

Jacob Engelmann

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

1,182
citations

394421

19
h-index

395702

33
g-index

52
all docs

52
docs citations

52
times ranked

749
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Object localization through the lateral line system of fish: theory and experiment. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2008, 194, 1-17. | 1.6 | 97 |
| 2 | Electrifying love: electric fish use species-specific discharge for mate recognition. <i>Biology Letters</i> , 2009, 5, 225-228. | 2.3 | 82 |
| 3 | Photonic Crystal Light Collectors in Fish Retina Improve Vision in Turbid Water. <i>Science</i> , 2012, 336, 1700-1703. | 12.6 | 71 |
| 4 | Sensory flow shaped by active sensing: sensorimotor strategies in electric fish. <i>Journal of Experimental Biology</i> , 2013, 216, 2487-2500. | 1.7 | 64 |
| 5 | Active sensing in a mormyrid fish: electric images and peripheral modifications of the signal carrier give evidence of dual foveation. <i>Journal of Experimental Biology</i> , 2008, 211, 921-934. | 1.7 | 62 |
| 6 | Functional foveae in an electrosensory system. <i>Journal of Comparative Neurology</i> , 2008, 511, 342-359. | 1.6 | 61 |
| 7 | Neural responses of goldfish lateral line afferents to vortex motions. <i>Journal of Experimental Biology</i> , 2006, 209, 327-342. | 1.7 | 58 |
| 8 | 3-Dimensional scene perception during active electrolocation in a weakly electric pulse fish. <i>Frontiers in Behavioral Neuroscience</i> , 2010, 4, 26. | 2.0 | 53 |
| 9 | Sensing External and Self-Motion with Hair Cells: A Comparison of the Lateral Line and Vestibular Systems from a Developmental and Evolutionary Perspective. <i>Brain, Behavior and Evolution</i> , 2017, 90, 98-116. | 1.7 | 53 |
| 10 | Electric imaging through active electrolocation: implication for the analysis of complex scenes. <i>Biological Cybernetics</i> , 2008, 98, 519-539. | 1.3 | 45 |
| 11 | Magic trait Electric Organ Discharge (EOD). <i>Communicative and Integrative Biology</i> , 2009, 2, 329-331. | 1.4 | 36 |
| 12 | Grouped retinæ and tapetal cups in some Teleostian fish: Occurrence, structure, and function. <i>Progress in Retinal and Eye Research</i> , 2014, 38, 43-69. | 15.5 | 31 |
| 13 | Motion parallax in electric sensing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 573-577. | 7.1 | 31 |
| 14 | Effects of Running Water on Lateral Line Responses to Moving Objects. <i>Brain, Behavior and Evolution</i> , 2003, 61, 195-212. | 1.7 | 29 |
| 15 | Coding of lateral line stimuli in the goldfish midbrain in still and running water. <i>Zoology</i> , 2004, 107, 135-151. | 1.2 | 27 |
| 16 | From static electric images to electric flow: Towards dynamic perceptual cues in active electroreception. <i>Journal of Physiology (Paris)</i> , 2013, 107, 95-106. | 2.1 | 25 |
| 17 | Motor patterns during active electrosensory acquisition. <i>Frontiers in Behavioral Neuroscience</i> , 2014, 8, 186. | 2.0 | 25 |
| 18 | Wake Tracking and the Detection of Vortex Rings by the Canal Lateral Line of Fish. <i>Physical Review Letters</i> , 2009, 103, 078102. | 7.8 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Sensory Flow as a Basis for a Novel Distance Cue in Freely Behaving Electric Fish. <i>Journal of Neuroscience</i> , 2017, 37, 302-312. | 3.6 | 23 |
| 20 | Sensory and Motor Effects of Etomidate Anesthesia. <i>Journal of Neurophysiology</i> , 2006, 95, 1231-1243. | 1.8 | 20 |
| 21 | The Schnauzenorgan-response of <i>Gnathonemus petersii</i> . <i>Frontiers in Zoology</i> , 2009, 6, 21. | 2.0 | 19 |
| 22 | Coding of Stimuli by Ampullary Afferents in <i>Gnathonemus petersii</i> . <i>Journal of Neurophysiology</i> , 2010, 104, 1955-1968. | 1.8 | 19 |
| 23 | Comparative histology of the adult electric organ among four species of the genus <i>Campylomormyrus</i> (Teleostei: Mormyridae). <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2015, 201, 357-374. | 1.6 | 19 |
| 24 | More a finger than a nose: The trigeminal motor and sensory innervation of the Schnauzenorgan in the elephantnose Fish <i>Gnathonemus petersii</i> . <i>Journal of Comparative Neurology</i> , 2015, 523, 769-789. | 1.6 | 17 |
| 25 | Wie Fische Wasser fñhlen: Das Seitenliniensystem. <i>Biologie in Unserer Zeit</i> , 2004, 34, 358-365. | 0.2 | 15 |
| 26 | A grouped retina provides high temporal resolution in the weakly electric fish <i>Gnathonemus petersii</i> . <i>Journal of Physiology (Paris)</i> , 2013, 107, 84-94. | 2.1 | 14 |
| 27 | Monitoring of Single-Cell Responses in the Optic Tectum of Adult Zebrafish with Dextran-Coupled Calcium Dyes Delivered via Local Electroporation. <i>PLoS ONE</i> , 2013, 8, e62846. | 2.5 | 14 |
| 28 | Social odour activates the hippocampal formation in zebra finches (<i>Taeniopygia guttata</i>). <i>Behavioural Brain Research</i> , 2019, 364, 41-49. | 2.2 | 14 |
| 29 | Receptive field properties of neurons in the electrosensory lateral line lobe of the weakly electric fish, <i>Gnathonemus petersii</i> . <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2008, 194, 1063-1075. | 1.6 | 12 |
| 30 | Male-mediated species recognition among African weakly electric fishes. <i>Royal Society Open Science</i> , 2018, 5, 170443. | 2.4 | 11 |
| 31 | Linking active sensing and spatial learning in weakly electric fish. <i>Current Opinion in Neurobiology</i> , 2021, 71, 1-10. | 4.2 | 11 |
| 32 | Temporal precision and reliability in the velocity regime of a hair-cell sensory system: the mechanosensory lateral line of goldfish, <i>Carassius auratus</i> . <i>Journal of Neurophysiology</i> , 2012, 107, 2581-2593. | 1.8 | 10 |
| 33 | Electric pulse characteristics can enable species recognition in African weakly electric fish species. <i>Scientific Reports</i> , 2018, 8, 10799. | 3.3 | 10 |
| 34 | Etomidate Reduces Initiation of Backpropagating Dendritic Action Potentials: Implications for Sensory Processing and Synaptic Plasticity During Anesthesia. <i>Journal of Neurophysiology</i> , 2007, 97, 2373-2384. | 1.8 | 9 |
| 35 | Spatial resolution of an eye containing a grouped retina: ganglion cell morphology and tectal physiology in the weakly electric fish <i>Gnathonemus petersii</i> . <i>Journal of Comparative Neurology</i> , 2013, 521, n/a-n/a. | 1.6 | 9 |
| 36 | Task-Related Sensorimotor Adjustments Increase the Sensory Range in Electrolocation. <i>Journal of Neuroscience</i> , 2020, 40, 1097-1109. | 3.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | RESPONSES OF PRIMARY AND SECONDARY LATERAL LINE UNITS TO DIPOLE STIMULI APPLIED UNDER STILL AND RUNNING WATER CONDITIONS. <i>Bioacoustics</i> , 2002, 12, 158-160. | 1.7 | 8 |
| 38 | Adaptation-induced modification of motion selectivity tuning in visual tectal neurons of adult zebrafish. <i>Journal of Neurophysiology</i> , 2015, 114, 2893-2902. | 1.8 | 8 |
| 39 | Somatotopic map of the active electrosensory sense in the midbrain of the mormyrid <i>Gnathonemus petersii</i> . <i>Journal of Comparative Neurology</i> , 2016, 524, 2479-2491. | 1.6 | 7 |
| 40 | Spatial learning through active electroreception in <i>Gnathonemus petersii</i> . <i>Animal Behaviour</i> , 2019, 156, 1-10. | 1.9 | 7 |
| 41 | Modeling latency code processing in the electric sense: from the biological template to its VLSI implementation. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 055007. | 2.9 | 5 |
| 42 | Application of reduced sensor movement sequences as a precursor for search area partitioning and a selection of discrete EEV contour-ring fragments for active electrolocation. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 066008. | 2.9 | 5 |
| 43 | Electrolocation of objects in fluids by means of active sensor movements based on discrete EEVs. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 055002. | 2.9 | 4 |
| 44 | The Use of Supervised Learning Models in Studying Agonistic Behavior and Communication in Weakly Electric Fish. <i>Frontiers in Behavioral Neuroscience</i> , 2021, 15, 718491. | 2.0 | 3 |
| 45 | Active sensing. <i>Communicative and Integrative Biology</i> , 2008, 1, 29-31. | 1.4 | 2 |
| 46 | Sensory Flow as a Basis for a Novel Distance Cue in Freely Behaving Electric Fish. <i>Journal of Neuroscience</i> , 2017, 37, 302-312. | 3.6 | 2 |
| 47 | Editorial note. <i>Journal of Physiology (Paris)</i> , 2008, 102, 153. | 2.1 | 1 |
| 48 | Physiological evidence of sensory integration in the electrosensory lateral line lobe of <i>Gnathonemus petersii</i> . <i>PLoS ONE</i> , 2018, 13, e0194347. | 2.5 | 1 |
| 49 | Motion parallax for object localization in electric fields. <i>Bioinspiration and Biomimetics</i> , 2022, 17, 016003. | 2.9 | 1 |
| 50 | Editorial. <i>Journal of Physiology (Paris)</i> , 2013, 107, 1. | 2.1 | 0 |
| 51 | Active Control of Sensing Through Movements in Active Electrolocation. , 2020, , 369-384. | | 0 |