Fernando Montealegre-Z

List of Publications by Year
in descending order

51 papers	1,147 citations	394421 19 h-index	434195 31 g-index
57 all docs	57 docs citations	57 times ranked	596 citing authors

#	Article	IF	Citations
1	Auditory mechanics in the grig (<i>Cyphoderris monstrosa</i>): tympanal travelling waves and frequency discrimination as a precursor to inner ear tonotopy. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20220398.	2.6	3
2	Bioacoustic and biophysical analysis of a newly described highly transparent genus of predatory katydids from the Andean cloud forest (Orthoptera: Tettigoniidae: Meconematinae: Phlugidini). Bioacoustics, 2021, 30, 93-109.	1.7	2
3	A narrow ear canal reduces sound velocity to create additional acoustic inputs in a microscale insect ear. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
4	Tenors Not Sopranos: Bio-Mechanical Constraints on Calling Song Frequencies in the Mediterranean Field-Cricket. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	5
5	Variation in the natural frequency of stamens in six morphologically diverse, buzz-pollinated, heterantherous<i>Solanum</i>taxa and its relationship to bee vibrations. Botanical Journal of the Linnean Society, 2021, 197, 541-553.	1.6	10
6	Differentiation between left and right wing stridulatory files in the field cricket Gryllus bimaculatus (Orthoptera: Gryllidae). Arthropod Structure and Development, 2021, 65, 101076.	1.4	5
7	The ander's organ: a mechanism for anti-predator ultrasound in a relict orthopteran. Journal of Experimental Biology, 2021, 224, .	1.7	5
8	Editorial: Evolutionary Biomechanics of Sound Production and Reception. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	3
9	Ultrasonic songs and stridulum anatomy of <i>Asiophlugis</i> crystal predatory katydids (Tettigonioidea: Meconematinae: Phlugidini). Bioacoustics, 2020, 29, 619-637.	1.7	5
10	The Auditory Mechanics of the Outer Ear of the Bush Cricket: A Numerical Approach. Biophysical Journal, 2020, 118, 464-475.	0.5	14
11	On the tympanic membrane impedance of the katydid Copiphora gorgonensis (Insecta: Orthoptera:) Tj ETQq1 1 0.784314 rgBT /Over	1.1	6
12	Biomechanical properties of a buzz-pollinated flower. Royal Society Open Science, 2020, 7, 201010.	2.4	15
13	Testing the role of trait reversal in evolutionary diversification using song loss in wild crickets. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8941-8949.	7.1	19
14	Complex wing motion during stridulation in the katydid Nastonotus foreli (Orthoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (Te	2.0	4
15	A silent orchestra: convergent song loss in Hawaiian crickets is repeated, morphologically varied, and widespread. Ecology, 2019, 100, e02694.	3.2	25
16	Functional morphology of tegmina-based stridulation in the relict species Cyphoderris monstrosa (Orthoptera: Ensifera: Prophalangopsidae). Journal of Experimental Biology, 2017, 220, 1112-1121.	1.7	17
17	Non-invasive biophysical measurement of travelling waves in the insect inner ear. Royal Society Open Science, 2017, 4, 170171.	2.4	12
18	Endless forms most hidden: katydids that masquerade as moss. Ecology, 2017, 98, 2479-2481.	3.2	1

#	Article	IF	Citations
19	Chamber music â€“ An unusual Helmholtz resonator for song amplification in a Neotropical bush-cricket (Orthoptera, Tettigoniidae). Journal of Experimental Biology, 2017, 220, 2900-2907.	1.7	11
20	Wing resonances in a new dead-leaf-mimic katydid (Tettigoniidae: Pterochrozinae) from the Andean cloud forests. Zoologischer Anzeiger, 2017, 270, 60-70.	0.9	5
21	Morphological determinants of signal carrier frequency in katydids (Orthoptera): a comparative analysis using biophysical evidence of wing vibration. Journal of Evolutionary Biology, 2017, 30, 2068-2078.	1.7	22
22	Evidence of auditory insensitivity to vocalization frequencies in two frogs. Scientific Reports, 2017, 7, 12121.	3.3	24
23	Structural biomechanics determine spectral purity of bush-cricket calls. Biology Letters, 2017, 13, 20170573.	2.3	11
24	Wing mechanics, vibrational and acoustic communication in a new bush-cricket species of the genus Copiphora (Orthoptera: Tettigoniidae) from Colombia. Zoologischer Anzeiger, 2016, 263, 55-65.	0.9	17
25	Auditory mechanics in a bush-cricket: direct evidence of dual sound inputs in the pressure difference receiver. Journal of the Royal Society Interface, 2016, 13, 20160560.	3.4	24
26	Distribution of sound pressure around a singing cricket: radiation pattern and asymmetry in the sound field. Bioacoustics, 2016, 25, 161-176.	1.7	3
27	Biomechanics of hearing in katydids. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2015, 201, 5-18.	1.6	36
28	Ultrasonic reverse stridulation in the spider-like katydid Arachnoscelis (Orthoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (Listro	1.7	8
29	Shrinking Wings for Ultrasonic Pitch Production: Hyperintense Ultra-Short-Wavelength Calls in a New Genus of Neotropical Katydids (Orthoptera: Tettigoniidae). PLoS ONE, 2014, 9, e98708.	2.5	32
30	Mechanisms of high frequency song generation in brachypterous crickets and the role of ghost frequencies. Journal of Experimental Biology, 2013, 216, 2001-11.	1.7	28
31	The spider-like katydid <i>Arachnoscelis</i> (Orthoptera: Tettigoniidae: Listroscelidinae): anatomical study of the genus. Zootaxa, 2013, 3666, 591-600.	0.5	3
32	Changing resonator geometry to boost sound power decouples size and song frequency in a small insect. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1444-52.	7.1	36
33	Wing stridulation in a Jurassic katydid (Insecta, Orthoptera) produced low-pitched musical calls to attract females. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3868-3873.	7.1	100
34	Convergent Evolution Between Insect and Mammalian Audition. Science, 2012, 338, 968-971.	12.6	90
35	Reverse stridulatory wing motion produces highly resonant calls in a neotropical katydid (Orthoptera: Tettigoniidae: Pseudophyllinae). Journal of Insect Physiology, 2012, 58, 116-124.	2.0	28
36	Quality calls: phylogeny and biogeography of a new genus of neotropical katydid (Orthoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	1.2	20

#	Article	IF	Citations
37	Mechanical filtering for narrow-band hearing in the weta. Journal of Experimental Biology, 2011, 214, 778-785.	1.7	8
38	Checklist and new distribution records of katydids (Orthoptera: Tettigoniidae) from Colombia. Zootaxa, 2011, 3023, 1.	0.5	15
39	Tympanal mechanics and neural responses in the ears of a noctuid moth. Die Naturwissenschaften, 2011, 98, 1057-1061.	1.6	12
40	Sound radiation and wing mechanics in stridulating field crickets (Orthoptera: Gryllidae). Journal of Experimental Biology, 2011, 214, 2105-2117.	1.7	53
41	Resonant Sound Production in<i>Copiphora gorgonensis</i>(Tettigoniidae: Copiphorini), an Endemic Species from<i>Parque Nacional Natural Gorgona</i>, Colombia. Journal of Orthoptera Research, 2010, 19, 347-355.	1.0	30
42	Resonating feathers produce courtship song. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 835-841.	2.6	28
43	Mechanical phase shifters for coherent acoustic radiation in the stridulating wings of crickets: the plectrum mechanism. Journal of Experimental Biology, 2009, 212, 257-269.	1.7	41
44	Mechanical response of the tympanal membranes of the tree cricket Oecanthus henryi. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2009, 195, 453-462.	1.6	18
45	Scale effects and constraints for sound production in katydids (Orthoptera: Tettigoniidae): correlated evolution between morphology and signal parameters. Journal of Evolutionary Biology, 2009, 22, 355-366.	1.7	70
46	Determinants of Male Spacing Behaviour in Panacanthus pallicornis (Orthoptera: Tettigoniidae). Ethology, 2007, 113, 1158-1172.	1.1	6
47	Generation of extreme ultrasonics in rainforest katydids. Journal of Experimental Biology, 2006, 209, 4923-4937.	1.7	78
48	The mechanics of sound production in Panacanthus pallicornis(Orthoptera: Tettigoniidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td 1219-1237.	1.7	64
49	The spiny devil katydids, Panacanthus Walker (Orthoptera: Tettigoniidae): an evolutionary study of acoustic behaviour and morphological traits. Systematic Entomology, 2004, 29, 21-57.	3.9	36
50	Panoploscelis specularis (Orthoptera: Tettigoniidae: Pseudophyllinae): extraordinary female sound generator, male description, male protest and calling signals. Journal of Orthoptera Research, 2003, 12, 173-181.	1.0	12
51	Lack of correlation between vertical distribution and carrier frequency, and preference for open spaces in arboreal katydids that use extreme ultrasound, in Gorgona, Colombia (Orthoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	0.4	7