Michael W Towsey

List of Publications by Year
in descending order

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73 papers	1,845 citations	361045 20 h-index	301761 39 g-index
76 all docs	76 docs citations	76 times ranked	1238 citing authors

#	Article	IF	Citations
1	The use of acoustic indices to determine avian species richness in audio-recordings of the environment. Ecological Informatics, 2014, 21, 110-119.	2.3	230
2	Sampling environmental acoustic recordings to determine bird species richness. Ecological Applications, 2013, 23, 1419-1428.	1.8	206
3	A practical comparison of manual and autonomous methods for acoustic monitoring. Methods in Ecology and Evolution, 2013, 4, 675-683.	2.2	167
4	Visualization of Long-duration Acoustic Recordings of the Environment. Procedia Computer Science, 2014, 29, 703-712.	1.2	115
5	A toolbox for animal call recognition. Bioacoustics, 2012, 21, 107-125.	0.7	112
6	Using soundscapes to detect variable degrees of human influence on tropical forests in Papua New Guinea. Conservation Biology, 2018, 32, 205-215.	2.4	65
7	Revealing the ecological content of long-duration audio-recordings of the environment through clustering and visualisation. PLoS ONE, 2018, 13, e0193345.	1.1	61
8	Analysing environmental acoustic data through collaboration and automation. Future Generation Computer Systems, 2013, 29, 560-568.	4.9	56
9	Long-duration, false-colour spectrograms for detecting species in large audio data-sets. Journal of Ecoacoustics, 2018, 2, 1-1.	1.5	44
10	Efficacy of modified backpropagation and optimisation methods on a real-world medical problem. Neural Networks, 1995, 8, 945-962.	3.3	35
11	A survey of tagging techniques for music, speech and environmental sound. Artificial Intelligence Review, 2014, 42, 637-661.	9.7	35
12	Using multi-label classification for acoustic pattern detection and assisting bird species surveys. Applied Acoustics, 2016, 110, 91-98.	1.7	35
13	The Australian Acoustic Observatory. Methods in Ecology and Evolution, 2021, 12, 1802-1808.	2.2	32
14	Acoustic classification of Australian frogs based on enhanced features and machine learning algorithms. Applied Acoustics, 2016, 113, 193-201.	1.7	27
15	Adaptive frequency scaled wavelet packet decomposition for frog call classification. Ecological Informatics, 2016, 32, 134-144.	2.3	27
16	Using soundscapes to investigate homogenization of tropical forest diversity in selectively logged forests. Journal of Applied Ecology, 2019, 56, 2493-2504.	1.9	27
17	The Navigation and Visualisation of Environmental Audio Using Zooming Spectrograms. , 2015, , .		24
18	Using visualization and machine learning methods to monitor low detectability speciesâ€"The least bittern as a case study. Ecological Informatics, 2020, 55, 101014.	2.3	24

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19	The cross-species prediction of bacterial promoters using a support vector machine. Computational Biology and Chemistry, 2008, 32, 359-366.	1.1	23
20	Temporal and environmental influences on the vocal behaviour of a nocturnal bird. Journal of Avian Biology, 2014, 45, 591-599.	0.6	23
21	Automated species identification of frog choruses in environmental recordings using acoustic indices. Ecological Indicators, 2020, 119, 106852.	2.6	23
22	Scaling Acoustic Data Analysis through Collaboration and Automation. , 2010, , .		20
23	Practical Analysis of Big Acoustic Sensor Data for Environmental Monitoring. , 2014, , .		20
24	An intelligent system for estimating frog community calling activity and species richness. Ecological Indicators, 2017, 82, 13-22.	2.6	20
25	Similarity-based birdcall retrieval from environmental audio. Ecological Informatics, 2015, 29, 66-76.	2.3	18
26	Managing and Analysing Big Audio Data for Environmental Monitoring. , 2013, , .		17
27	Towards an Acoustic Environmental Observatory. , 2008, , .		16
28	Frog call classification: a survey. Artificial Intelligence Review, 2018, 49, 375-391.	9.7	16
29	Assessing the value of acoustic indices to distinguish species and quantify activity: A case study using frogs. Freshwater Biology, 2020, 65, 142-152.	1.2	16
30	Acoustic classification of frog within-species and species-specific calls. Applied Acoustics, 2018, 131, 79-86.	1.7	15
31	Acoustic monitoring reveals year-round calling by invasive toads in tropical Australia. Bioacoustics, 2021, 30, 125-141.	0.7	15
32	Classifying and ranking audio clips to support bird species richness surveys. Ecological Informatics, 2016, 34, 108-116.	2.3	14
33	Assessing the potential of acoustic indices for protected area monitoring in the Serra do CipÃ³ National Park, Brazil. Ecological Indicators, 2021, 120, 106953.	2.6	13
34	THE PREDICTION OF BACTERIAL TRANSCRIPTION START SITES USING SVMS. International Journal of Neural Systems, 2006, 16, 363-370.	3.2	12
35	A Novel Representation of Bioacoustic Events for Content-Based Search in Field Audio Data. , 2013, , .		12
36	Acoustic detection and acoustic habitat characterisation of the critically endangered whiteâ€bellied heron (Ardea insignis) in Bhutan. Freshwater Biology, 2020, 65, 153-164.	1.2	12

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37	Acoustic classification of Australian anurans using syllable features. , 2015, , .		11
38	Data selection in frog chorusing recognition with acoustic indices. Ecological Informatics, 2020, 60, 101160.	2.3	11
39	Detection of Rain in Acoustic Recordings of the Environment. Lecture Notes in Computer Science, 2014, , 104-116.	1.0	10
40	Visual Fingerprints of the Acoustic Environment: The Use of Acoustic Indices to Characterise Natural Habitats. , 2015, , .		10
41	Application of image processing techniques for frog call classification. , 2015, , .		8
42	A novel frog chorusing recognition method with acoustic indices and machine learning. Future Generation Computer Systems, 2021, 125, 485-495.	4.9	8
43	Homoeopathyâ€"a biophysical point of view. The British Homoeopathic Journal, 1995, 84, 218-228.	0.6	7
44	The greatest shadow on Earth. Physics Education, 2014, 49, 88-94.	0.3	7
45	Decision support for the efficient annotation of bioacoustic events. Ecological Informatics, 2015, 25, 14-21.	2.3	7
46	Active learning for classifying longâ€duration audio recordings of the environment. Methods in Ecology and Evolution, 2018, 9, 1948-1958.	2.2	7
47	Computer-Assisted Sampling of Acoustic Data for More Efficient Determination of Bird Species Richness. , 2015, , .		6
48	An Investigation into Acoustic Analysis Methods for Endangered Species Monitoring: A Case of Monitoring the Critically Endangered White-Bellied Heron in Bhutan. , 2017, , .		6
49	Catching Toad Calls in the Cloud: Commodity Edge Computing for Flexible Analysis of Big Sound Data. , 2018, , .		6
50	Investigation of Acoustic and Visual Features for Frog Call Classification. Journal of Signal Processing Systems, 2020, 92, 23-36.	1.4	6
51	Acoustic region workflow for efficient comparison of soundscapes under different invasive mammals' management regimes. Ecological Informatics, 2022, 68, 101554.	2.3	6
52	Acoustic component detection for automatic species recognition in environmental monitoring. , 2011, , .		5
53	Compact Features for Birdcall Retrieval from Environmental Acoustic Recordings. , 2015, , .		5
54	Acoustic Feature Extraction Using Perceptual Wavelet Packet Decomposition for Frog Call Classification. , 2015, , .		5

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55	THE IN SILICO PREDICTION OF PROMOTERS IN BACTERIAL GENOMES. , 2007, , .		4
56	Image Processing and Classification Procedure for the Analysis of Australian Frog Vocalisations. , 2015, , .		4
57	Using non-negative matrix factorisation to facilitate efficient bird species richness surveys. Ecological Indicators, 2017, 80, 297-302.	2.6	4
58	Multiple-Instance Multiple-Label Learning for the Classification of Frog Calls with Acoustic Event Detection. Lecture Notes in Computer Science, 2016, , 222-230.	1.0	4
59	Generalised features for bird vocalisation retrieval in acoustic recordings. , 2015, , .		3
60	Detection of anuran calling activity in long field recordings for bio-acoustic monitoring. , 2015, , .		3
61	Archiving Nature's Heartbeat Using Smartphones. , 0, , 121-139.		3
62	Assistive classification for improving the efficiency of avian species richness surveys. , 2015, , .		2
63	Recognition of Frog Chorusing with Acoustic Indices and Machine Learning. , 2019, , .		2
64	Using a Novel Visualization Tool for Rapid Survey of Long-Duration Acoustic Recordings for Ecological Studies of Frog Chorusing. Frontiers in Ecology and Evolution, 2022, 9, .	1.1	2
65	DIABETIC AUTONOMIC NEUROPATHY DETECTION BY HEART-RATE VARIABILITY POWER-SPECTRAL ANALYSIS. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250039.	0.3	1
66	Birdcall Retrieval from Environmental Acoustic Recordings Using Image Processing. , 2015, , .		1
67	Feature Extraction Based on Bandpass Filtering for Frog Call Classification. Lecture Notes in Computer Science, 2016, , 231-239.	1.0	1
68	Animal Call Recognition with Acoustic Indices: Little Spotted Kiwi as a Case Study. , 2018, , .		1
69	Reconciling Folksonomic Tagging with Taxa for Bioacoustic Annotations. Lecture Notes in Computer Science, 2013, , 292-305.	1.0	1
70	Comparative Studies Made Simple in GPFlow. , 2008, , .		0
71	Social Network Analysis of an Acoustic Environment: The Use of Visualised Data to Characterise Natural Habitats. , 2019, , .		0
72	Comparative Studies Simplified in GPFlow. Lecture Notes in Computer Science, 2008, , 491-500.	1.0	0

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73	Archiving Natureâ€™s Heartbeat Using Smartphones. , 0, , 1896-1912.		0