
19. A. Lopez Pinar, R. Ghadiriasli, P. Darriet, A. Buettner. Unexpected impact of 2-methylisoborneol as off-odour substance in aged wines. *Food Chem.* 2017, 220, 498-504, doi: 10.1016/j.foodchem.2016.10.021. <sup>(c)</sup> IF 4.232
20. M. Mahmoud, A. Buettner. Characterisation of aroma-active and off-odour compounds in German rainbow trout (*Oncorhynchus mykiss*). Part II: Case of fish meat and skin from earthen-ponds farming. *Food Chem.* 2016, accepted, doi: 10.1016/j.foodchem.2016.09.17. <sup>(c)</sup> IF 4.232
21. M. Denzer-Lippmann, J. Freiherr, J. Beauchamp, N. Thuerauf, J. Kornhuber, A. Buettner. Development and validation of a food-associated olfactory test (FAOT). *Chem Senses* 2017, 42, 47-57, doi: 10.1093/chemse/bjw099. <sup>(c)</sup> IF 2.886
22. L. Scheffler, Y. Sauermann, G. Zeh, K. Hauf, A. Heinlein, C. Sharapa, A. Buettner. Detection of volatile metabolites of garlic in human breast milk. *Metabolites* 2016, 6, 18, doi:10.3390/metabo6020018. <sup>(c)</sup>
23. M. Mahmoud, A. Buettner. Characterization of aroma-active and off-odor compounds in German rainbow trout (*Oncorhynchus mykiss*). Part I: Case of aquaculture water from earthen-ponds farming. *Food Chem.* 2016, 210, 623-630. doi: 10.1016/j.foodchem.2016.05.03. <sup>(c)</sup> IF 4.232
24. A. Lopez Pinar, D. Rauhut, E. Ruehl, A. Buettner. Effects of *Botrytis cinerea* and *Erysiphe necator* fungi on the aroma character of grape must: A comparative approach. *Food Chem.* 2016, 207, 251-260, doi: 10.1016/j.foodchem.2016.03.110. <sup>(c)</sup> IF 4.232
25. J. Niebler, K. Zhuravlova, M. Minceva, A. Buettner. Fragrant Sesquiterpene Ketones as Trace Constituents in Frankincense Volatile Oil of *Boswellia sacra* (Note). *J. Nat. Prod.* 2016, 9, 1160-1164, doi: 10.1021/acs.jnatprod.5b00836. <sup>(c)</sup> IF 3.662
26. O. Tyapkova, C. Siefarth, U. Schweiggert-Weisz, J. Beauchamp, A. Buettner, S. Bader-Mittermaier. Flavor release from sugar-containing and sugar-free confectionary egg

- albumen foams. *LWT - Food Science and Technology* 2016, 69, 538–545, doi: 10.1016/j.lwt.2016.01.075. *IF* 2.711
27. J. Niebler, A. Buettner. Frankincense revisited, part I: Comparative analysis of volatiles in commercially relevant *Boswellia* species. *Chem. Biodivers.* 2016, 13, 613–629, doi: 10.1002/cbdv.201500329, in press. <sup>(c)</sup> *IF* 1.52
28. Niebler, A. Buettner. Frankincense revisited: Volatiles and semivolatiles in *Boswellia* gum resins - part II: rare species and hybrids. *Chem. Biodivers.* 2016, 5, 630–643, doi: 10.1002/cbdv.201500339, in press. <sup>(c)</sup> *IF* 1.52
29. S. Elsharif, A. Banerjee, A. Buettner. Structure-odor relationships of linalool, linalyl acetate and their corresponding oxygenated derivatives. *Frontiers in Chemistry, Food Chemistry section* 2015, 3, 57, doi: 10.3389/fchem.2015.00057. <sup>(c)</sup> *IF* 3.994
30. K. Lorber, A. Buettner. Structure-odor Relationships of (E)-3-alkenoic acids, (E)-3-alken-1-ols and (E)-3-alkenals. *J. Agric. Food Chem.* 2015, 63, 6681–6688, doi: 10.1021/acs.jafc.5b02169. <sup>(c)</sup> *IF* 2.857
31. J. Niebler, A. Buettner. Pyrolysis-GC-MS-Olfactometry: A new approach to identify thermally generated odorants in frankincense. *J. Anal. Appl. Pyrol.* 2015, 113, 690–700, doi: 10.1016/j.jaap.2015.04.018. <sup>(c)</sup> *IF* 3.56
32. M. Denzer, F. Kirsch, A. Buettner. Are odorant constituents of herbal tea transferred into human milk? *J. Agric. Food Chem.* 2015, 63, 104–111, doi: 10.1021/jf504073d. <sup>(c)</sup> *IF* 2.857
33. J. Niebler, A. Buettner. Identification of odorants in frankincense (*Boswellia sacra* Flueck.) by aroma extract dilution analysis and two-dimensional gas chromatography-mass spectrometry/olfactometry. *Phytochem.* 109, 2015, 66–75, doi: 10.1016/j.phytochem.2014.10.030. <sup>(c)</sup> *IF* 2.779
34. C. Siefarth, A. Buettner. The Aroma of Goat Milk: Seasonal Effects and Changes Through Heat Treatment. *J. Agric. Food Chem.* 2014, 62, 11805–11817, doi: 10.1021/jf5040724. <sup>(c)</sup> *IF* 2.912
35. S. Nilsson, J. Sjöberg, M. Amundin, C. Hartmann, A. Buettner, M. Laska. Behavioral responses in large carnivores to mammalian blood odor and a blood odor component. *PLoS ONE*, 2014, 9, e112694, doi:10.1371/journal.pone.0112694. <sup>(c)</sup> *IF* 3.234
36. O. Benjamin, P. Silcock, J. Beauchamp, A. Buettner, D. W. Everett. Emulsifying Properties of Legume Proteins Compared to  $\beta$ -Lactoglobulin and Tween 20 and the Volatile Release from Oil-in-Water Emulsions. *J. Food Sci.* 2014, 79, E2014-E22, doi: 10.1111/1750-3841.12593. *IF* 1.649
37. H. Loos, S. Doucet, R. Soussignan, C. Hartmann, K. Durand, R. Dittrich, P. Sagot, A. Buettner, B. Schaal. Responsiveness of human neonates to the odor of 5 $\alpha$ -androst-16-en-3-one: A behavioral paradox? *Chem. Senses* 2014, 39, 693–703, doi: 10.1093/chemse/bju04 . *IF* 3.157
38. A. Heinlein, M. Metzger, H. Walles, A. Buettner. Transport of hop aroma compounds across Caco-2-monolayers. *Food Funct.* 2014, doi: 10.1039/C3FO60675A. <sup>(c)</sup> *IF* 2.791
39. C. Siefarth, T.B.T. Thao, P. Mittermaier, T. Pfeiffer, A. Buettner. Effect of radio frequency heating on yoghurt – II. Microstructure and texture. *Foods* 2014, 3, 369–393; doi:10.3390/foods3020369. <sup>(c)</sup>
40. C. Siefarth, T.B.T. Thao, P. Mittermaier, T. Pfeiffer, A. Buettner. Effect of radio frequency heating on yoghurt – I. Technological applicability, shelf-life and sensorial quality. *Foods* 2014, 3, 318–335; doi:10.3390/foods3020318. <sup>(c)</sup>
41. M. Denzer, S. Gailer, D. Kern, L. Schumm, N. Thuerauf, J. Kornhuber, A. Buettner, J. Beauchamp. Quantitative validation of the n-butanol sniffin' sticks threshold evaluation set. *Chemosens. percept.* 2014, 7, 91–101, doi: 10.1007/s12078-014-9168-1. *IF* 1.302

42. K. Lorber, P. Schieberle, A. Buettner. The influence of the chemical structure on odor qualities and odor thresholds in homologous series of 1,5-alkadien-3-ones, 1-alken-3-ones, 1,5-alkadien-3-ols and 1-alken-3-ols. *J. Agric. Food Chem.* 2014, 62, 1025-31, doi: 10.1021/jf404885j. <sup>(c)</sup> IF 2.912
43. C. Siefarth, Y. Serfert, S. Drusch, A. Buettner. Comparative Evaluation of Diagnostic Tools in the Process of Oxidative Deterioration of Unsaturated Fatty Acid Enriched Infant Formulas during Storage. *Foods* 2014, 3(1), 30-65, doi: 10.3390/foods3010030. <sup>(c)</sup>
44. C. Hartmann, R. Dittrich, A. Buettner. Identification of odor active substances in individual low-volume amniotic fluid samples by a sensorically targeted gas chromatographic-olfactometric approach. *Chemosens. Percept.* 2014, 7, 31-39, doi: 10.1007/s12078-013-9161-0. <sup>(c)</sup> IF 1.302
45. J. Beauchamp, M. Scheibe, T. Hummel, A. Buettner. Intranasal odorant concentrations in relation to sniff behaviour. *Chem. Biodivers.* 2014, 11, 619-638, doi: 10.1002/cbdv.201300320. IF 1.515
46. O. Tyapkova, S. Bader-Mittermaier, U. Schweiggert-Weisz, S. Wurzinger, J. Beauchamp, Andrea Buettner. Characterisation of flavour-texture interactions in sugar-free and sugar-containing pectin gels. *Food Res. Int.* 2014, 55, 336-346, doi: 10.1016/j.foodres.2013.10.048. IF 2.818
47. E. Zardin, O. Tyapkova, A. Buettner, J. Beauchamp. Performance assessment of proton-transfer-reaction time-of-flight mass spectrometry (PTR-TOF-MS) for analysis of isobaric compounds in food-flavour applications. *LWT - Food Sci. Technol.* 2014, 56, 153-160, doi: 10.1016/j.lwt.2013.10.041. IF 2.416
48. A. Kessler, H. Sahin-Nadeem, S. Lummis, I. Weigel, M. Pischetsrieder, A. Buettner, C. Villmann. GABAA receptor modulation by terpenoids from Sideritis extracts. *Mol. Nutr. Food Res.* 2014, 58, 851-862, doi: 10.1002/mnfr.201300420. IF 4.603
49. M. Wagenstaller, A. Buettner. Coffee aroma constituents and odorant metabolites in human urine. *Metabolomics* 2014, 10, 225-240, doi: 10.1007/s11306-013-0581-2. <sup>(c)</sup> IF 3.855
50. M. Wagenstaller, A. Buettner. Quantitative determination of odorants and their glucuronide conjugates in human urine. *Metabolites* 2013, 3, 637-657, doi: 10.3390/metabo3030637. <sup>(c)</sup>
51. F. Kirsch, A. Buettner. Odour qualities and thresholds of physiological metabolites of 1,8-cineole as an example for structure-activity relationships considering chirality aspects. *Chem. Biodiv.* 2013, 10, 1683-1695, doi: 10.1002/cbdv.201300097. <sup>(c)</sup> IF 1.795
52. C. Hartmann, A. Triller, M. Spehr, R. Dittrich, H. Hatt, A. Buettner. Sperm activating odorous substances in human follicular fluid and vaginal secretion: Identification by gas chromatography-olfactometry and Ca<sup>2+</sup> imaging. *ChemplusChem* 2013, 78, 695-702, doi: 10.1002/cplu.201300008 <sup>(c)</sup>. IF 3.242.
53. M. Mehdid, A. Djafri, F. Andreoli, N. Vanthuyne, D. Farran, J. Niebler, A. Buettner, M. Giorgi, C. Roussel. Metathetic Sulfur Transfer mediated by N-(2-aminophenyl)-4-methyl-thiazolin-2-thione derivatives: Part III: a new Route to Diversely Substituted S-alkyl thioesters. *Tetrahedron* 2013, 69, 4994e5001, doi: 10.1016/j.tet.2013.04.013. IF 2.817
54. O. Benjamin, P. Silcock, J. Beauchamp, A. Buettner, D.W. Everett. Volatile release and structural stability of β-lactoglobulin primary and multilayer emulsions under simulated oral conditions. *Food Chem.* 2013, 140, 124-134, doi: 10.1016/j.foodchem.2013.02.043 IF 3.259

55. J. Spitzer, K. Klos, A. Buettner. Monitoring aroma changes during human milk storage at +4°C by sensory and quantification experiments. *Clin. Nutr.* 2013, 32, 1036-1042, doi: 10.1016/j.clnu.2013.01.015. <sup>(c)</sup> IF 4.487
56. F. Kirsch, A. Buettner. Characterisation of the metabolites of 1,8-cineole transferred into human milk: Concentrations and ratio of enantiomers. *Metabolites* 2013, 3, 47-71, doi: 10.3390/metabo3010047. <sup>(c)</sup>
57. J. Spitzer, A. Buettner. Monitoring aroma changes during human milk storage at -19°C by quantification experiments. *Food Res. Int.* 2013, 51, 250–256, doi: 10.1016/j.foodres.2012.12.002. <sup>(c)</sup> IF 3.05
58. C. Hartmann, F. Mayenzet, J.-P. Larcinese, O. Haefliger, A. Buettner, C. Starkenmann. Development of an analytical approach for identification and quantification of 5- $\alpha$ -androst-16-en-3-one in human milk. *Steroids* 2013, 78, 156-160, doi: 10.1016/j.steroids.2012.11.005. <sup>(c)</sup> IF 2.716
59. M. Schaffarczyk, T. Balaban, M. Rychlik, A. Buettner. Syntheses of chiral 1,8-cineole-metabolites and determination of their enantiomeric composition in human urine after ingestion of 1,8-cineole-containing capsules. *ChemPlusChem* 2013, 78, 77-85, doi: 10.1002/cplu.201200253. <sup>(c)</sup> IF 3.242
60. F. Kirsch, K. Horst, W. Röhrig, M. Rychlik, A. Buettner. Tracing metabolite profiles in human milk: Studies on the odorant 1,8-cineole transferred into breast milk after oral intake. *Metabolomics* 2013, 9, 483-496, doi: 10.1007/s11306-012-0466-9. <sup>(c)</sup> IF 3.965
61. M. Wagenstaller, A. Buettner. Characterization of odorants in human urine using a combined chemo-analytical and human-sensory approach – a potential diagnostic strategy. *Metabolomics*, 2013, 9, 9-20, doi: 10.1007/s11306-012-0425-5. <sup>(c)</sup> IF 3.965
62. O. Benjamin, P. Silcock, J. Beauchamp, A. Buettner, D.W. Everett. Tongue pressure and oral conditions affect volatile release from liquid systems in a model mouth. *J. Agric. Food Chem.* 2012, 60, 9918-27, doi: 10.1021/jf3028232. IF 2.906
63. J. Müller, N. Gruner, I. Almstätter, F. Kirsch, A. Buettner, M. Pfaffl. Investigation into the metabolism of 1,8-cineole in an intestinal cell culture model and acquisition of its immune-modulatory effect via gene expression analysis. *Flavour Fragr. J.* 2012, 27, 405–413, doi: 10.1002/ffj.3109. IF 1.824
64. A. Heinlein, A. Buettner. Monitoring of biotransformation of hop aroma compounds in an in vitro digestion model. *Food & Function* 2012, 3, 1059-1067, doi: 10.1039/C2FO30061C. <sup>(c)</sup> IF 2.694
65. C. Hartmann, S. Doucet, Y. Niclass, R. Dittrich, S. Cupisti, B. Schaal, A. Buettner, C. Starkenmann. Human sweat odour conjugates in human milk, colostrum and amniotic fluid. *Food Chem.* 2012, 135, 228-233, doi: 10.1016/j.foodchem.2012.04.077. <sup>(c)</sup> IF 2.906
66. A. Kessler, C. Villmann , H. Sahin, M. Pischetsrieder, A. Buettner. GABA<sub>A</sub> receptor modulation by the volatile fractions of Sideritis species used as ‘Greek’ or ‘Turkish’ mountain tea. *Flavour Fragr. J.* 2012, 27, 297–303, doi: 10.1002/mnfr.201300420. IF 1.824
67. A. Strube, A. Buettner, M. Czerny. Influence of chemical structure on absolute odour thresholds and odour characters of ortho- and para-halogenated phenols and cresols. *Flavour Fragr. J.* 2012, 27, 304–312, doi: 10.1002/ffj.3101. IF 1.824
68. F. Kirsch, J. Beauchamp, A. Buettner. Time-dependent aroma changes in breast-milk after oral intake of a pharmacological preparation containing 1,8-cineole. *Clin. Nutr.* 2012, 31, 682-692, doi: 10.1016/j.clnu.2012.02.002. <sup>(c)</sup> IF 4.487

69. S. Sandgruber, A. Buettner. Comparative human-sensory evaluation and quantitative comparison of odour-active oxidation markers of encapsulated fish oil products used for supplementation during pregnancy and the breastfeeding period. *Food Chem.* 2012, 133, 458-466, doi: 10.1016/j.foodchem.2012.01.072. <sup>(c)</sup> IF 3.334
  70. S. Sandgruber, D. Much, U. Amann-Gassner, H. Hauner, A. Buettner. Sensory and molecular characterisation of the protective effect of storage at -80°C on the odour profiles of human milk. *Food Chem.* 2012, 130, 236-242, doi: 10.1016/j.foodchem.2011.07.013. <sup>(c)</sup> IF 3.334
  71. C. Siefarth, O. Tyapkova, J. Beauchamp, U. Schweiggert, A. Buettner, S. Bader. Mixture design approach as a tool to study in vitro flavor release and viscosity interactions in sugar-free polyol and bulking agent solutions. *Food Res. Int.* 2011, 44, 3202-3211, doi: 10.1016/j.foodres.2011.08.005. IF 3.15
  72. C. Siefarth, O. Tyapkova, J. Beauchamp, U. Schweiggert, A. Buettner, S. Bader. Influence of polyols and bulking agents on flavor release from low-viscosity solutions. *Food Chem.* 2011, 129, 1462-1468, doi: 10.1016/j.foodchem.2011.05.115. IF: 3.655
  73. S. Sandgruber, D. Much, U. Amann-Gassner, H. Hauner, A. Buettner. Sensory and molecular characterization of human milk odour profiles after maternal fish oil supplementation during pregnancy and breastfeeding. *Food Chem.* 2011, 128, 485-494, doi: 10.1016/j.foodchem.2011.03.058. <sup>(c)</sup> IF 3.655
  74. M. Czerny, R. Brueckner, E. Kirchhoff, R. Schmitt, A. Buettner. The Influence of Molecular Structure on Odor Qualities and Odor Detection Thresholds of Volatile Alkylated Phenols. *Chem. Senses* 2011, 36, 539-553, doi: 10.1093/chemse/bjr009. IF 2.599
  75. J. Spitzer, S. Doucet, A. Buettner. The influence of storage conditions on flavour changes in human milk. *Food Qual. Pref.* 2010, 21, 998-1007, doi: 10.1016/j.foodqual.2010.05.007. <sup>(c)</sup> IF 3.013
  76. J. Beauchamp, F. Kirsch, A. Buettner. Real-time breath gas analysis for pharmacokinetics: monitoring exhaled breath by on-line proton-transfer-reaction mass spectrometry after ingestion of eucalyptol-containing capsules. *J. Breath Res.* 2010, 4, 026006, doi: 10.1088/1752-7155/4/2/026006. (Journal featured article and Article of the year 2010) IF 1.828
  77. A. Buettner, J. Beauchamp. Chemical input – sensory output: diverse modes of physiology-flavour interaction. *Food Qual. Pref.* 2010, 21, 915-924, doi: 10.1016/j.foodqual.2010.01.008 <sup>(c)</sup> IF 3.013
  78. J. Beauchamp, J. Frasnelli, A. Buettner, M. Scheibe, A. Hansel, T. Hummel. Characterization of an olfactometer by proton-transfer reaction mass spectrometry. *Meas. Sci. Technol.* 2010, 21, 025801, doi: 10.1088/0957-0233/21/2/025801. IF 1.35
  79. J. Spitzer, A. Buettner. Characterization of aroma changes in human milk during storage at -19 °C. *Food Chem.* 2010, 120, 240-246, doi: 10.1016/j.foodchem.2009.10.015. <sup>(c)</sup> IF 3.458
  80. S. Bader, M. Czerny, P. Eisner, A. Buettner. Characterisation of odour-active compounds in lupin flour. *J. Sci. Food Agric.* 2009, 89 (14), 2421-2427, doi: 10.1002/jsfa.3739. IF 1.386
  81. M. Czerny, A. Buettner. Odor-Active Compounds in Cardboard. *J. Agric. Food Chem.* 2009, 57, 9979-9984, doi: 10.1021/jf901435n. IF 2.469
-

82. A. Strube, H. Guth, A. Buettner. Identification of a medicinal off-flavour in mineral water. *Water Res.* 2009, **43**, 5216-5224, doi: 10.1016/j.watres.2009.08.026. *IF* 4.355
83. M. Mertens, E. Kirchhoff, A. Buettner. The volatile constituents of frankincense – a review. *Flavour Fragr. J.* 2009, **24**, 279 – 300, doi: 10.1002/ffj.1942. <sup>(c)</sup> *IF* 1.266
84. A. Strube, A. Buettner, C. Groetzinger. Characterization and identification of a plastic off-odour in mineral water. *Water Sci. Technol.: Water Supply—WSTWS* 2009, **9** (3), 299-309, doi: 10.2166/ws.2009.382. *IF* 1.094
85. O. Lasekan, A. Buettner, M. Christlbauer. Investigation of the Retronasal Perception of Palm Wine (*Elaeis guineensis*) Aroma by Application of Sensory Analysis and Exhaled Odorant Measurement (EXOM). *African Journal of Food Agriculture, Nutrition and Development*, 2009, **9**, 793-813, doi: 10.4314/ajfand.v9i2.19221. <sup>(c)</sup>
86. O. Tyapkova, M. Czerny, A. Buettner. Characterisation of flavour compounds formed by  $\gamma$ -irradiation of polypropylene. *Polymer Degrad. Stabil.* 2009, **94**, 757-769, doi: 10.1016/j.polymdegradstab.2009.02.2006. *IF* 2.154 <sup>(c)</sup>
87. A. Buettner, S. Otto, A. Beer, M. Mestres, P. Schieberle, T. Hummel. Dynamics of retronasal aroma perception during consumption: Cross-linking on-line breath analysis with medico-analytical tools to elucidate a complex process. *Food Chem.* 2008, **108**, 1234-1246, doi: 10.1016/j.foodchem.2007.03.042. *IF* 2.696 <sup>(H) (c)</sup>
88. M. Tietz, A. Buettner, B. Conde-Petit. Changes in structure and aroma release from starch–aroma systems upon  $\alpha$ -amylase addition. *Eur. Food Res. Technol.* 2008, **227**, 1439–1446, doi: 10.1007/s00217-008-0864-4. *IF* 1.622
89. M. Tietz, A. Buettner, B. Conde-Petit. Interaction between starch and aroma compounds as measured by proton transfer reaction mass spectrometry (PTR-MS). *Food Chem.* 2008, **108**, 1192-1199, doi: 10.1016/j.foodchem.2007.08.012. *IF* 2.696
90. O. Lasekan, A. Buettner, M. Christlbauer. Investigation of Important Odorants of Palm wine (*Elaeis guineensis*). *Food Chem.* 2007, **105**(1), 15-23, doi: 10.1017/j.foodchem.2006.12.052. *IF* 3.052 <sup>(c)</sup>
91. A. Buettner. Characterization of odor-active and volatile constituents in small-scale human milk samples. *Flav. Fragr. J.* 2007, **22**, 465-473, doi: 10.1002/ffj.1822. *IF* 1.266 <sup>(c)</sup>
92. M. Mestres, R. Kieffer, A. Buettner. Aroma release and retronasal perception of Ethyl butanoate during and after consumption of flavored whey protein gels – relation between textural and physiological parameters. *J. Agric. Food Chem.* 2006, **54**, 1814-1821, doi: 10.1021/jf0517501. *IF* 2.562 <sup>(H) (c)</sup>
93. A. Buettner, M. Mestres. Investigation of the retronasal perception of strawberry aroma aftersmell depending on matrix composition. *J. Agric. Food Chem.* 2005, **53**, 1661-1669, doi: 10.1021/jf048502+. *IF* 2.562 <sup>(H) (c)</sup>
94. Y. Tokitomo, M. Steinhaus, A. Buettner, P. Schieberle. Odor-active constituents in fresh pineapple (*Ananas comosus* [L.] Merr.) by quantitative and sensory evaluation. *Biosci. Biotechnol. Biochem.* 2005, **69**, 1323-1330, doi: 10.1271/bbb.69.132. *IF* 1.39
95. M. Mestres, N. Moran, A. Jordan, A. Buettner. Aroma release and retronasal perception during and after consumption of flavored whey protein gels with different textures. Part I: in vivo release analysis. *J. Agric. Food Chem.* 2005, **53**, 403-409, doi: 10.1021/jf048596n. *IF* 2.562 <sup>(H) (c)</sup>

96. A. Buettner. Investigation of potent odorants and afterodor development in two chardonnay wines using the Buccal Odor Screening System (BOSS). *J. Agric. Food Chem.* 2004, 52, 2339-2346, doi: 10.1021/jf035322b. *IF* 2.562 <sup>(H)</sup> <sup>(c)</sup>
  97. A. Buettner, F. Welle. Intra-oral detection of potent odorants using a modified stir-bar sorptive extraction system in combination with HRGC/O called Buccal Odor Screening System (BOSS). *Flavour Fragr. J.*, 2004, 19, 505-514, doi: 10.1002/ffj.1473. *IF* 1.266 <sup>(H)</sup> <sup>(c)</sup>
  98. A. Buettner, M. Mestres, A. Fischer, J. Guasch; P. Schieberle. Evaluation of the most odour-active compounds in the peel oil of clementines (*Citrus reticulata blanco* cv. clementine). *Eur. Food Res. Technol.* 2003, 216, 11-14, doi: 10.1007/s00217-002-0586-y. *IF* 1.622
  99. A. Buettner. The influence of human salivary enzymes on odorant concentration changes occurring in vivo; Part I: Esters and thiols. *J. Agric. Food Chem.* 2002, 50, 3283-3289, doi: 10.1021/jf011586r. *IF* 2.562 <sup>(H)</sup> <sup>(c)</sup>
  100. A. Buettner. Influence of human saliva on odorant concentrations; Part II: Aldehydes, alcohols, 3-alkyl-2-methoxypyrazines, methoxyphenols, and 3-hydroxy-4,5-dimethyl-2(5H)-furanone. *J. Agric. Food Chem.* 2002, 50, 7105-7110, doi: 10.1021/jf020714o. *IF* 2.562 <sup>(H)</sup> <sup>(c)</sup>
  101. A. Buettner, A. Beer, C. Hannig, M. Settles, P. Schieberle. Physiological and analytical studies on flavor perception dynamics as induced by the eating and swallowing process. *Food qual. pref.* 2002, 13, 497-504, doi: 10.1016/S0950-3293(02)00052-6. *IF* 2.006 <sup>(H)</sup> <sup>(c)</sup>
  102. S. Lorenz, A. Buettner, K. Ender, G. Nuernberg, H.-J. Papstein, P. Schieberle, K. Nuernberg. Influence of keeping system on the fatty acid composition in the *longissimus* muscle of bulls and odorants formed after pressure cooking. *Eur. Food Res. Technol.* 2002, 214, 112-118, doi:10.1007/s00217-001-0427-4. *IF* 1.622
  103. A. Buettner, A. Beer, C. Hannig, M. Settles. Observation of the swallowing process by application of videofluoroscopy and real-time magnetic resonance imaging – consequences for aroma perception. *Chem. Senses* 2001, 26, 1211-1219, doi: 10.1093/chemse/26.9.1211. *IF* 3.041 <sup>(H)</sup> <sup>(c)</sup>
  104. A. Buettner, P. Schieberle. Aroma properties of homologous series of 2,3-epoxyalkanals and tr-4,5-epoxyalk-2-enals. *J. Agric. Food Chem.* 2001, 49, 3881-3884. *IF* 2.562
  105. A. Buettner, P. Schieberle. Evaluation of key aroma compounds in handsqueezed grapefruit juice (*Citrus paradisi* Macfayden) by quantitation and flavor reconstitution experiments. *J. Agric. Food Chem.* 2001, 49, 1358-1363, doi: 10.1021/jf001235x. *IF* 2.562 <sup>(D)</sup>
  106. A. Buettner, P. Schieberle. Evaluation of aroma differences between hand-squeezed juices from Valencia late and Navel oranges by quantitation of key odorants and flavor reconstitution experiments. *J. Agric. Food Chem.* 2001, 49, 2387-2394, doi: 10.1021/jf001363l. *IF* 2.562 <sup>(D)</sup>
  107. A. Buettner, P. Schieberle. Exhaled odorant measurement (EXOM) – a new approach to quantify the degree of in-mouth release of food aroma compounds. *Food Sci. Technol.* 2000, 33, 553-559, doi: 10.1006/fstl.2000.0708. *IF* 1.887 <sup>(H)</sup>
-

108. A. Buettner, P. Schieberle. Influence of mastication on the concentrations of aroma volatiles – some aspects of flavour release and flavour perception. *Food Chem.* 2000, 71, 347-354, doi: 10.1016/S0308-8146(00)00199-0. *IF* 2.696 <sup>(H)</sup>
109. A. Buettner, P. Schieberle. Characterization of the most odor-active volatiles in fresh, hand-squeezed juice of grapefruit (*Citrus paradisi* Macfayden). *J. Agric. Food Chem.* 1999, 47, 5189-5193, doi: 10.1021/jf990071l. *IF* 2.562 <sup>(D)</sup>
110. A. Hinterholzer, P. Schieberle. Identification of the most odour-active volatiles in fresh, hand-extracted juice of Valencia late oranges by odour dilution techniques. *Flavour Fragr. J.* 1998, 13, 49-55, doi : 10.1002/(SICI)1099-1026(199801/02)13:13.0.CO;2-S. *IF* 1.266. <sup>(D)</sup>
111. A. Hinterholzer, T. Lemos, P. Schieberle. Identification of the key odorants in raw french beans and changes during cooking. *Z Lebensm Unters Forsch A* 1998, 207, 219-222, doi: 10.1007/s002170050322. *IF*

(H) publications related to the habilitation thesis

(D) publications related to the PhD thesis

(C) corresponding author

## 2. Proceedings (peer-reviewed)

112. Shaimaa Awadain Elsharifa and Andrea Buettner. Structure-odor relationship study of C-6 unsaturated acyclic monoterpene alcohols: a comparative approach. Proceedings of the 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 2017, accepted.
  113. R. Ghadiriasli, A. Pinar, J.-W. van de Kuilen, A. Buettner. Odorants in oak wood – a review of aroma-analytical approaches used for uncovering the olfactorily relevant substances. Proceedings of the 6th Int. Sci. Conf. on Hardwood Processing 2017, accepted.
  114. A. Buettner, J. Beauchamp, J. Freiherr, A. Heinlein, A. Kessler, K. Leuner, M. Metzger, M. Pischetsrieder, C. Villmann, H. Walles. Physiological impact of odorants: immediate versus post-ingestion and post-inhalation effects. In: Flavour Science. Proceedings of the XIV Weurman Flavour Research Symposium (A. Taylor, D. Mottram, eds), Context Products Ltd, Packington, UK, 2015, ISBN 9781899043705, pp. 285-290.
  115. J. Spitzer, A. Buettner. Quantification of odour-active marker substances of fatty acid oxidation in stored milk: comparison between human and bovine milk. In: Proceedings of the 10th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2014, pp. 465-468.
  116. J. Niebler, D. Farran, C. Roussel, T. S. Balaban, A. Buettner. Synthesis of new thioterpenoid odorants with unexpected mushroom-like flavour qualities. In: Proceedings of the 10th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2014, pp. 439-443.
  117. A. Heinlein, E. Neufeld, A. Buettner. The fate of aroma compounds in the gastrointestinal tract – experiments comparing fed and fasted conditions. In: Proceedings of the 10th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2014, pp. 265-269.
  118. K. Lorber, P. Schieberle, A. Buettner. Structure-odour relationships of alka-1,5-dien-3-ones, alk-1-en-3-ones, alka-1,5-dien-3-ols and alk-1-en-3-ols. In: Proceedings of the 10th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2014, pp. 258-261.
  119. A. Kessler, C. Villmann, H. Sahin, A. Buettner. Electrophysiological characterization of neurotropic activity of Sideritis tea volatiles. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 71-75.
  120. I. Almstätter, J. Pfaffl, M. Pfaffl, A. Buettner. Determination of cell morphology under 1,8-cineole treatment in porcine intestinal cells. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 65-69.
  121. A. Strube, M. Czerny, A. Buettner. Determination of odor perceptions of ortho and para halogenated phenols. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 557-561.
  122. A. Heinlein, A. Buettner. Monitoring of hop aroma compounds in an in vitro digestion model. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 77-80.
-

123. S. Sandgruber, A. Buettner. Sensory and molecular characterization of the aroma profiles of fish oil supplements. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 245-249.
  124. A. Buettner. Odorant – physiology interactions: in search of effects beyond smell perception. Flavour Science. Proceedings of the 13th Weurman Flavour Research Symposium, 2013, Zaragoza, Spain, 51-57.
  125. F. Kirsch, K. Horst, J. Beauchamp, M. Rychlik, A. Buettner. Transfer of a pharmacological aroma preparation into human milk – monitoring of substance profiles depending on physiological transition processes. In: Advances and challenges in flavour chemistry & biology, Proceedings of the 9th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, W. Meyerhof, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2011, 257-260.
  126. S. Sandgruber, D. Much, U. Amann-Gassner, H. Hauner, A. Buettner. Do maternal dietary food aromas influence flavour profiles of human milk? – a fishy example. In: Advances and challenges in flavour chemistry & biology, Proceedings of the 9th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, W. Meyerhof, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2011, 267-271.
  127. S. Doucet, C. Hartmann, R. Dittrich, B. Schaal, A. Buettner. Do overlapping odour constituents in human milk and amniotic fluid explain undifferentiated attraction in newborns? In: Advances and challenges in flavour chemistry & biology, Proceedings of the 9th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, W. Meyerhof, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2011, 39-44.
  128. M. Czerny, R. Brueckner, A. Buettner. Sensory properties of homologous series of volatile alkylated phenols. In: Advances and challenges in flavour chemistry & biology, Proceedings of the 9th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, W. Meyerhof, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2011, 82-87.
  129. A. Buettner. In vivo flavour monitoring: from stimulation via perception to appreciation. In: Advances and challenges in flavour chemistry & biology, Proceedings of the 9th Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, W. Meyerhof, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2011, 47-54.
  130. A. Buettner. Characterization of food perception: tracing the chemosensations that drive our appetite. In: Expression of multidisciplinary flavour science, Proceedings of the 12th Weurman Aroma symposium (I. Blank, M. Wüst, C. Yeretzian, eds), ZHAW Zürcher Hochschule für Angewandte Wissenschaften, Switzerland, 2010, 95-100. <sup>(c)</sup>
  131. A. Strube, A. Buettner. The Influence of the Chemical Structure on Odor Qualities and Odor Potencies in Chloro-organic Substances. In: Expression of multidisciplinary flavour science, Proceedings of the 12th Weurman Aroma symposium (I. Blank, M. Wüst, C. Yeretzian, eds), ZHAW Zürcher Hochschule für Angewandte Wissenschaften, Switzerland, 2010, 486-489.
  132. K. Buhr, A. Buettner, P. Schieberle. Troubleshooting proton transfer reaction - mass spectrometry. In: Proceedings of the 8<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2007, 185-190.
-

133. M. Tietz, A. Buettner, B. Conde-Petit. Starch flavor interactions : impact of starch structure and release from food model systems. Proceedings of the 8<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2007, 429-432.
  134. A. Buettner. Investigation of Espresso-“Aftersmell” by Use of the Buccal Odor Screening System (BOSS). In: State-of-the-Art in Flavour Chemistry and Biology. Proceedings of the 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2005, 387-390. <sup>(H) (c)</sup>
  135. A. Buettner, M. Griess. Retronasal perception of espresso aroma. In: State-of-the-Art in Flavour Chemistry and Biology. Proceedings of the 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2005, pp. 381-386. <sup>(H) (c)</sup>
  136. A. Buettner, M. Mestres. Retronasal aroma perception – a closer look at psychophysical interaction phenomena. In: State-of-the-Art in Flavour Chemistry and Biology. Proceedings of the 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds), Eigenverlag Deutsche Forschungsanstalt für Lebensmittelchemie, Garching, Germany, 2005, pp. 3-12. <sup>(H) (c)</sup>
  137. T.S. Balaban, A. Buettner, C. Roussel, N. Vanthuyne, P. Schieberle. Novel fragrant tetrahydropyrans and their olfactory properties. In: State-of-the-Art in Flavour Chemistry and Biology. Proceedings of the 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds) 2005, pp. 31-36. <sup>(c)</sup>
  138. D. Boerger, A. Buettner, P. Schieberle. Structure/odour correlations in homologous series of allylic ketones – An approach to predict odour thresholds based on molecular modeling. In: State-of-the-Art in Flavour Chemistry and Biology. Proceedings of the 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology (T. Hofmann, T. Rothe, P. Schieberle, eds) 2005, pp. 51-58.
  139. A. Buettner. Prolonged retronasal aroma perception – a phenomenon influenced by physiological factors and food matrix composition. In: Flavour Research at the Dawn of the Twenty-first Century (J.L. Le Quéré, P.X. Etiévant, eds), Proceedings of the 10<sup>th</sup> Weurman Flavour Research Symposium, Lavoisier, London, 2003, 188-193. <sup>(H) (c)</sup>
  140. K. Schmiedeberg, M. Sieber, A. Buettner, P. Schieberle, W. Meyerhof, D. Krautwurst. Identification and functional expression of olfactory receptors specific for key food alkylpyrazines. In: Flavour Research at the Dawn of the Twenty-first Century (J.L. Le Quéré, P.X. Etiévant, eds), Proceedings of the 10<sup>th</sup> Weurman Flavour Research Symposium, Lavoisier, London, 2003, 269-274.
  141. D. Börger, A. Buettner, P. Schieberle. Structure/odour relationships in homologous series of aroma-active allylalcohols and allylketones. In: Flavour Research at the Dawn of the Twenty-first Century (J.L. Le Quéré, P.X. Etiévant, eds), Proceedings of the 10<sup>th</sup> Weurman Flavour Research Symposium, Lavoisier, London, 2003, 281-286.
  142. P. Schieberle, M. Mestres, A. Buettner. Characterization of aroma compounds in fresh and processed mandarin oranges. In: *Freshness and shelf-life of foods* (H. Weenen, K. Cadwallader, eds), ACS Symp. Ser. 836, 2003, 162-174.
-

143. A. Buettner, A. Beer, C. Hannig, M. Settles, P. Schieberle. Quantitation of the in-mouth release of heteroatomic odorants. In: *Flavor chemistry of heteroatomic compounds* (T. Reineccius, G. Reineccius, eds), ACS Symp. Ser. 826, 2002, 296-311. <sup>(H) (c)</sup>
144. P. Schieberle, A. Buettner. Influence of the chain length on the aroma properties of homologous epoxy-aldehydes, ketones and alcohols. In: *Aroma-active compounds in foods: chemistry and sensory properties* (G. Takeoka, M. Güntert, K.-H. Engel, eds). ACS symp. ser. 794, 2001, 109-118.
145. A. Buettner, P. Schieberle. Application of a comparative aroma extract dilution analysis to monitor changes in orange juice aroma compounds during processing. In: *Gas chromatography – olfactometry: the state of the art* (J. Leland, A. Buettner, P. Schieberle, T. Acree, eds). ACS symp. ser. 782, 2001, pp. 33-45. <sup>(D)</sup>
146. A. Buettner, P. Schieberle. Comparison of important aroma compounds in hand-squeezed orange juices of Valencia late and Navel oranges (*Citrus sinensis* (L.) Osbeck). In: *Flavour 2000* (M. Rothe, ed.), 6<sup>th</sup> Wartburg Aroma Symposium, 2001, pp. 151-160. <sup>(D)</sup>
147. P. Schieberle, A. Buettner. Comparison of the key odorants in fresh, hand-squeezed juices of orange (Valencia late) and grapefruit (White Marsh). In: *Frontiers of Flavor Science* (P. Schieberle, K.-H. Engel, eds). 9<sup>th</sup> Weurman Flavour Research Symposium 2000, pp. 10-16. <sup>(D)</sup>
148. A. Buettner, P. Schieberle. Stable isotope dilution assays for the quantification of odour-active thiols in hand-squeezed grapefruit juices (*Citrus paradisi* MACFAYDEN). In: *Frontiers of Flavor Science* (P. Schieberle, K.-H. Engel, eds). 9<sup>th</sup> Weurman Flavour Research Symposium 2000, pp. 132-134. <sup>(D)</sup>
149. A. Buettner, P. Schieberle. Changes in the concentrations of key fruit odorants induced by mastication. In: *Flavor release* (D. Roberts, A. Taylor, eds). ACS symp. ser. 763, 2000, New Orleans, pp. 87-98. <sup>(H)</sup>

(H) publications related to the habilitation thesis

(D) publications related to the PhD thesis

(C) corresponding author

### 3. Proceedings (nicht peer-reviewed)

150. A. Buettner, M Gruenbaum, E. Zardin, R. Fengler, L. Gruber, J. Beauchamp. Rapid assessment of aromatic mineral oil constituents contamination in paper-based food packaging. *Proceedings of the 7th International PTR-MS Conference*, Obergurgl, Austria, 2016, Armin Hansel, Jürgen Dunkl, eds., Innsbruck University press, 2016, pp. 67-70.
151. A. Buettner, Jonathan Beauchamp, J. Freiherr. Understanding human perception and response during aroma evaluation and tasting of wine. *Proceedings of the 15th Australian Wine Industry Technical Conference* 2013.
152. J. Beauchamp, D. Kern, M. Scheibe, M. Y. Denzer, N. Thürauf, A. Buettner. PTR-MS applications in olfactology: detection of odorants at the human nasal receptor sites. *Proceedings of the 6th International PTR-MS Conference*, Obergurgl, Austria, 2013, Armin Hansel, Jürgen Dunkl, eds., Innsbruck University press, ISBN 978-3-902811-91-2, pp. 28-31.

153. E. Zardin, O.Tyapkova, S. Mittermaier, A. Buettner, J. Beauchamp. Applications of PTR-TOF-MS in food chemistry: discrimination of isobaric aroma compounds and monitoring of lipoxygenase-derived volatile formation. Proceedings of the 6th International PTR-MS Conference, Obergurgl, Austria, 2013, Armin Hansel, Jürgen Dunkl, eds., Innsbruck University press, ISBN 978-3-902811-91-2, pp. 71-73.
154. C. Siefarth, O. Tyapkova, J. Beauchamp, U. Schweiggert, A. Buettner, S. Bader. Influence of polyols and bulking agents on flavor release. Proceedings of the 5th PTR-MS conference, Obergurgl, Austria, 2011, 116-119.
155. J. Beauchamp, A. Buettner. From pharmacokinetics to sensory science: the versatility of PTR-MS in a multidisciplinary environment. Proceedings of the 5th PTR-MS conference, Obergurgl, Austria, 2011, 25-28.
156. A. Buettner. Die Welt des Lebensmittelgenusses: Sind unsere Präferenzen angeboren oder erlernt? Moderne Ernährung heute (R. Matissek, ed.), Kompendium wissenschaftlicher Pressedienste Band 8, 2010, 33-40.
157. A. Strube, O. Tyapkova, M. Czerny, A. Buettner. Sensory analytics: characterization and identification of off-flavors in packaged food. 11. Workshop: Geruch und Emissionen bei Kunststoffen, Kassel, 2009, 14-1 – 14-9.
158. A. Buettner, J. Beauchamp. Objectifying human perception: When physiology and psychology deceives analytics. Proceedings of the 4th PTR-MS conference, Obergurgl, Austria, 2009, 56-60.
159. J. Beauchamp, J. Frasnelli, A. Buettner, M. Scheibe, A. Hansel, T. Hummel. PTR-MS Characterisation of an Olfactometer. Proceedings of the 4th PTR-MS conference, Obergurgl, Austria, 2009, 186-190.
160. A. Buettner. Nahrungsprägung und Lebensmittel-Präferenz: Angeboren oder erlernt? In: Flavor – Neue Lebensmittel für den modernen Verbrauchergeschmack, Proceedings der Fraunhofer IVV Jahrestagung, 2008, 21-28.
161. S. Bader, P. Eisner, K. Hasenkopf, M. Schott, M. Czerny, A. Buettner. Optimierung der sensorischen Eigenschaften von Lupinenproteinpräparaten. In: Flavor – Neue Lebensmittel für den modernen Verbrauchergeschmack, Proceedings der Fraunhofer IVV Jahrestagung, 2008, 51-61.
162. K. Buhr, A. Buettner, P. Schieberle. Analysis of Lactones by Proton Transfer Reaction - Mass Spectrometry (PTR-MS). Fragmentation Patterns and Detection Limits. Proceedings of the 3<sup>rd</sup> International PTR-MS Conference 2007, Universitätszentrum Obergurgl, Obergurgl, Austria, 2007.
163. A. Buettner, M. Mestres. Targeting the qualitative, quantitative and temporal aspects of retronasal aroma perception: a challenge for time-intensity profiling? Proceedings of the 3<sup>rd</sup> International PTR-MS Conference 2007, Universitätszentrum Obergurgl, Obergurgl, Austria, 2007.
164. A. Buettner, P. Schieberle. Wann sind Aromastoffe für die Geruchswahrnehmung verfügbar? In: Mikrobielle allergische und toxische Verbindungen (R. Keller, K. Senkpiel, R.A. Samson, E.S. Hoekstra, eds), Schriftenreihe des Instituts für medizinische Mikrobiologie und Hygiene der Universität zu Lübeck, IX. Lübecker Fachtagung für Umwelthygiene, Band 9, 2005, 303-318.
165. A. Buettner. Physiology and chemistry behind retronasal aroma perception during winetasting. In: Oenologie 2003 (A. Lonvaud-Funel, G. de Revel, P. Darriet, eds),

Proceedings of the VIIth International Symposium d'Oenology, Editions Tec & Doc, Paris, 2003, 566-569. (H)

166. A. Buettner, P. Schieberle. Influence of mastication on the concentrations of aroma volatiles. Food Science and Technology COST Action 96. Interactions of food matrix with small ligands influencing flavour and texture. Volume 7, 2000, P. Pittia, E. Guichard (eds), pp. 123-125.
167. A. Buettner, U. Hoch, P. Schieberle. Studies on correlations between odor activity values, headspace concentrations and odor intensities in defined aroma model solutions. Food Science and Technology COST Action 96. Interactions of food matrix with small ligands influencing flavour and texture. Volume 4, 1998, E. Guichard (ed.), pp. 123-129.
168. A. Hinterholzer, I. Baek, R. Linforth, A. Taylor, P. Schieberle. Aroma of oranges and flavour release during consumption of oranges. Food Science and Technology COST Action 96. Interactions of food matrix with small ligands influencing flavour and texture. Volume 3, 1997, P. Schieberle (ed.), pp.45-49.

#### **4. Publikationen in nicht referierten Journalen/Other articles**

169. C. Wiedmer, A. Büttner. Bösen Stinkern auf der Spur Identifizierung und Charakterisierung von Geruchsstoffen in Spielwaren und Bedarfsgegenständen. Nachrichten aus der Chemie, 2017, in press.
170. P. Denk, A. Büttner. Nachweis und Identifizierung von Geruchsstoffen in Klebstoffen mittels Methoden der Analytischen Sensorik. GIT-Labor-Fachzeitschrift, 2017, in press.
171. C. Wiedmer, A. Büttner. Dicke Luft im Kinderzimmer? Nachweis und Identifizierung von Geruchsstoffen in Spielwaren und Produkten des täglichen Bedarfs (Thema des Monats). Deutsche Lebensmittelrundschau. Heft 06/2017, 246-253.
172. M. Pischetsrieder, A. Hess, C. Villmann, A. Büttner. Wechselwirkung zwischen Lebensmitteln und Gehirnfunktion. Labor&More 2017.
173. P. Bauer, P. Denk, L. Schreiner, M. Strangl, C. Wiedmer, Andrea Büttner. Smells of a modern world – Nachweis und Identifizierung von Geruchsstoffen in Rohstoffen für Produkte des täglichen Bedarfs. FOODLab, 2017, in press.
174. H. Loos, A. Buettner. Fehlgerüche in Lebensmitteln und Verpackungsmaterialien – Spurenanalytik mit GC, MS und Nase. GIT Laborzeitschrift 2017, 61 (2), 25-27.
175. A. Hammer, H. Loos, A. Büttner, J. Beauchamp. Confinement Odour – Identifizierung von Geruchsstoffen in vakuumverpacktem Rindfleisch. Verpackungsroundschau 2017, 4, 98 - 100.
176. S. Sahin, A. Buettner, M. Pischetsrieder. Ernährungsphysiologie und Sensorik: Analyse und Bewertung von bioaktiven Lebensmittelinhaltstoffen unter ernährungsphysiologischen Aspekten sowohl in vitro als auch in vivo. Chemie in unserer Zeit, 2016, in press.
177. J. Niebler, A. Büttner. Der Duft von Weihrauch. Nachrichten aus der Chemie 2016, 1, 23-26.

178. J. Niebler, A. Buettner. Quantification of odor active compounds from *Boswellia sacra* frankincense by stable isotope dilution assays (SIDA) in combination with TDU-GC-MS. *Lebensmittelchemie*, 2015, *Lebensmittelchemie*, 69, 79–83 doi: 10.1002/lemi.201590031.
179. F. Kirsch, A. Büttner. Mit der Muttermilch aufgesaugt. *Ernährung heute* 2014, 3, 10-12.
180. M. Pischetsrieder, A. Hess, A. Büttner, C. Villmann. Neurotrition. Spezial *Lebensmittelchemie, Lab&More*, 2014, 6.14, 14-18.
181. A. Kessler, C. Villmann, A. Buettner, M. Pischetsrieder. Identifikation GABA-aktiver Lebensmittelinhaltstoffe. *Lebensmittelchemie* 67, 2013, 63.
182. F. Kirsch, J. Beauchamp, K. Horst, M. Rychlik, A. Buettner. Übergang des Aromastoffs 1,8-Cineol und seiner Metabolite in Muttermilch. *Lebensmittelchemie* 67, 2013, 63.
183. A. Buettner. Was ist eigentlich Aromaforschung? *Forschung und Lehre*, 6, 2013, 484-485.
184. A. Buettner. Moderne Geruchsstoff-Analytik: ein facettenreiches Forschungsgebiet mit hohem Anwendungspotential. *Analyticapro* 2012.
185. A. Buettner, J. Beauchamp: The smell of Fraunhofer – sensory assessments meets odorant analytics, *ACheM S Annual Newsletter* 2011.
186. A. Strube, A. Büttner. Identifizierung von Fehlaromen – Kann Mineralwasser riechen? *Getränkel*, 2010, 15 (2), 54-56.
187. M. Czerny, A. Strube, A. Büttner. Lebensmittelaromen - Identifizierung geruchsaktiver Verbindungen. *Deut. Lebensm.-Rundschau DLR Spezial* 2010, 106, 48-52.
188. M. Mertens, A. Büttner. Vergleich der Geruchscharakteristika des Kauweihrauchs Luban mit den handelsüblichen Weihrauch-Varietäten *Boswellia sacra* und *Bowellia serrata*. *Lebensmittelchemie* 64, 2010, 95.
189. J. Spitzer, A. Buettner. Aromastabilität von Muttermilch während der Lagerung bei -20 °C. Aktuelle Wochenschau der Gesellschaft Deutscher Chemiker (GDCh), Woche 50, 2009; <http://www.aktuelle-wochenschau.de/w50/woche50.html>.
190. A. Buettner. Über die Komplexität und Individualität des menschlichen Geschmacks. *Journal Coulinaire* 2008, 7, 29-35.
191. A. Buettner, A. Strube, F. Welle. Ist Verpackungssensorik normbar? *Verpackungs-Rundschau* 2007, 6, 97-99.
192. A. Buettner, A. Beer. Anleitung zur Weinverkostung. Die physiologischen Geheimnisse der Geruchs- und Geschmackswahrnehmung. *Journal Coulinaire* 2007, 4, 58-67.
193. A. Buettner. Spaß an Essen und Trinken - Retronasale Geruchswahrnehmung. *Nachrichten aus der Chemie* 2004, 52, 540-543. (<sup>H</sup>)

## 5. Buchbeiträge/Book chapters

194. A. Buettner, J. Beauchamp, M. Wagenstaller. Physiological impacts of odour compounds. In: Flavour Development, Analysis and Perception in Food and Beverages, Elsevier, Woodhead Publishing, (Parker, Elmore, Methven, eds), 2015, S. 387-407, ISBN 9781782421030, online first 2014 (invited contribution).
195. A. Buettner. Human milk odour profiles. In: Handbook of dietary and nutritional aspects of human breast milk. Prevention, treatment and toxicity (Eds S. Zibadi, R. Watson, V. Preedy), Wageningen Academic Publishers, 2013, ISBN: 978-90-8686-209-2, pp. 725-742. (invited contribution).

## 6. Patentanmeldung/Patent application

7. A. Buettner. Vaginal odorants. WO2009/003935.
8. A. Buettner. Improved Infant Formula, Aroma Composition for Use in Such an Infant Formula and for Use as Fragrance and Aroma Composition, and Method for Producing Such an Aroma Composition. PCT/EP2008/003721.
9. A. Buettner. Detection of analytes in a defined area of the body. WO2005/024389.

## 10. Monographien/Books/Editorial Work

1. Springer Handbook of Odour, Springer, March 2017 (A. Buettner, ed.), ISBN 978-3-319-26930-6.
2. The Chemical Sensory Informatics of Food: Measurement, Analysis, Integration (B. Guthrie, J. Beauchamp, A. Buettner, B. Lavine, eds.). ACS Symp Ser. 1191, 2016, doi: 10.1021/bk-2015-1191.
3. Gas chromatography – olfactometry: the state of the art (J. Leland, A. Buettner, P. Schieberle, T. Acree, eds). ACS Symp. Ser. 782, 2001.

## 11. Dissertations-, Habilitationsschrift/Thesis

4. A. Buettner. Aroma release and perception during consumption of food taking into account physiological aspects, Habilitationsschrift (Thesis of habilitation), Verlag Dr. Hut, 2007, Munich, Germany, ISBN 978-3-89963-559-1. <sup>(H)</sup>
5. A. Buettner. Wichtige Aromastoffe in frisch gepressten Citrusfruchtsaften aus verschiedenen Orangenvarietäten (*Citrus sinensis* (L.) Osbeck) sowie Grapefruit (*Citrus paradisi* Macf.), Dissertationsschrift (PhD thesis), Herbert Utz Verlag-Wissenschaft, 1999, Munich, Germany, ISBN 978-3-89675-523-0. <sup>(D)</sup>

## 12. Poster/s

1. K. Lorber, M. Wagenstaller, M. Schranz, F. Juhlke, K. Klos, J. Kerschbaumer, A. Buettner. Odor qualities and odor thresholds of halogenated, alkylated, alkenylated and methoxylated guaiacol-derived odorants. 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 18.-22.09.2017.
2. L. Schreiner, R. Ghadiriasli, P. Bauer, A. Buettner. Characterization of Odorants in Wood. 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 18.-22.09.2017.
3. L. Scheffler, N. Sillner, Y. Sauermann, C. Sharapa, J. Beauchamp, A. Buettner. Biotransformation, transmission and excretion processes of garlic odorants in humans: impact on human milk, urine and exhaled breath. 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 18.-22.09.2017.
4. E. Kroener, A. Buettner. Characterisation of aroma active compounds in horseradish (*Armoracia rusticana*). 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 18.-22.09.2017.
5. S. Elsharif, A. Buettner. Structure-odor relationship study of C-6 α, β unsaturated acyclic monoterpenic alcohols: a comparative approach. 15th Weurman Flavour Research Symposium. Graz University of Technology, Graz, Austria, 18.-22.09.2017.
6. L. Scheffler, Y. Sauermann, C. Sharapa, A. Büttner. Charakterisierung von flüchtigen Knoblauch-Metaboliten in Muttermilch. 46. Deutscher Lebensmittelchemikertag, Universität Würzburg, Würzburg, Germany, 25. – 27.09.2017.
7. C. Wiedmer, C. Velasco-Schön, P. Denk, A. Büttner. Identifizierung und Bewertung von Fehlgerüchen in Spielwaren und Kinderprodukten. 46. Deutscher Lebensmittelchemikertag, Universität Würzburg, Würzburg, Germany, 25. – 27.09.2017.
8. E.-M. Kröner, A. Büttner. Klassifizierung aromaaktiver Verbindungen in Meerrettich (*Armoracia rusticana*). 46. Deutscher Lebensmittelchemikertag, Universität Würzburg, Würzburg, Germany, 25. – 27.09.2017.
9. M. Mahmoud, A. Buettner. Identification of potent aroma compounds in rainbow trout (*Oncorhynchus mykiss*) aquaculture farming. First Food Chemistry Conference, Amsterdam, The Netherlands, 30.10. – 1.11.2016.
10. S. Jüttner, K. Lorber, A. Buettner. Struktur-Wirkungsbeziehungen versus interindividuelle Wahrnehmungsunterschiede bei geruchsaktiven Thioketonen und Thioalkoholen. 45. Deutscher Lebensmittelchemikertag, Technical University Munich, Freising-Weihenstephan, Germany, 12. – 14.09.2016.
11. C. Sharapa, L. Scheffler, M. Denzer-Lippmann, F. Kirsch, S. Sandgruber, H. Loos, J. Beauchamp. Nutritional odorant transmission into human milk. 45. Deutscher Lebensmittelchemikertag, Technical University Munich, Freising-Weihenstephan, Germany, 12. – 14.09.2016.
12. M. Mahmoud, A. Buettner. Odorant identification and sensory evaluation of German rainbow trout (*Oncorhynchus mykiss*) from aquaculture. 45. Deutscher Lebensmittelchemikertag, Technical University Munich, Freising-Weihenstephan, Germany, 12. – 14.09.2016.

13. S. Atak, H. van Brederode, C. Alzheimer, A. Buettner, C. Villmann. Myrtenol potentiates tonic GABAergic currents in cell lines and brain stem slices. 11th Wartburg Symposium on Flavour Chemistry & Biology, Eisenach, Germany, 21.06. – 24.06.2016.
  14. S. Elsharif, A. Banerjee, A. Buettner. Structure-odor relationships of linalool and related terpene alcohols, their acetates and their corresponding oxygenated derivatives. 11th Wartburg Symposium on Flavour Chemistry & Biology, Eisenach, Germany, 21.06. – 24.06.2016.
  15. K. Lorber, A. Buettner. Structure-odour relationships of unsaturated fatty acid derivatives. 11<sup>th</sup> Wartburg Symposium on Flavour Chemistry & Biology, Eisenach, Germany, 21.06. – 24.06.2016.
  16. E.-M. Kröner, A. Büttner. Identifikation von Fehlgeruch verursachenden Störsubstanzen in Kunststoffspielzeug. 67. Arbeitstagung des Regionalverbandes Bayern der Lebensmittelchemischen Gesellschaft, Fachgruppe in der GDCh, Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, Erlangen, 10.03.2016.
  17. J. Niebler, A. Buettner. Quantification of odor active compounds from *Boswellia sacra* frankincense by stable isotope dilution assays (SIDA) in combination with TDU-GC-MS. 44. Deutscher Lebensmittelchemikertag, Karlsruher Institut für Technologie (KIT), Karlsruhe, Germany, 14. – 16.09.2015.
  18. M. Denzer-Lippmann, N. Thuerauf, G. Münch, J. Kornhuber, A. Buettner. Development and sensory validation of an innovative non-food related olfactory test. Emil Fischer Graduate School Research Day, University of Erlangen, 09.07.2015, Erlangen, Germany.
  19. N. Sillner, J. Beauchamp, L. Scheffler, C. Sharapa, A. Buettner. Analysis of garlic substances via PTR-MS - development of an on-line approach for monitoring odorants and metabolites in human physiological media. Emil Fischer Graduate School Research Day, University of Erlangen, 09.07.2015, Erlangen, Germany.
  20. A. Lopez-Pinar, P. Darriet, A. Buettner. 2-Methylisoborneol in wine, is it responsible for off-odours? Oeno 2015, 29.06-01.07.2015, Bordeaux, France.
  21. A. Lopez-Pinar, E. Rühl, D. Rauhut, A. Buettner. Effects of *Botrytis cinerea* and *Oidium tuckeri* fungi on the aroma character of must: A comparative approach. IX In Vino Analytica Scientia Symposium 2015, 14.07.-17.07.2015, Trento, Italy.
  22. H. Loos, C. Hartmann, S. Doucet, F. Védrines, R. Soussignan, A. Buettner, B. Schaal. Chemical and behavioral approaches in the elucidation of olfactory interactions between human mothers and newborns. XXIVth annual congress of the European Chemoreception Research Organisation (ECRO) 2014, Dijon, France.
  23. M. Denzer, N. Thuerauf, J. Kornhuber, A. Buettner. Development of a food-related identification test for olfactory assessment. EuroSense 2014, Sixth European Conference on Sensory and Consumer Research, Bella Center, Copenhagen, Denmark.
  24. J. Ebner, P. Emirbayer, L. Scheffler, A. Küçükçetin, H. Sahin, M. Pischetsrieder, A. Büttner. Einrichtung eines Forschungs- und Bildungsnetzwerkes über gesundheitsfördernde Lebensmittel mit besonderem Fokus auf traditionellen türkischen Lebensmitteln. Regionalverbandstagung Lebensmittelchemische Gesellschaft, Gesellschaft Deutscher Chemiker, 24.02.2014, Julius-Maximilians-Universität Würzburg, Würzburg, Germany.
-

25. C. Siefarth, T. B. T. Tran, P. Mittermaier, T. Pfeiffer, A. Buettner. The Effect of Radio-Frequency Heating on the Taste and Texture of Yoghurt. Weihenstephaner Milchwirtschaftliche Herbsttagung 2013, Weihenstephan, Germany.
  26. E. Zardin, O. Zillich, A. Büttner. Monitoring volatile organic compounds at the epidermal surface: a fast, in-vivo & non-invasive tool for physiology and cosmetics testing. 42. Deutscher Lebensmittelchemikertag GDCh, 2013, Braunschweig, Germany.
  27. J. Beauchamp, A. Buettner. On-line breath gas analysis for monitoring pharmacokinetics of volatile organic compounds in humans. Internationaler Kongress Forum Life Science 2013, Technische Universität München, Garching.
  28. D. Kern, J. Beauchamp, M. Scheibe, T. Hummel, M. McClintock, A. Buettner. Odorant Measurement at the Olfactory Cleft using Proton-Transfer-Reaction Mass Spectrometry. AChemS 35th Annual Meeting, 2013, Huntington Beach, California, USA.
  29. M. Denzer, J. Beauchamp, D. Kern, S. Gailer, N. Thuerauf, J. Kornhuber, A. Buettner. Measuring n-Butanol Concentrations Released from the Tips of the Sniffin' Sticks Threshold Test using Proton-Transfer-Reaction Mass Spectrometry. AChemS 35th Annual Meeting, 2013, Huntington Beach, California, USA.
  30. J. Spitzer, A. Buettner. Quantification of odour-active marker substances of fatty acid oxidation in stored milk: comparison between human and bovine milk. 10th Wartburg Flavor Symposium, 2013, Eisenach, Germany.
  31. J. Niebler, D. Farran, C. Roussel, T. S. Balaban, A. Buettner. Synthesis of new thioterpenoid odorants with unexpected mushroom-like flavour qualities. 10th Wartburg Flavor Symposium, 2013, Eisenach, Germany.
  32. A. Heinlein, E. Neufeld, A. Buettner. The fate of aroma compounds in the gastrointestinal tract – experiments comparing fed and fasted conditions. 10th Wartburg Flavor Symposium, 2013, Eisenach, Germany.
  33. K. Lorber, P. Schieberle, A. Buettner. Structure-odour relationships of alka-1,5-dien-3-ones, alk-1-en-3-ones, alka-1,5-dien-3-ols and alk-1-en-3-ols. 10th Wartburg Flavor Symposium, 2013, Eisenach, Germany.
  34. A. Städele, A. Buettner, R. Carle. Determination of human biofeedback parameters in relation to temporally and concentration controlled olfactory stimulation. ELLS Scientific Student Conference 2012, Alnarp, Sweden.
  35. F. Kirsch, M. Denzer, A. Buettner. Transfer of terpene-related odorants into human milk - a process involving dietary, environmental and pharmacological considerations. XVI Int. symp. on olfaction and taste (ISOT), 2012, Stockholm, Sweden.
  36. M. Wagenstaller, A. Buettner. Odorants in human urine – structural elucidation and quantitative determination. XVI Int. symp. on olfaction and taste (ISOT), 2012, Stockholm, Sweden.
  37. M. Wagenstaller, A. Buettner. Excretion of coffee aroma constituents and their metabolites in human urine. XVI Int. symp. on olfaction and taste (ISOT), 2012, Stockholm, Sweden.
  38. H. Loos, S. Doucet, P. Sagot, K. Durand, A. Buettner, B. Schaal. Human neonates' responses to the odour of high dilutions of androstenone. XVI Int. symp. on olfaction and taste (ISOT), 2012, Stockholm, Sweden.
-

39. A. Strube, A. Buettner. Identification of off-odours in water - the key for developing prevention strategies. Jahrestagung der Wasserchemischen Gesellschaft, 2012, Neu-Ulm, Deutschland.
  40. I. Almstätter, J. Müller, M. Pfaffl, A. Buettner. Gene-expression analysis of pro-inflammatory genes after 1,8-cineole treatment in porcine intestinal cells. 13th Weurman Flavour Research Symposium, 2011, Zaragoza, Spain.
  41. I. Almstätter, J. Müller, M. Pfaffl, A. Buettner. Determination of cell morphology under 1,8-cineole treatment in porcine intestinal cells. 13th Weurman Flavour Research Symposium, 2011, Zaragoza, Spain.
  42. A. Heinlein, A. Buettner. Monitoring of hop aromatic compounds stability in an in vitro digestion model. 13th Weurman Flavour Research Symposium, 2011, Zaragoza, Spain.
  43. S. Sandgruber, A. Buettner. Sensory and molecular characterization of the aroma profiles of fish oil supplements. 13th Weurman Flavour Research Symposium, 2011, Zaragoza, Spain.
  44. A. Kessler, C. Villmann, A. Buettner, M. Pischetsrieder. Combined chemo-analytical and electrophysiological characterization of neurotropic activity of odorants. 13th Weurman Flavour Research Symposium, 2011, Zaragoza, Spain.
  45. M. Wagenstaller, A. Buettner. Advanced odour analytical tools for elucidation of the diagnostic potential of odorous substances in human urine. Metabomeeting 2011, Metabolic Profiling Forum, 2011, Helsinki, Finland.
  46. C. Hartmann, S. Doucet, Y. Niclass, R. Dittrich, S. Cupisti, B. Schaal, C. Starkenmann, A. Buettner. Human sweat odor precursors detected in human milk, colostrum and amniotic fluid. AChemS 33rd Annual Meeting, 2011, St. Petersburg, Florida, USA.
  47. S. Sandgruber, D. Much, U. Amann-Gassner, H. Hauner, A. Buettner. Fish oil in the maternal diet: odorant transmission into human milk? AChemS 33rd Annual Meeting, 2011, St. Petersburg, Florida, USA.
  48. J. Beauchamp, M. Scheibe, T. Hummel, A. Buettner. Dependence of intranasal odorant concentrations on sniff behaviour. AChemS 33rd Annual Meeting, 2011, St. Petersburg, Florida, USA.
  49. J. Beauchamp, M. Scheibe, T. Hummel, A. Buettner. Varying the mode of sniffing alters intra-nasal odorant concentrations. Symposium "Human Chemosensation", 2010, Dresden, Germany.
  50. S. Bader, P. Eisner, A. Buettner. Characterization of techno-functional and flavour properties of a Lupin protein isolate from *Lupinus angustifolius* cv. *Boregine*. World Congress of Food Science and Technology, 2010, Cape Town, South Africa.
  51. A. Strube, A. Buettner. Sensory aspects of offensive odours: "musty" is not always perceived the same. Symposium „Offensive odours – chemistry, behaviour, development and language“, XXth annual congress of the European Chemoreception Research Organisation (ECRO) 2010, Avignon, France.
  52. J. Beauchamp, F. Kirsch, A. Buettner. PTR-MS for pharmacokinetics studies: monitoring exhaled eucalyptol following Soledum® capsule ingestion. 1st German-Austrian Workshop on Breath Gas Analysis, 2010, Greifswald, Germany.
-

53. S. Sandgruber, D. Much, H. Hauner, A. Buettner. Translation of dietary odorants into human milk – molecular and physiological considerations. "The Power of Programming - Developmental Origins of Health and Disease" 2010, Munich, Germany.
  54. C. Hartmann, S. Doucet, R. Dittrich, B. Schaal, A. Buettner. Identification of odor active substances in human amniotic fluid. AChemS 32nd Annual Meeting, 2010, St. Petersburg, Florida, USA.
  55. A. Strube, A. Buettner. Influence of the chemical structure on odour intensity and odour character of halogenated and methylated phenols. AChemS 32nd Annual Meeting, 2010, St. Petersburg, Florida, USA.
  56. S. Doucet, C. Hartmann, R. Dittrich, R. Soussignan, B. Schaal, A. Buettner. Human neonatal responses to androstenone. AChemS 32nd Annual Meeting, 2010, St. Petersburg, Florida, USA.
  57. F. Kirsch, K. Horst, M. Rychlik, A. Buettner. Transfer of a pharmacological aroma preparation into human milk – monitoring of substance profiles depending on physiological transition processes. 9<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology, 2010, Eisenach, Germany.
  58. S. Sandgruber, D. Much, H. Hauner, A. Buettner. Do maternal dietary food aromas influence flavour profiles of human milk? A fishy example. 9<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology, 2010, Eisenach, Germany.
  59. J. Spitzer, A. Buettner. Charakterisierung der Aromastabilität von Muttermilch während der Lagerung bei -20°C. Regionalverbandstagung der Lebensmittelchemischen Gesellschaft, Gesellschaft Deutscher Chemiker, 2010, Erlangen, Germany.
  60. M. Mertens, A. Buettner. Vergleich der Geruchscharakteristika des Kauhweihrauchs Luban mit den handelsüblichen Weihrauch-Varietäten *Boswellia sacra* und *Boswellia serrata*. 38. Deutscher Lebensmittelchemikertag 2009, Berlin, Germany.
  61. M. Mertens, H. Tessenow, A. Buettner. Frankincense – historical evidence from traditional Chinese literature of beneficial effects on the human physiology. 57<sup>th</sup> Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research 2009, Geneva, Switzerland.
  62. J. Spitzer, A. Buettner. The Influence of Storage Conditions on Flavour Changes in Human Milk. 8<sup>th</sup> Pangborn Sensory Science Symposium 2009, Florence, Italy.
  63. A. Strube, A. Buettner. Identification and odour characteristics of new halogenated compounds responsible for a medicinal off-flavour in food. 8<sup>th</sup> Pangborn Sensory Science Symposium, 2009, Florence, Italy.
  64. M. Czerny, A. Buettner. Structure-Odour-Activity Relationship Of Volatile Alkylated Phenols. 8<sup>th</sup> Pangborn Sensory Science Symposium, 2009, Florence, Italy.
  65. J. Spitzer, A. Buettner. Characterization of off-odor development in human milk during storage at -18 °C. AChemS 31st Annual Meeting, 2009, Hyatt Sarasota, Sarasota, Florida, USA.
  66. J. Beauchamp, M. Scheibe, T. Hummel, A. Buettner. Characterisation of odorant pathways in olfactory dysfunction. Breath 2009, Int. Conf. on Breath and Breath Odor Research, 2009, Dortmund, Germany.
-

67. O. Tyapkova, M. Czerny, A. Buettner. Off-Flavour compounds formed by  $\gamma$ -irradiation of polypropylene. 11. Workshop: Geruch und Emissionen bei Kunststoffen, 2009, Kassel, Germany.
68. J. Beauchamp, J. Frasnelli, A. Buettner, M. Scheibe, A. Hansel, T. Hummel. PTR-MS Characterisation of an Olfactometer used in Olfactory Dysfunction Assessments. 4th PTR-MS conference, 2009, Obergurgl, Austria.
69. A. Strube, A. Buettner. Investigations into Off-flavours in PET bottled Mineral Water due to Sunlight Exposure. 4th International Symposium on Food Packaging – Scientific Developments supporting Safety and Quality, 2008, Prague, Czech Republic.
70. A. Strube, A. Buettner. The influence of the chemical structure on odour qualities and odour potencies in chloro-organic substances. 12<sup>th</sup> Weurman Flavour Research Symposium, 2008, Zuerich, Switzerland.
71. A. Buettner. Characterization of odor-active and volatile organic compounds (VOC's) in human milk, vaginal secretion, and saliva. AChemS 29th Annual Meeting, 2007, Hyatt Sarasota, Sarasota, Florida, USA.
72. M. Tietz, A. Buettner, B. Conde-Petit. Starch flavor interactions : impact of starch structure and release from food model systems. 8<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology, 2007, Eisenach, Germany.
73. K. Buhr, A. Buettner, P. Schieberle. Analysis of lactones by proton transfer reaction-mass spectrometry (PTR-MS). Fragmentation patterns and detection limits. 3<sup>rd</sup> International PTR-MS Conference 2007, Universitätszentrum Obergurgl, 2007, Obergurgl, Austria.
74. A. Buettner. Analytical tool for the detection of volatiles and potent odorants in selected areas of the human body. 3<sup>rd</sup> Japanese-German Frontiers of Science Symposium, Humboldt Foundation, 2006, Heidelberg, Germany.
75. A. Buettner. Retronasal aroma development during and after consumption of beverages. 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology, 2004, Eisenach, Germany.
76. A. Buettner, M. Griess. Retronasal perception of espresso aroma. 7<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology, 2004, Eisenach, Germany.
77. A. Buettner, T. Lemos, P. Schieberle. Identification of the key odorants in the french beans and changes during cooking. 4° Encontro de química de alimentos, 1999, Coimbra, Spain.
78. A. Buettner, P. Schieberle. Quantification of odour-active thiols in fresh, hand-squeezed grapefruit juices (*Citrus paradisi* MACFAYDEN) by stable isotope dilution assays. 9<sup>th</sup> Weurman Flavour Research Symposium, 1999, Freising, Germany.