# Maik Behrens

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8178117/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 92 papers | 6,118 citations | 66315 42 h-index | 71651 76 g-index |
| 100 all docs | 100 docs citations | 100 times ranked | 3576 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The Molecular Receptive Ranges of Human TAS2R Bitter Taste Receptors. Chemical Senses, 2010, 35, 157-170. | 1.1 | 907 |
| 2 | Bitter Taste Receptors for Saccharin and Acesulfame K. Journal of Neuroscience, 2004, 24, 10260-10265. | 1.7 | 315 |
| 3 | The human taste receptor hTAS2R14 responds to a variety of different bitter compounds. Biochemical and Biophysical Research Communications, 2004, 319, 479-485. | 1.0 | 200 |
| 4 | Gustatory and extragustatory functions of mammalian taste receptors. Physiology and Behavior, 2011, 105, 4-13. | 1.0 | 194 |
| 5 | G Protein-Coupled Receptors in Human Fat Taste Perception. Chemical Senses, 2012, 37, 123-139. | 1.1 | 190 |
| 6 | Gustatory Expression Pattern of the Human TAS2R Bitter Receptor Gene Family Reveals a Heterogenous Population of Bitter Responsive Taste Receptor Cells. Journal of Neuroscience, 2007, 27, 12630-12640. | 1.7 | 180 |
| 7 | Broad Tuning of the Human Bitter Taste Receptor hTAS2R46 to Various Sesquiterpene Lactones, Clerodane and Labdane Diterpenoids, Strychnine, and Denatonium. Journal of Agricultural and Food Chemistry, 2007, 55, 6236-6243. | 2.4 | 172 |
| 8 | Comprehensive Analysis of Mouse Bitter Taste Receptors Reveals Different Molecular Receptive Ranges for Orthologous Receptors in Mice and Humans. Journal of Biological Chemistry, 2016, 291, 15358-15377. | 1.6 | 171 |
| 9 | Structural requirements of bitter taste receptor activation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11110-11115. | 3.3 | 156 |
| 10 | Sweet and Umami Taste: Natural Products, Their Chemosensory Targets, and Beyond. Angewandte Chemie - International Edition, 2011, 50, 2220-2242. | 7.2 | 146 |
| 11 | Modulation of Bitter Taste Perception by a Small Molecule hTAS2R Antagonist. Current Biology, 2010, 20, 1104-1109. | 1.8 | 142 |
| 12 | Members of RTP and REEP Gene Families Influence Functional Bitter Taste Receptor Expression. Journal of Biological Chemistry, 2006, 281, 20650-20659. | 1.6 | 118 |
| 13 | The bitter pill: clinical drugs that activate the human bitter taste receptor TAS2R14. FASEB Journal, 2014, 28, 1181-1197. | 0.2 | 113 |
| 14 | Bitter taste receptor research comes of age: From characterization to modulation of TAS2Rs. Seminars in Cell and Developmental Biology, 2013, 24, 215-221. | 2.3 | 108 |
| 15 | Receptor Agonism and Antagonism of Dietary Bitter Compounds. Journal of Neuroscience, 2011, 31, 14775-14782. | 1.7 | 103 |
| 16 | The Human Bitter Taste Receptor TAS2R10 Is Tailored to Accommodate Numerous Diverse Ligands. Journal of Neuroscience, 2013, 33, 201-213. | 1.7 | 101 |
| 17 | Insights into the Binding of Phenyltiocarbamide (PTC) Agonist to Its Target Human TAS2R38 Bitter Receptor. PLoS ONE, 2010, 5, e12394. | 1.1 | 97 |
| 18 | Genomic, genetic and functional dissection of bitter taste responses to artificial sweeteners. Human Molecular Genetics, 2011, 20, 3437-3449. | 1.4 | 94 |

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|---|---|---|---|
| 19 | Tuning Properties of Avian and Frog Bitter Taste Receptors Dynamically Fit Gene Repertoire sizes. Molecular Biology and Evolution, 2014, 31, 3216-3227. | 3.5 | 90 |
| 20 | The Human Bitter Taste Receptor hTAS2R50 Is Activated by the Two Natural Bitter Terpenoids Andrographolide and Amarogentin. Journal of Agricultural and Food Chemistry, 2009, 57, 9860-9866. | 2.4 | 83 |
| 21 | Amino Acids and Peptides Activate at Least Five Members of the Human Bitter Taste Receptor Family. Journal of Agricultural and Food Chemistry, 2013, 61, 53-60. | 2.4 | 83 |
| 22 | Oral and Extraoral Bitter Taste Receptors. Results and Problems in Cell Differentiation, 2011, 52, 87-99. | 0.2 | 82 |
| 23 | Comparing Class AÂGPCRs to bitter taste receptors. Methods in Cell Biology, 2016, 132, 401-427. | 0.5 | 80 |
| 24 | Intestinal bitter taste receptor activation alters hormone secretion and imparts metabolic benefits. Molecular Metabolism, 2018, 16, 76-87. | 3.0 | 78 |
| 25 | Caffeine induces gastric acid secretion via bitter taste signaling in gastric parietal cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6260-E6269. | 3.3 | 74 |
| 26 | Bitter taste receptor agonists elicit Gâ€proteinâ€dependent negative inotropy in the murine heart. FASEB Journal, 2014, 28, 4497-4508. | 0.2 | 72 |
| 27 | Evidence for a Transient Additional Ligand Binding Site in the TAS2R46 Bitter Taste Receptor. Journal of Chemical Theory and Computation, 2015, 11, 4439-4449. | 2.3 | 70 |
| 28 | Genetic, Functional, and Phenotypic Diversity in TAS2R38-Mediated Bitter Taste Perception. Chemical Senses, 2013, 38, 475-484. | 1.1 | 69 |
| 29 | Coarse-Grained/Molecular Mechanics of the TAS2R38 Bitter Taste Receptor: Experimentally-Validated Detailed Structural Prediction of Agonist Binding. PLoS ONE, 2013, 8, e64675. | 1.1 | 67 |
| 30 | Human Bitter Taste Receptors Are Activated by Different Classes of Polyphenols. Journal of Agricultural and Food Chemistry, 2018, 66, 8814-8823. | 2.4 | 65 |
| 31 | Blends of Non-caloric Sweeteners Saccharin and Cyclamate Show Reduced Off-Taste due to TAS2R Bitter Receptor Inhibition. Cell Chemical Biology, 2017, 24, 1199-1204.e2. | 2.5 | 63 |
| 32 | Mammalian Bitter Taste Perception. Results and Problems in Cell Differentiation, 2009, 47, 77-96. | 0.2 | 60 |
| 33 | Major haplotypes of the human bitter taste receptor TAS2R41 encode functional receptors for chloramphenicol. Biochemical and Biophysical Research Communications, 2013, 435, 267-273. | 1.0 | 58 |
| 34 | A Subset of Mouse Colonic Goblet Cells Expresses the Bitter Taste Receptor Tas2r131. PLoS ONE, 2013, 8, e82820. | 1.1 | 58 |
| 35 | The role of lipolysis in human orosensory fat perception. Journal of Lipid Research, 2014, 55, 870-882. | 2.0 | 56 |
| 36 | A Role of the Epithelial Sodium Channel in Human Salt Taste Transduction?. Chemosensory Perception, 2008, 1, 78-90. | 0.7 | 54 |

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|---|---|---|---|
| 37 | Vertebrate Bitter Taste Receptors: Keys for Survival in Changing Environments. Journal of Agricultural and Food Chemistry, 2018, 66, 2204-2213. | 2.4 | 54 |
| 38 | Probing the Binding Pocket of the Broadly Tuned Human Bitter Taste Receptor TAS2R14 by Chemical Modification of Cognate Agonists. Chemical Biology and Drug Design, 2016, 88, 66-75. | 1.5 | 53 |
| 39 | Beyond the Flavour: The Potential Druggability of Chemosensory G Protein-Coupled Receptors. International Journal of Molecular Sciences, 2019, 20, 1402. | 1.8 | 53 |
| 40 | Functions of human bitter taste receptors depend on Nâ€glycosylation. Journal of Neurochemistry, 2008, 106, 1138-1148. | 2.1 | 52 |
| 41 | Receptor Polymorphism and Genomic Structure Interact to Shape Bitter Taste Perception. PLoS Genetics, 2015, 11, e1005530. | 1.5 | 52 |
| 42 | BMP mRNA and protein expression in the developing mouse olfactory system. Journal of Comparative Neurology, 2002, 451, 267-278. | 0.9 | 48 |
| 43 | Reengineering the ligand sensitivity of the broadly tuned human bitter taste receptor TAS2R14. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2162-2173. | 1.1 | 47 |
| 44 | Structureâ€“Function Relationships of Olfactory and Taste Receptors. Chemical Senses, 2018, 43, 81-87. | 1.1 | 45 |
| 45 | Bitter substances from plants used in traditional Chinese medicine exert biased activation of human bitter taste receptors. Chemical Biology and Drug Design, 2018, 91, 422-433. | 1.5 | 45 |
| 46 | ORA1, a Zebrafish Olfactory Receptor Ancestral to All Mammalian V1R Genes, Recognizes 4-Hydroxyphenylacetic Acid, a Putative Reproductive Pheromone. Journal of Biological Chemistry, 2014, 289, 19778-19788. | 1.6 | 44 |
| 47 | Human Bitter Taste Perception. Chemical Senses, 2005, 30, i14-i15. | 1.1 | 42 |
| 48 | Molecular biology of mammalian bitter taste receptors. A review.. Flavour and Fragrance Journal, 2011, 26, 260-268. | 1.2 | 42 |
| 49 | Immunohistochemical Detection of TAS2R38 Protein in Human Taste Cells. PLoS ONE, 2012, 7, e40304. | 1.1 | 41 |
| 50 | Rational design of agonists for bitter taste receptor TAS2R14: from modeling to bench and back. Cellular and Molecular Life Sciences, 2020, 77, 531-542. | 2.4 | 40 |
| 51 | Cloning of the Î±A-crystallin genes of a blind cave form and the epigean form of Astyanax fasciatus: a comparative analysis of structure, expression and evolutionary conservation. Gene, 1998, 216, 319-326. | 1.0 | 38 |
| 52 | The human bitter taste receptor TAS2R7 facilitates the detection of bitter salts. Biochemical and Biophysical Research Communications, 2019, 512, 877-881. | 1.0 | 35 |
| 53 | Homology Model-Assisted Elucidation of Binding Sites in GPCRs. , 2012, 914, 179-205. | | 34 |
| 54 | Expression profiling of Tas2r genes reveals a complex pattern along the mouse GI tract and the presence of Tas2r131 in a subset of intestinal Paneth cells. Cellular and Molecular Life Sciences, 2018, 75, 49-65. | 2.4 | 33 |

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| 55 | Identification of members of the Bex gene family as olfactory marker protein (OMP) binding partners. Journal of Neurochemistry, 2003, 86, 1289-1296. | 2.1 | 32 |
| 56 | Perinatal Administration of a Bitter Tastant Influences Gene Expression in Chicken Palate and Duodenum. Journal of Agricultural and Food Chemistry, 2014, 62, 12512-12520. | 2.4 | 32 |
| 57 | A role for taste receptors in (neuro)endocrinology?. Journal of Neuroendocrinology, 2019, 31, e12691. | 1.2 | 31 |
| 58 | Bitter taste receptors. Evolution, Medicine and Public Health, 2021, 9, 431-447. | 1.1 | 29 |
| 59 | Ligand binding modes from low resolution GPCR models and mutagenesis: chicken bitter taste receptor as a test-case. Scientific Reports, 2017, 7, 8223. | 1.6 | 27 |
| 60 | Copy Number Variation inTAS2RBitter Taste Receptor Genes: Structure, Origin, and Population Genetics. Chemical Senses, 2016, 41, 649-659. | 1.1 | 25 |
| 61 | From Cell to Beak: In-Vitro and In-Vivo Characterization of Chicken Bitter Taste Thresholds. Molecules, 2017, 22, 821. | 1.7 | 25 |
| 62 | Genetic Labeling of Car4-expressing Cells Reveals Subpopulations of Type III Taste Cells. Chemical Senses, 2017, 42, 747-758. | 1.1 | 23 |
| 63 | Numerous Compounds Orchestrate Coffeeâ€™s Bitterness. Journal of Agricultural and Food Chemistry, 2020, 68, 6692-6700. | 2.4 | 21 |
| 64 | Bitter Sensing TAS2R50 Mediates the trans-Resveratrol-Induced Anti-inflammatory Effect on Interleukin 6 Release in HGF-1 Cells in Culture. Journal of Agricultural and Food Chemistry, 2021, 69, 13339-13349. | 2.4 | 20 |
| 65 | Segregated Expression of ENaC Subunits in Taste Cells. Chemical Senses, 2020, 45, 235-248. | 1.1 | 19 |
| 66 | Sweet taste of heavy water. Communications Biology, 2021, 4, 440. | 2.0 | 19 |
| 67 | Extra-Oral Taste Receptorsâ€”Function, Disease, and Perspectives. Frontiers in Nutrition, 2022, 9, 881177. | 1.6 | 18 |
| 68 | Molecular Features Underlying Selectivity in Chicken Bitter Taste Receptors. Frontiers in Molecular Biosciences, 2018, 5, 6. | 1.6 | 17 |
| 69 | At the Root of T2R Gene Evolution: Recognition Profiles of Coelacanth and Zebrafish Bitter Receptors. Genome Biology and Evolution, 2021, 13, . | 1.1 | 17 |
| 70 | Bitter Taste Receptors and Their Cells. Annals of the New York Academy of Sciences, 2009, 1170, 111-115. | 1.8 | 16 |
| 71 | Taste receptor function. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2019, 164, 173-185. | 1.0 | 16 |
| 72 | Probing the Evolutionary History of Human Bitter Taste Receptor Pseudogenes by Restoring Their Function. Molecular Biology and Evolution, 2017, 34, 1587-1595. | 3.5 | 15 |

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| 73 | Bitterless guaifenesin prodrugsâ€”design, synthesis, characterization, in vitro kinetics, and bitterness studies. Chemical Biology and Drug Design, 2019, 93, 262-271. | 1.5 | 14 |
| 74 | Structure-Function Analyses of Human Bitter Taste Receptorsâ€”Where Do We Stand?. Molecules, 2020, 25, 4423. | 1.7 | 13 |
| 75 | Allyl Isothiocyanate: A TAS2R38 Receptor-Dependent Immune Modulator at the Interface Between Personalized Medicine and Nutrition. Frontiers in Immunology, 2021, 12, 669005. | 2.2 | 12 |
| 76 | Activation Spectra of Human Bitter Taste Receptors Stimulated with Cyclolinopeptides Corresponding to Fresh and Aged Linseed Oil. Journal of Agricultural and Food Chemistry, 2022, 70, 4382-4390. | 2.4 | 12 |
| 77 | Expression of Coxsackie-Adenovirus receptor (CAR) in the developing mouse olfactory system. Journal of Neurocytology, 2005, 34, 295-305. | 1.6 | 11 |
| 78 | Human Sweet Receptor T1R3 is Functional in Human Gastric Parietal Tumor Cells (HGT-1) and Modulates Cyclamate and Acesulfame K-Induced Mechanisms of Gastric Acid Secretion. Journal of Agricultural and Food Chemistry, 2018, 66, 4842-4852. | 2.4 | 11 |
| 79 | BitterMatch: recommendation systems for matching molecules with bitter taste receptors. Journal of Cheminformatics, 2022, 14, . | 2.8 | 10 |
| 80 | G Proteinâ€“Coupled Taste Receptors. , 2016, , 227-244. | | 8 |
| 81 | Gastrointestinal taste receptors. Current Opinion in Endocrinology, Diabetes and Obesity, 2020, 27, 110-114. | 1.2 | 8 |
| 82 | Taste Receptor Gene Expression Outside the Gustatory System. Topics in Medicinal Chemistry, 2014, , 1-34. | 0.4 | 7 |
| 83 | Sodium Imbalance in Mice Results Primarily in Compensatory Gene Regulatory Responses in Kidney and Colon, but Not in Taste Tissue. Nutrients, 2020, 12, 995. | 1.7 | 7 |
| 84 | Metallic Sensationâ€”Just an Off-Flavor or a Biologically Relevant Sensing Pathway?. Journal of Agricultural and Food Chemistry, 2021, 69, 1775-1780. | 2.4 | 7 |
| 85 | Saccharin: Artificial Sweetener, Bitter Tastant, and Sweet Taste Inhibitor. ACS Symposium Series, 2008, , 230-240. | 0.5 | 6 |
| 86 | Editorial: Extra-Oral Taste Receptors: Function, Disease and Evolution. Frontiers in Physiology, 2020, 11, 607134. | 1.3 | 5 |
| 87 | Bitter taste receptors of the common vampire bat are functional and show conserved responses to metal ionsin vitro. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210418. | 1.2 | 4 |
| 88 | Substrate Specificity of Rat DESC4, a Type II Transmembrane Serine Protease. Protein and Peptide Letters, 2009, 16, 1-6. | 0.4 | 3 |
| 89 | Pharmacology of TAS1R2/TAS1R3 Receptors and Sweet Taste. Handbook of Experimental Pharmacology, 2021, , 1. | 0.9 | 2 |
| 90 | Ligand Recognition of Taste Receptors. ACS Symposium Series, 2015, , 183-192. | 0.5 | 1 |

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|---|---|---|---|
| 91 | Bitter Taste. , 2020, , 231-246. | | 1 |
| 92 | Receptors \| Taste Receptors. , 2021, , 314-322. | | 0 |