Michael A Ainslie

List of Publications by Year
in descending order

98 papers	1,815 citations	361413 20 h-index	330143 37 g-index
127 all docs	127 docs citations	127 times ranked	1297 citing authors

#	Article	IF	Citations
1	A Terminology Standard for Underwater Acoustics and the Benefits of International Standardization. IEEE Journal of Oceanic Engineering, 2022, 47, 179-200.	3.8	16
2	International harmonization of procedures for measuring and analyzing of vessel underwater radiated noise. Marine Pollution Bulletin, 2022, 174, 113124.	5.0	10
3	Effects of a seismic survey on movement of free-ranging Atlantic cod. Current Biology, 2021, 31, 1555-1562.e4.	3.9	25
4	Modeling potential masking of echolocating sperm whales exposed to continuous 1â€“2â€‰kHz naval sonar. Journal of the Acoustical Society of America, 2021, 149, 2908-2925.	1.1	6
5	Temperature-driven seasonal and longer term changes in spatially averaged deep ocean ambient sound at frequencies 63â€“125â€‰Hz. Journal of the Acoustical Society of America, 2021, 149, 2531-2545.	1.1	10
6	Characterization of the acoustic output of single marine-seismic airguns and clusters: The Svein Vaage dataset. Journal of the Acoustical Society of America, 2021, 150, 3675-3692.	1.1	6
7	Application of kurtosis to underwater sound. Journal of the Acoustical Society of America, 2020, 148, 780-792.	1.1	20
8	Application of damped cylindrical spreading to assess range to injury threshold for fishes from impact pile driving. Journal of the Acoustical Society of America, 2020, 148, 108-121.	1.1	13
9	Modeling Acoustical Pressure and Particle Acceleration Close to Marine Seismic Airguns and Airgun Arrays. IEEE Journal of Oceanic Engineering, 2019, 44, 611-620.	3.8	5
10	Guest Editorial Special Issue on Verification and Validation of Air Gun Source Signature and Sound Propagation Models. IEEE Journal of Oceanic Engineering, 2019, 44, 551-559.	3.8	3
11	International Airgun Modeling Workshop: Validation of Source Signature and Sound Propagation Modelsâ€”Dublin (Ireland), JulyÂ16, 2016â€”Problem Description. IEEE Journal of Oceanic Engineering, 2019, 44, 565-574.	3.8	7
12	Guest Editorial: The International Airgun Modeling Workshop. IEEE Journal of Oceanic Engineering, 2019, 44, 560-564.	3.8	1
13	Populationâ€level consequences of seismic surveys on fishes: An interdisciplinary challenge. Fish and Fisheries, 2019, 20, 653-685.	5.3	38
14	Source specific sound mapping: Spatial, temporal and spectral distribution of sound in the Dutch North Sea. Environmental Pollution, 2019, 247, 1143-1157.	7.5	45
15	Predicting acoustic dose associated with marine mammal behavioural responses to sound as detected with fixed acoustic recorders and satellite tags. Journal of the Acoustical Society of America, 2019, 145, 1401-1416.	1.1	3
16	Analytical and Numerical Propagation Loss Predictions for Gradually Range-Dependent Isospeed Waveguides. IEEE Journal of Oceanic Engineering, 2019, 44, 1240-1252.	3.8	9
17	The contribution of shipping sound to the dutch underwater soundscape: Past, present, future. Proceedings of Meetings on Acoustics, 2019, , .	0.3	1
18	Behavioral Responses of Harbor Porpoises (Phocoena phocoena) to U.S. Navy 53C Sonar Signals in Noise. Aquatic Mammals, 2019, 45, 359-366.	0.7	0

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19	Modelling the broadband propagation of marine mammal echolocation clicks for click-based population density estimates. Journal of the Acoustical Society of America, 2018, 143, 954-967.	1.1	10
20	Pile driving acoustics made simple: Damped cylindrical spreading model. Journal of the Acoustical Society of America, 2018, 143, 310-317.	1.1	19
21	Behavioral Responses of Harbor Porpoises (Phocoena phocoena) to Sonar Playback Sequences of Sweeps and Tones (3.5-4.1 kHz). Aquatic Mammals, 2018, 44, 389-404.	0.7	0
22	Echo, Reverberation, and Echo-to-Reverberation Ratio for a Short Pulse in a Range-Dependent Pekeris Waveguide. IEEE Journal of Oceanic Engineering, 2017, 42, 362-372.	3.8	3
23	Temporary hearing threshold shift in a harbor porpoise (Phocoena phocoena) after exposure to multiple airgun sounds. Journal of the Acoustical Society of America, 2017, 142, 2430-2442.	1.1	22
24	Acoustical measurement, processing, reporting and terminology standards for underwater risk assessment. Proceedings of Meetings on Acoustics, 2017, , .	0.3	2
25	Verification of airgun sound field models for environmental impact assessment. Proceedings of Meetings on Acoustics, 2016, , .	0.3	13
26	The effect of sound speed profile on shallow water shipping sound maps. Journal of the Acoustical Society of America, 2016, 140, EL84-EL88.	1.1	11
27	Sonar equations for planetary exploration. Journal of the Acoustical Society of America, 2016, 140, 1400-1419.	1.1	6
28	Low frequency bottom reverberation in a Pekeris waveguide with Lambertâ€™s rule. Journal of Computational Acoustics, 2016, 24, 1650001.	1.0	6
29	COMPILEâ€"A Generic Benchmark Case for Predictions of Marine Pile-Driving Noise. IEEE Journal of Oceanic Engineering, 2016, 41, 1061-1071.	3.8	31
30	Sources of Underwater Sound and Their Characterization. Advances in Experimental Medicine and Biology, 2016, 875, 27-35.	1.6	8
31	Summary Report Panel 1: The Need for Protocols and Standards in Research on Underwater Noise Impacts on Marine Life. Advances in Experimental Medicine and Biology, 2016, 875, 1265-1271.	1.6	4
32	Controlled Sonar Exposure Experiments on Cetaceans in Norwegian Waters: Overview of the 3S-Project. Advances in Experimental Medicine and Biology, 2016, 875, 589-598.	1.6	0
33	Assessing the Effectiveness of Ramp-Up During Sonar Operations Using Exposure Models. Advances in Experimental Medicine and Biology, 2016, 875, 1197-1203.	1.6	1
34	The European Marine Strategy: Noise Monitoring in European Marine Waters from 2014. Advances in Experimental Medicine and Biology, 2016, 875, 205-215.	1.6	7
35	Mapping Underwater Sound in the Dutch Part of the North Sea. Advances in Experimental Medicine and Biology, 2016, 875, 1001-1006.	1.6	7
36	Offshore Dredger Sounds: Source Levels, Sound Maps, and Risk Assessment. Advances in Experimental Medicine and Biology, 2016, 875, 189-196.	1.6	1

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37	Potential Population Consequences of Active Sonar Disturbance in Atlantic Herring: Estimating the Maximum Risk. Advances in Experimental Medicine and Biology, 2016, 875, 217-222.	1.6	0
38	Development of a Model to Assess Masking Potential for Marine Mammals by the Use of Air Guns in Antarctic Waters. Advances in Experimental Medicine and Biology, 2016, 875, 1243-1249.	1.6	0
39	Potential for population-level disturbance by active sonar in herring. ICES Journal of Marine Science, 2015, 72, 558-567.	2.5	11
40	Definition and results of test cases for shipping sound maps. , 2015, , .		8
41	How effectively do horizontal and vertical response strategies of long-finned pilot whales reduce sound exposure from naval sonar?. Marine Environmental Research, 2015, 106, 68-81.	2.5	17
42	Assessing the Impact of Underwater Clearance of Unexploded Ordnance on Harbour Porpoises (Phocoena phocoena) in the Southern North Sea. Aquatic Mammals, 2015, 41, 503-523.	0.7	40
43	Assessing the environmental risks of marine seismic surveying: latest insights from sonar. , 2015, , .		0
44	Dose-response relationships for the onset of avoidance of sonar by free-ranging killer whales. Journal of the Acoustical Society of America, 2014, 135, 975-993.	1.1	78
45	Modeling Effectiveness of Gradual Increases in Source Level to Mitigate Effects of Sonar on Marine Mammals. Conservation Biology, 2014, 28, 119-128.	4.7	12
46	Improved Active Sonar Tactical Support by Through-the-Sensor Estimation of Acoustic Seabed Properties. IEEE Journal of Oceanic Engineering, 2014, 39, 755-768.	3.8	3
47	A depth-dependent formula for shallow water propagation. Journal of the Acoustical Society of America, 2014, 136, 573-582.	1.1	29
48	Changes in 63Hz third-octave band sound levels over 42months recorded at four deep-ocean observatories. Journal of Marine Systems, 2014, 130, 4-11.	2.1	21
49	Simulation of an Underwater Acoustic Communication Channel Characterized by Wind-Generated Surface Waves and Bubbles. IEEE Journal of Oceanic Engineering, 2013, 38, 642-654.	3.8	35
50	Validation of finite element computations for the quantitative prediction of underwater noise from impact pile driving. Journal of the Acoustical Society of America, 2013, 133, 72-81.	1.1	69
51	Echo and reverberation in a Pekeris waveguide by convolution and by the product rule. Journal of the Acoustical Society of America, 2013, 133, 1335-1346.	1.1	5
52	Neglect of bandwidth of Odontocetes echo location clicks biases propagation loss and single hydrophone population estimates. Journal of the Acoustical Society of America, 2013, 134, 3506-3512.	1.1	12
53	Insights into the calculation of metrics for transient sounds in shallow water. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
54	Optimal soft start and shutdown procedures or stationary or moving sound sources. Proceedings of Meetings on Acoustics, 2013, , .	0.3	3

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55	The Weston Memorial workshop: progress to date on low frequency active sonar scenarios. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
56	Impact of naval sonar signals on Atlantic herring (Clupea harengus) during summer feeding. ICES Journal of Marine Science, 2012, 69, 1078-1085.	2.5	12
57	Simulation of an underwater acoustic communication channel characterized by wind-generated surface waves and bubbles. Proceedings of Meetings on Acoustics, 2012, , .	0.3	6
58	What is the Source Level of Pile-Driving Noise in Water?. Advances in Experimental Medicine and Biology, 2012, 730, 445-448.	1.6	4
59	Bayesian reverberation inversion incorporating grain-size dependent regression relations as a priori information. Proceedings of Meetings on Acoustics, 2012, , .	0.3	1
60	Measuring ship acoustic signatures against mine threat. Proceedings of Meetings on Acoustics, 2012, , .	0.3	2
61	Potential causes of increasing low frequency ocean noise levels. Proceedings of Meetings on Acoustics, 2012, , .	0.3	2
62	Assessment of Cumulative Sound Exposure Levels for Marine Piling Events. Advances in Experimental Medicine and Biology, 2012, 730, 453-457.	1.6	0
63	Review of scattering and extinction cross-sections, damping factors, and resonance frequencies of a spherical gas bubble. Journal of the Acoustical Society of America, 2011, 130, 3184-3208.	1.1	180
64	The effect of wind-generated bubbles on sea-surface backscattering at 940 Hz. Journal of the Acoustical Society of America, 2011, 130, 3413-3420.	1.1	16
65	Detection of Blainvilleâ€™s beaked whales with towed arrays. Applied Acoustics, 2010, 71, 1027-1035.	3.3	19
66	Fixed time versus fixed range reverberation calculation: Analytical solution. Journal of the Acoustical Society of America, 2010, 128, 28-38.	1.1	10
67	Principles of Sonar Performance Modelling. , 2010, , .		209
68	Near resonant bubble acoustic cross-section corrections, including examples from oceanography, volcanology, and biomedical ultrasound. Journal of the Acoustical Society of America, 2009, 126, 2163-2175.	1.1	45
69	A Simple and Accurate Formula for the Absorption of Sound in Seawater. IEEE Journal of Oceanic Engineering, 2009, 34, 610-616.	3.8	23
70	The sonar equations revisited. , 2009, , 573-633.		0
71	Underwater acoustics. , 2009, , 191-249.		0
72	Sonar oceanography. , 2009, , 125-190.		0

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73	Propagation of underwater sound. , 2009, , 439-512.		1
74	Sources and scatterers of sound. , 2009, , 361-438.		0
75	The Dependence of Fusion Gain on Signal-Amplitude Distributions and Position Errors. IEEE Journal of Oceanic Engineering, 2008, 33, 266-277.	3.8	2
76	Observable parameters from multipath bottom reverberation in shallow water. Journal of the Acoustical Society of America, 2007, 121, 3363.	1.1	17
77	A Multivariate Correlation Analysis of High- Frequency Bottom Backscattering Strength Measurements With Geotechnical Parameters. IEEE Journal of Oceanic Engineering, 2007, 32, 640-650.	3.8	14
78	Mean grain size mapping with single-beam echo sounders. Journal of the Acoustical Society of America, 2006, 120, 2555-2566.	1.1	23
79	â€œTransmission lossâ€•and â€œpropagation lossâ€•in undersea acoustics. Journal of the Acoustical Society of America, 2005, 118, 603-604.	1.1	8
80	Effect of wind-generated bubbles on fixed range acoustic attenuation in shallow water at 1â€“4kHz. Journal of the Acoustical Society of America, 2005, 118, 3513-3523.	1.1	45
81	The sonar equation and the definitions of propagation loss. Journal of the Acoustical Society of America, 2004, 115, 131-134.	1.1	6
82	Caustic envelopes and cusp coordinates due to the reflection of a spherical wave from a layered sediment. Journal of the Acoustical Society of America, 2004, 115, 1449-1459.	1.1	5
83	Conditions for the excitation of interface waves in a thin unconsolidated sediment layer. Journal of Sound and Vibration, 2003, 268, 249-267.	3.9	7
84	Obituaries: David E. Westonâ€,â€¢â€,1929â€“2001. Journal of the Acoustical Society of America, 2001, 110, 647-647.	1.1	0
85	DEDUCTIVE MULTI-TONE INVERSION OF SEABED PARAMETERS. Journal of Computational Acoustics, 2000, 08, 271-284.	1.0	3
86	Comments on â€œUltrasonic interferences in polymer platesâ€•[J. Acoust. Soc. Am. 104, 1232â€“1241 (1998)]. Journal of the Acoustical Society of America, 1999, 106, 3034-3035.	1.1	0
87	Fast and explicit Wentzelâ€“Kramersâ€“Brillouin mode sum for the bottom-interacting field, including leaky modes. Journal of the Acoustical Society of America, 1998, 103, 1804-1812.	1.1	9
88	A simplified formula for viscous and chemical absorption in sea water. Journal of the Acoustical Society of America, 1998, 103, 1671-1672.	1.1	291
89	Benchmark solutions of plane wave bottom reflection loss. Journal of the Acoustical Society of America, 1998, 104, 3305-3312.	1.1	5
90	Broadband Geoacoustic Deduction. Journal of Computational Acoustics, 1998, 06, 45-59.	1.0	2

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91	Reflection and transmission coefficients for a layered fluid sediment overlying a uniform solid substrate. Journal of the Acoustical Society of America, 1996, 99, 893-902.	1.1	26
92	Energyâ€conserving reflection and transmission coefficients for a solidâ€"solid boundary. Journal of the Acoustical Society of America, 1995, 98, 2836-2840.	1.1	31
93	Planeâ€wave reflection and transmission coefficients for a threeâ€layered elastic medium. Journal of the Acoustical Society of America, 1995, 97, 954-961.	1.1	28
94	Experimental study of sound propagation in modelled shallow-water environments. Ultrasonics, 1994, 32, 141-147.	3.9	2
95	Caustics and beam displacements due to the reflection of spherical waves from a layered halfâ€space. Journal of the Acoustical Society of America, 1994, 96, 2506-2515.	1.1	3
96	Stationary phase evaluation of the bottom interacting field in isovelocity water. Journal of the Acoustical Society of America, 1993, 94, 1496-1509.	1.1	7
97	Numerical and laboratory modeling of propagation over troughs and ridges. Journal of the Acoustical Society of America, 1993, 94, 2287-2295.	1.1	9
98	The Influence of Sediment Rigidity on the Plane-Wave Reflection Coefficient. , 1991, , 447-454.		1