

Franz Goller

List of Publications by Year in descending order

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Version: 2024-02-01

71
papers

2,473
citations

186265

28
h-index

223800

46
g-index

73
all docs

73
docs citations

73
times ranked

1300
citing authors

#	ARTICLE	IF	CITATIONS
1	Vocal athletics â€“ from birdsong production mechanisms to sexy songs. <i>Animal Behaviour</i> , 2022, 184, 173-184.	1.9	19
2	Enzymatic Alteration of ECM to Explore Muscle Function and Motor Control of a Learned Behavior. <i>Methods in Molecular Biology</i> , 2022, 2303, 487-493.	0.9	0
3	Climbing parrots achieve pitch stability using forces and free moments produced by axialâ€“appendicular couples. <i>Journal of Experimental Biology</i> , 2022, 225, .	1.7	14
4	Specialized androgen synthesis in skeletal muscles that actuate elaborate social displays. <i>Journal of Experimental Biology</i> , 2022, 225, .	1.7	5
5	Different frequency control mechanisms and the exploitation of frequency space in passerines. <i>Ecology and Evolution</i> , 2021, 11, 6569-6578.	1.9	3
6	Processes underlying complex patterns of song trait evolution in a <i>Setophaga</i> hybrid zone. <i>Ecology and Evolution</i> , 2021, 11, 7264-7277.	1.9	3
7	Replay of innate vocal patterns during night sleep in suboscines. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20210610.	2.6	2
8	Birds breathe at an aerodynamic resonance. <i>Chaos</i> , 2021, 31, 123132.	2.5	2
9	Dynamics behind rough sounds in the song of the <i>Pitangus sulphuratus</i> . <i>Physical Review E</i> , 2020, 102, 062415.	2.1	4
10	Unusual Avian Vocal Mechanism Facilitates Encoding of Body Size. <i>Physical Review Letters</i> , 2020, 124, 098101.	7.8	8
11	Androgenic modulation of extraordinary muscle speed creates a performance trade-off with endurance. <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	14
12	Multifunctional bilateral muscle control of vocal output in the songbird syrinx. <i>Journal of Neurophysiology</i> , 2020, 124, 1857-1874.	1.8	4
13	Song Feature Specific Analysis of Isolate Song Reveals Interspecific Variation in Learned Components. <i>Developmental Neurobiology</i> , 2019, 79, 350-369.	3.0	10
14	The evolution of the syrinx: An acoustic theory. <i>PLoS Biology</i> , 2019, 17, e2006507.	5.6	33
15	From electromyographic activity to frequency modulation in zebra finch song. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2018, 204, 209-217.	1.6	7
16	Identity and novelty in the avian syrinx. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 10209-10217.	7.1	38
17	Syringeal EMGs and synthetic stimuli reveal a switch-like activation of the songbirdâ€™s vocal motor program. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8436-8441.	7.1	7
18	Gating related activity in a syringeal muscle allows the reconstruction of zebra finches songs. <i>Chaos</i> , 2018, 28, 075517.	2.5	5

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19	Physiological constraint on acrobatic courtship behavior underlies rapid sympatric speciation in bearded manakins. <i>ELife</i> , 2018, 7, .	6.0	25
20	Contributions of rapid neuromuscular transmission to the fine control of acoustic parameters of birdsong. <i>Journal of Neurophysiology</i> , 2017, 117, 637-645.	1.8	8
21	Neuromuscular mechanisms of an elaborate wing display in the golden-collared manakin (<i>Manacus</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 11	1.7	11
22	Regulation of glycosaminoglycan biogenesis is critical for sensitiveâ€periodâ€dependent vocal ontogeny. <i>Developmental Neurobiology</i> , 2017, 77, 1401-1412.	3.0	0
23	Evolution of Vocal Diversity through Morphological Adaptation without Vocal Learning or Complex Neural Control. <i>Current Biology</i> , 2017, 27, 2677-2683.e3.	3.9	30
24	Androgens Support Male Acrobatic Courtship Behavior by Enhancing Muscle Speed and Easing the Severity of Its Tradeoff With Force. <i>Endocrinology</i> , 2017, 158, 4038-4046.	2.8	30
25	Is sexual dimorphism in singing behavior related to syringeal muscle composition?. <i>Auk</i> , 2017, 134, 710-720.	1.4	14
26	Adult zebra finches rehearse highly variable song patterns during sleep. <i>PeerJ</i> , 2017, 5, e4052.	2.0	10
27	Coos, booms, and hoots: The evolution of closedâ€mouth vocal behavior in birds. <i>Evolution; International Journal of Organic Evolution</i> , 2016, 70, 1734-1746.	2.3	34
28	Breathtaking Songs: Coordinating the Neural Circuits for Breathing and Singing. <i>Physiology</i> , 2016, 31, 442-451.	3.1	33
29	Fossil evidence of the avian vocal organ from the Mesozoic. <i>Nature</i> , 2016, 538, 502-505.	27.8	65
30	Select forelimb muscles have evolved superfast contractile speed to support acrobatic social displays. <i>ELife</i> , 2016, 5, e13544.	6.0	37
31	A circular model for song motor control in <i>Serinus canaria</i> . <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 41.	2.1	29
32	The functional morphology of male courtship displays in the Pectoral Sandpiper (<i>Calidris) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 T	1.4	14
33	Motor control of sound frequency in birdsong involves the interaction between air sac pressure and labial tension. <i>Physical Review E</i> , 2014, 89, 032706.	2.1	14
34	A heterogeneous thermal environment enables remarkable behavioral thermoregulation in <i>Uta stansburiana</i>. <i>Ecology and Evolution</i> , 2014, 4, 3319-3329.	1.9	48
35	Male moths optimally balance take-off thoracic temperature and warm-up duration to reach a pheromone source quickly. <i>Animal Behaviour</i> , 2014, 98, 79-85.	1.9	4
36	Morphological basis for the evolution of acoustic diversity in oscine songbirds. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20132306.	2.6	41

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37	The acoustic effect of vocal tract adjustments in zebra finches. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2013, 199, 57-69.	1.6	23
38	Integrative physiology of fundamental frequency control in birds. <i>Journal of Physiology (Paris)</i> , 2013, 107, 230-242.	2.1	61
39	Atypical Song Reveals Spontaneously Developing Coordination between Multi-Modal Signals in Brown-Headed Cowbirds (<i>Molothrus ater</i>). <i>PLoS ONE</i> , 2013, 8, e65525.	2.5	12
40	Temperature Induced Syllable Breaking Unveils Nonlinearly Interacting Timescales in Birdsong Motor Pathway. <i>PLoS ONE</i> , 2013, 8, e67814.	2.5	33
41	Prosthetic Avian Vocal Organ Controlled by a Freely Behaving Bird Based on a Low Dimensional Model of the Biomechanical Periphery. <i>PLoS Computational Biology</i> , 2012, 8, e1002546.	3.2	13
42	Interaction between telencephalic signals and respiratory dynamics in songbirds. <i>Journal of Neurophysiology</i> , 2012, 107, 2971-2983.	1.8	15
43	Sexual dimorphism and bilateral asymmetry of syrinx and vocal tract in the European starling (<i>Sturnus vulgaris</i>). <i>Journal of Morphology</i> , 2011, 272, 1527-1536.	1.2	24
44	Metabolic and Respiratory Costs of Increasing Song Amplitude in Zebra Finches. <i>PLoS ONE</i> , 2011, 6, e23198.	2.5	50
45	Roles of syntax information in directing song development in white-crowned sparrows (<i>zonotrichia</i>) Tj ETQq1 1 0.784314 rgBT /Overl 0.5 15	0.5	15
46	Peripheral mechanisms for vocal production in birds – differences and similarities to human speech and singing. <i>Brain and Language</i> , 2010, 115, 69-80.	1.6	110
47	Acquisition of an Acoustic Template Leads to Refinement of Song Motor Gestures. <i>Journal of Neurophysiology</i> , 2010, 104, 984-993.	1.8	10
48	Smooth Operator: Avoidance of Subharmonic Bifurcations through Mechanical Mechanisms Simplifies Song Motor Control in Adult Zebra Finches. <i>Journal of Neuroscience</i> , 2010, 30, 13246-13253.	3.6	19
49	Disrupting vagal feedback affects birdsong motor control. <i>Journal of Experimental Biology</i> , 2010, 213, 4193-4204.	1.7	16
50	Sexual Dimorphism of the Zebra Finch Syrinx Indicates Adaptation for High Fundamental Frequencies in Males. <i>PLoS ONE</i> , 2010, 5, e11368.	2.5	41
51	Tutor model syntax influences the syntactical and phonological structure of crystallized songs of white-crowned sparrows. <i>Animal Behaviour</i> , 2008, 76, 1815-1827.	1.9	9
52	Frequency Modulation During Song in a Suboscine Does Not Require Vocal Muscles. <i>Journal of Neurophysiology</i> , 2008, 99, 2383-2389.	1.8	52
53	Superfast Vocal Muscles Control Song Production in Songbirds. <i>PLoS ONE</i> , 2008, 3, e2581.	2.5	105
54	Songbirds use pulse tone register in two voices to generate low-frequency sound. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2007, 274, 2703-2710.	2.6	36

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55	Nonlinear Model Predicts Diverse Respiratory Patterns of Birdsong. <i>Physical Review Letters</i> , 2006, 96, 058103.	7.8	41
56	Peripheral Motor Dynamics of Song Production in the Zebra Finch. <i>Annals of the New York Academy of Sciences</i> , 2004, 1016, 130-152.	3.8	99
57	Beak gape dynamics during song in the zebra finch. <i>Journal of Neurobiology</i> , 2004, 59, 289-303.	3.6	46
58	Tracheal length changes during zebra finch song and their possible role in upper vocal tract filtering. <i>Journal of Neurobiology</i> , 2004, 59, 319-330.	3.6	47
59	Respiratory patterns and oxygen consumption in singing zebra finches. <i>Journal of Experimental Biology</i> , 2003, 206, 967-978.	1.7	68
60	Somatosensory feedback modulates the respiratory motor program of crystallized birdsong. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 5680-5685.	7.1	59
61	Direct observation of syringeal muscle function in songbirds and a parrot. <i>Journal of Experimental Biology</i> , 2002, 205, 25-35.	1.7	89
62	Direct observation of syringeal muscle function in songbirds and a parrot. <i>Journal of Experimental Biology</i> , 2002, 205, 25-35.	1.7	60
63	Novel motor gestures for phonation during inspiration enhance the acoustic complexity of birdsong. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2001, 268, 2301-2305.	2.6	44
64	The metabolic cost of birdsong production. <i>Journal of Experimental Biology</i> , 2001, 204, 3379-3388.	1.7	207
65	Bilaterally symmetrical respiratory activity during lateralized birdsong. , 1999, 41, 513-523.		23
66	The neuromuscular control of birdsong. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1999, 354, 927-939.	4.0	172
67	Vocal gymnastics and the bird brain. <i>Nature</i> , 1998, 395, 11-12.	27.8	8
68	Motor Correlates of Vocal Diversity in Songbirds. , 1997, , 235-288.		71
69	Motor stereotypy and diversity in songs of mimic thrushes. <i>Journal of Neurobiology</i> , 1996, 30, 231-245.	3.6	14
70	Implications for lateralization of bird song from unilateral gating of bilateral motor patterns. <i>Nature</i> , 1995, 373, 63-66.	27.8	80
71	Motor dynamics of song production by mimic thrushes. <i>Journal of Neurobiology</i> , 1994, 25, 917-936.	3.6	76