

# GÃ¼nther K H Zupanc

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

3,226  
citations

172457

29  
h-index

155660

55  
g-index

83  
all docs

83  
docs citations

83  
times ranked

1744  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Itâ€™s all about seeing and hearing: the Editorsâ€™ and Readersâ€™ Choice Awards 2022. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2022, , 1.  | 1.6 | 1         |
| 2  | The <i>Journal of Comparative Physiology A</i> : rooted in great tradition, committed to innovation and discovery. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2022, 208, 213-223.   | 1.6 | 4         |
| 3  | Government funding of research beyond biomedicine: challenges and opportunities for neuroethology. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2022, 208, 443-456.   | 1.6 | 2         |
| 4  | Suggested reviewers: friends or foes?. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2022, 208, 463-466.   | 1.6 | 3         |
| 5  | The Neurosphere Simulator: An educational online tool for modeling neural stem cell behavior and tissue growth. <i>Developmental Biology</i> , 2021, 469, 80-85.   | 2.0 | 2         |
| 6  | Cellular automata modeling suggests symmetric stem-cell division, cell death, and cell drift as key mechanisms driving adult spinal cord growth in teleost fish. <i>Journal of Theoretical Biology</i> , 2021, 509, 110474.  | 1.7 | 3         |
| 7  | Adult neurogenesis in the central nervous system of teleost fish: from stem cells to function and evolution. <i>Journal of Experimental Biology</i> , 2021, 224, .   | 1.7 | 14        |
| 8  | Modeling of sustained spontaneous network oscillations of a sexually dimorphic brainstem nucleus: the role of potassium equilibrium potential. <i>Journal of Computational Neuroscience</i> , 2021, 49, 419-439.   | 1.0 | 3         |
| 9  | Development of a sexual dimorphism in a central pattern generator driving a rhythmic behavior: The role of gliaâ€‘mediated potassium buffering in the pacemaker nucleus of the weakly electric fish <i>Apteronotus leptorhynchus</i> . <i>Developmental Neurobiology</i> , 2020, 80, 6-15. | 3.0 | 9         |
| 10 | Stochastic cellular automata model of tumorous neurosphere growth: Roles of developmental maturity and cell death. <i>Journal of Theoretical Biology</i> , 2019, 467, 100-110.   | 1.7 | 9         |
| 11 | Adult Neural Stem Cells in Development, Regeneration, and Aging. <i>Developmental Neurobiology</i> , 2019, 79, 391-395.  | 3.0 | 2         |
| 12 | Cellular Automata Modeling of Stemâ€‘Cellâ€‘Driven Development of Tissue in the Nervous System. <i>Developmental Neurobiology</i> , 2019, 79, 497-517.   | 3.0 | 18        |
| 13 | Calbindin-D28k expression in spinal electromotoneurons of the weakly electric fish <i>Apteronotus leptorhynchus</i> during adult development and regeneration. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2019, 205, 595-608. | 1.6 | 1         |
| 14 | Stemâ€‘Cellâ€‘Driven Growth and Regrowth of the Adult Spinal Cord in Teleost Fish. <i>Developmental Neurobiology</i> , 2019, 79, 406-423.  | 3.0 | 6         |
| 15 | Glia-mediated modulation of extracellular potassium concentration determines the sexually dimorphic output frequency of a model brainstem oscillator. <i>Journal of Theoretical Biology</i> , 2019, 471, 117-124.  | 1.7 | 6         |
| 16 | Stochastic cellular automata model of neurosphere growth: Roles of proliferative potential, contact inhibition, cell death, and phagocytosis. <i>Journal of Theoretical Biology</i> , 2018, 445, 151-165.  | 1.7 | 14        |
| 17 | Growth of adult spinal cord in knifefish: Development and parametrization of a distributed model. <i>Journal of Theoretical Biology</i> , 2018, 437, 101-114.  | 1.7 | 7         |
| 18 | Olfactory navigation versus olfactoryâ€‘activation: a controversy revisited. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2018, 204, 703-706.   | 1.6 | 10        |

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|----|--|-----|-----------|
| 19 | Mapping brain structure and function: cellular resolution, global perspective. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2017, 203, 245-264.   | 1.6 | 4         |
| 20 | Additive neurogenesis supported by multiple stem cell populations mediates adult spinal cord development: A spatiotemporal statistical mapping analysis in a teleost model of indeterminate growth. <i>Developmental Neurobiology</i> , 2017, 77, 1269-1307. | 3.0 | 20        |
| 21 | Dynamic Neuron-Glia Interactions in an Oscillatory Network Controlling Behavioral Plasticity in the Weakly Electric Fish, <i>Apteronotus leptorhynchus</i> . <i>Frontiers in Physiology</i> , 2017, 8, 1087.   | 2.8 | 9         |
| 22 | Absence of gliosis in a teleost model of spinal cord regeneration. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2016, 202, 445-456.   | 1.6 | 15        |
| 23 | Adult stem cells in the knifefish cerebellum. <i>Developmental Neurobiology</i> , 2015, 75, 39-65.   | 3.0 | 27        |
| 24 | The central nervous system transcriptome of the weakly electric brown ghost knifefish ( <i>Apteronotus</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf   | 2.8 | 19        |
| 25 | Regeneration science needs to broaden its focus to understand why some organisms can regenerate and others not. <i>Regenerative Medicine</i> , 2015, 10, 801-803.  | 1.7 | 3         |
| 26 | Matrix metalloproteinase-2 and -9 in the cerebellum of teleost fish: Functional implications for adult neurogenesis. <i>Molecular and Cellular Neurosciences</i> , 2015, 68, 9-23.   | 2.2 | 14        |
| 27 | Collaboration in the competitive world of science: lessons to be learned from William T. Keeton. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2015, 201, 957-960.                                 | 1.6 | 1         |
| 28 | Cell replacement therapy: Lessons from teleost fish. <i>Experimental Neurology</i> , 2015, 263, 272-276.   | 4.1 | 0         |
| 29 | Large-scale identification of proteins involved in the development of a sexually dimorphic behavior. <i>Journal of Neurophysiology</i> , 2014, 111, 1646-1654.   | 1.8 | 23        |
| 30 | Impact beyond the impact factor. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2014, 200, 113-116.   | 1.6 | 38        |
| 31 | Indeterminate body growth and lack of gonadal decline in the brown ghost knifefish ( <i>Apteronotus leptorhynchus</i> ), an organism exhibiting negligible brain senescence. <i>Canadian Journal of Zoology</i> , 2014, 92, 947-953.                         | 1.0 | 28        |
| 32 | Quantitative analysis reveals dominance of gliogenesis over neurogenesis in an adult brainstem oscillator. <i>Developmental Neurobiology</i> , 2014, 74, 934-952.  | 3.0 | 22        |
| 33 | Age-related changes in stem cell dynamics, neurogenesis, apoptosis, and gliosis in the adult brain: A novel teleost fish model of negligible senescence. <i>Developmental Neurobiology</i> , 2014, 74, 514-530.  | 3.0 | 40        |
| 34 | Undergraduate Research and Inquiry-Based Learning: The Revitalization of the Humboldtian Ideals. <i>Bioscience Education</i> , 2012, 19, 1-11.   | 0.4 | 4         |
| 35 | Teleost Fish as a Model System to Study Successful Regeneration of the Central Nervous System. <i>Current Topics in Microbiology and Immunology</i> , 2012, 367, 193-233.  | 1.1 | 53        |
| 36 | Adult neurogenesis in the brain of the Mozambique tilapia, <i>Oreochromis mossambicus</i> . <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2012, 198, 427-449.                                      | 1.6 | 26        |

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|----|---|------|-----------|
| 37 | Echo response to chirping in the weakly electric brown ghost knifefish ( <i>Apteronotus leptorhynchus</i> ): role of frequency and amplitude modulations. <i>Canadian Journal of Zoology</i> , 2011, 89, 498-508.   | 1.0  | 21        |
| 38 | Spinal cord repair in regeneration-competent vertebrates: Adult teleost fish as a model system. <i>Brain Research Reviews</i> , 2011, 67, 73-93.  | 9.0  | 52        |
| 39 | Adult Neurogenesis in Teleost Fish. , 2011, , 137-167.  |      | 12        |
| 40 | Towards a comparative understanding of adult neurogenesis. <i>European Journal of Neuroscience</i> , 2011, 34, 845-846.   | 2.6  | 15        |
| 41 | Adult neurogenesis and neuronal regeneration in the central nervous system of teleost fish. <i>European Journal of Neuroscience</i> , 2011, 34, 917-929.  | 2.6  | 190       |
| 42 | Effect of temperature on spinal cord regeneration in the weakly electric fish, <i>Apteronotus leptorhynchus</i> . <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2010, 196, 359-368.                       | 1.6  | 11        |
| 43 | Dynamics of caspase-3-mediated apoptosis during spinal cord regeneration in the teleost fish, <i>Apteronotus leptorhynchus</i> . <i>Brain Research</i> , 2009, 1304, 14-25.   | 2.2  | 27        |
| 44 | Structural and functional regeneration after spinal cord injury in the weakly electric teleost fish, <i>Apteronotus leptorhynchus</i> . <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2009, 195, 699-714. | 1.6  | 46        |
| 45 | Towards brain repair: Insights from teleost fish. <i>Seminars in Cell and Developmental Biology</i> , 2009, 20, 683-690.  | 5.0  | 61        |
| 46 | Integrative and comparative neurobiology: in memoriam of Theodore H. Bullock (1915-2005). <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2008, 194, 113-113.   | 1.6  | 0         |
| 47 | Apoptotic cell death, long-term persistence, and neuronal differentiation of aneuploid cells generated in the adult brain of teleost fish. <i>Developmental Neurobiology</i> , 2008, 68, 1257-1268.   | 3.0  | 19        |
| 48 | Stretching the limits: Stem cells in regeneration science. <i>Developmental Dynamics</i> , 2008, 237, 3648-3671.  | 1.8  | 65        |
| 49 | Adult neurogenesis and neuronal regeneration in the brain of teleost fish. <i>Journal of Physiology (Paris)</i> , 2008, 102, 357-373.   | 2.1  | 152       |
| 50 | Numerical chromosome variation and mitotic segregation defects in the adult brain of teleost fish. <i>Developmental Neurobiology</i> , 2007, 67, 1334-1347.   | 3.0  | 31        |
| 51 | Proteomics of traumatic brain injury and regeneration. <i>Proteomics - Clinical Applications</i> , 2007, 1, 1362-1372.  | 1.6  | 14        |
| 52 | Proteome analysis identifies novel protein candidates involved in regeneration of the cerebellum of teleost fish. <i>Proteomics</i> , 2006, 6, 677-696.   | 2.2  | 51        |
| 53 | Theodore H. Bullock (1915-2005). <i>Nature</i> , 2006, 439, 280-280.  | 27.8 | 2         |
| 54 | Electric fish: model systems for neurobiology. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2006, 192, 559-559.  | 1.6  | 1         |

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|----|--|-----|-----------|
| 55 | Isolation, cultivation, and differentiation of neural stem cells from adult fish brain. <i>Journal of Neuroscience Methods</i> , 2006, 158, 75-88.   | 2.5 | 56        |
| 56 | Upregulation of calbindin-D28k expression during regeneration in the adult fish cerebellum. <i>Brain Research</i> , 2006, 1095, 26-34.   | 2.2 | 26        |
| 57 | New neurons for the injured brain: mechanisms of neuronal regeneration in adult teleost fish. <i>Regenerative Medicine</i> , 2006, 1, 207-216.   | 1.7 | 58        |
| 58 | Proliferation, migration, neuronal differentiation, and long-term survival of new cells in the adult zebrafish brain. <i>Journal of Comparative Neurology</i> , 2005, 488, 290-319.  | 1.6 | 328       |
| 59 | From Electrogenesis to Electroreception: An Overview. , 2005, , 5-46.  |     | 40        |
| 60 | Potential role of radial glia in adult neurogenesis of teleost fish. <i>Glia</i> , 2003, 43, 77-86.  | 4.9 | 108       |
| 61 | Temperature Dependence of the Electric Organ Discharge in Weakly Electric Fish. , 2003, , 85-94.   |     | 7         |
| 62 | Spatio-Temporal Distribution of Microglia/Macrophages during Regeneration in the Cerebellum of Adult Teleost Fish, <i>Apteronotus leptorhynchus</i> : A Quantitative Analysis. <i>Brain, Behavior and Evolution</i> , 2003, 62, 31-42. | 1.7 | 42        |
| 63 | Up-regulation of vimentin expression during regeneration in the adult fish brain. <i>NeuroReport</i> , 2002, 13, 317-320.  | 1.2 | 19        |
| 64 | Light-“dark-controlled changes in modulations of the electric organ discharge in the teleost <i>Apteronotus leptorhynchus</i> . <i>Animal Behaviour</i> , 2001, 62, 1119-1128.   | 1.9 | 25        |
| 65 | Neuronal regeneration in the cerebellum of adult teleost fish, <i>Apteronotus leptorhynchus</i> : guidance of migrating young cells by radial glia. <i>Developmental Brain Research</i> , 2001, 130, 15-23.                            | 1.7 | 67        |
| 66 | Adult Neurogenesis and Neuronal Regeneration in the Central Nervous System of Teleost Fish. <i>Brain, Behavior and Evolution</i> , 2001, 58, 250-275.  | 1.7 | 141       |
| 67 | A Comparative Approach towards the Understanding of Adult Neurogenesis. <i>Brain, Behavior and Evolution</i> , 2001, 58, 246-249.  | 1.7 | 44        |
| 68 | Molecular Cloning and Pharmacological Characterization of a Somatostatin Receptor Subtype in the Gymnotiform Fish <i>Apteronotus albifrons</i> . <i>General and Comparative Endocrinology</i> , 1999, 115, 333-345.                    | 1.8 | 30        |
| 69 | Up-regulation of somatostatin after lesions in the cerebellum of the teleost fish <i>Apteronotus leptorhynchus</i> . <i>Neuroscience Letters</i> , 1999, 268, 135-138.   | 2.1 | 20        |
| 70 | Cell Proliferation after Lesions in the Cerebellum of Adult Teleost Fish: Time Course, Origin, and Type of New Cells Produced. <i>Experimental Neurology</i> , 1999, 160, 78-87.   | 4.1 | 108       |
| 71 | Characterisation of the fish sst3 receptor, a member of the SRIF1 receptor family: atypical pharmacological features. <i>Neuropharmacology</i> , 1999, 38, 449-462.  | 4.1 | 30        |
| 72 | An in vitro technique for tracing neuronal connections in the teleost brain. <i>Brain Research Protocols</i> , 1998, 3, 37-51.   | 1.6 | 30        |

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|----|--|-----|-----------|
| 73 | Apoptosis after Injuries in the Cerebellum of Adult Teleost Fish. <i>Experimental Neurology</i> , 1998, 152, 221-230.  | 4.1 | 75        |
| 74 | Long-term survival of postembryonically born cells in the cerebellum of gymnotiform fish, <i>Apteronotus leptorhynchus</i> . <i>Neuroscience Letters</i> , 1997, 221, 185-188.                               | 2.1 | 47        |
| 75 | Apoptosis in the cerebellum of adult teleost fish, <i>Apteronotus leptorhynchus</i> . <i>Developmental Brain Research</i> , 1996, 97, 279-286.   | 1.7 | 61        |
| 76 | Postembryonic development of the cerebellum in gymnotiform fish. <i>Journal of Comparative Neurology</i> , 1996, 370, 443-464.   | 1.6 | 92        |
| 77 | Peptidergic transmission: From morphological correlates to functional implications. <i>Micron</i> , 1996, 27, 35-91.   | 2.2 | 125       |
| 78 | Proliferation zones in the brain of adult gymnotiform fish: A quantitative mapping study. <i>Journal of Comparative Neurology</i> , 1995, 353, 213-233.  | 1.6 | 244       |
| 79 | Apoptosis as a regulator of cell proliferation in the central posterior/prepacemaker nucleus of adult gymnotiform fish, <i>Apteronotus leptorhynchus</i> . <i>Neuroscience Letters</i> , 1995, 202, 133-136. | 2.1 | 37        |
| 80 | Evoked chirping in the weakly electric fish <i>Apteronotus leptorhynchus</i> : a quantitative biophysical analysis. <i>Canadian Journal of Zoology</i> , 1993, 71, 2301-2310.                                | 1.0 | 136       |