Coen P H Elemans

List of Publications by Year in Descending Order

33 papers	1,018 citations	16 h-index	31 g-index
40 ext. papers	1,315 ext. citations	7.7 avg, IF	4.42 L-index

#	Paper	IF	Citations
33	Aerodynamics and motor control of ultrasonic vocalizations for social communication in mice and rats.. *BMC Biology*, **2022**, 20, 3	7.3	0
32	Syringeal vocal folds do not have a voice in zebra finch vocal development. *Scientific Reports*, **2021**, 11, 6469	4.9	1
31	One-to-one innervation of vocal muscles allows precise control of birdsong. *Current Biology*, **2021**, 31, 3115-3124.e5	6.3	2
30	Increasing Muscle Speed Drives Changes in the Neuromuscular Transform of Motor Commands during Postnatal Development in Songbirds. *Journal of Neuroscience*, **2020**, 40, 6722-6731	6.6	4
29	High-fidelity continuum modeling predicts avian voiced sound production. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 4718-4723	11.5	2
28	Vocal state change through laryngeal development. *Nature Communications*, **2019**, 10, 4592	17.4	15
27	Vocal Motor Performance in Birdsong Requires Brain-Body Interaction. *ENeuro*, **2019**, 6,	3.9	6
26	The return to water in ancestral was accompanied by a novel mechanism for producing and shaping vocal signals. *ELife*, **2019**, 8,	8.9	10
25	Quantifying syringeal dynamics using electroglottography. *Journal of Experimental Biology*, **2018**, 221,	3	2
24	The last common ancestor of animals lacked the HIF pathway and respired in low-oxygen environments. *ELife*, **2018**, 7,	8.9	50
23	Motor control by precisely timed spike patterns. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 1171-1176	11.5	55
22	Oilbirds produce echolocation signals beyond their best hearing range and adjust signal design to natural light conditions. *Royal Society Open Science*, **2017**, 4, 170255	3.3	7
21	Fundamental constraints in synchronous muscle limit superfast motor control in vertebrates. *ELife*, **2017**, 6,	8.9	20
20	In situ vocal fold properties and pitch prediction by dynamic actuation of the songbird syrinx. *Scientific Reports*, **2017**, 7, 11296	4.9	11
19	Plasticity in mitochondrial cristae density allows metabolic capacity modulation in human skeletal muscle. *Journal of Physiology*, **2017**, 595, 2839-2847	3.9	90
18	Semicircular Canals Circumvent Brownian Motion Overload of Mechanoreceptor Hair Cells. *PLoS ONE*, **2016**, 11, e0159427	3.7	5
17	Embodied Motor Control of Avian Vocal Production. *Springer Handbook of Auditory Research*, **2016**, 119-157	15	13

List of Publications

16	Mice produce ultrasonic vocalizations by intra-laryngeal planar impinging jets. *Current Biology*, **2016**, 26, R880-R881	6.3	47
15	Multifunctional and Context-Dependent Control of Vocal Acoustics by Individual Muscles. *Journal of Neuroscience*, **2015**, 35, 14183-94	6.6	27
14	The singer and the song: the neuromechanics of avian sound production. *Current Opinion in Neurobiology*, **2014**, 28, 172-8	7.6	34
13	Vocal production complexity correlates with neural instructions in the oyster toadfish (Opsanus tau). *Journal of Experimental Biology*, **2014**, 217, 1887-93	3	11
12	The songbird syrinx morphome: a three-dimensional, high-resolution, interactive morphological map of the zebra finch vocal organ. *BMC Biology*, **2013**, 11, 1	7.3	89
11	How the bat got its buzz. *Biology Letters*, **2013**, 9, 20121031	3.6	50
10	Superfast muscles set maximum call rate in echolocating bats. *Science*, **2011**, 333, 1885-8	33.3	78
9	Walking the line: search behavior and foraging success in ant species. *Behavioral Ecology*, **2011**, 22, 501-509	2.9	34
8	Smooth operator: avoidance of subharmonic bifurcations through mechanical mechanisms simplifies song motor control in adult zebra finches. *Journal of Neuroscience*, **2010**, 30, 13246-53	6.6	17
7	Amplitude and frequency modulation control of sound production in a mechanical model of the avian syrinx. *Journal of Experimental Biology*, **2009**, 212, 1212-24	3	15
6	Biomechanics and control of vocalization in a non-songbird. *Journal of the Royal Society Interface*, **2008**, 5, 691-703	4.1	30
5	SPECTROGRAM ANALYSIS OF ANIMAL SOUND PRODUCTION. *Bioacoustics*, **2008**, 18, 183-212	1.6	14
4	Superfast vocal muscles control song production in songbirds. *PLoS ONE*, **2008**, 3, e2581	3.7	79
3	Parasitic inhibition of cell death facilitates symbiosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 213-5	11.5	142
2	Bird song: superfast muscles control dove's trill. *Nature*, **2004**, 431, 146	50.4	45
1	Quantitative modelling of the biomechanics of the avian syrinx. *Animal Biology*, **2003**, 53, 183-193	0.7	10