Bruce M Howe

List of Publications by Year
in descending order

103 papers	3,846 citations	159585 30 h-index	133252 59 g-index
146 all docs	146 docs citations	146 times ranked	2809 citing authors

#	Article	IF	Citations
1	SMART Subsea Cables for Observing the Earth and Ocean, Mitigating Environmental Hazards, and Supporting the Blue Economy. Frontiers in Earth Science, 2022, 9, .	1.8	13
2	The Deep Ocean Observing Strategy: Addressing Global Challenges in the Deep Sea Through Collaboration. Marine Technology Society Journal, 2022, 56, 50-66.	0.4	7
3	Underwater Time-Gated Standoff Raman Sensor for In Situ Chemical Sensing. Applied Spectroscopy, 2021, 75, 739-746.	2.2	4
4	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
5	Envisioning a Global Multi-Purpose Ocean Acoustic Network. Marine Technology Society Journal, 2021, 55, 78-79.	0.4	2
6	SMART Subsea Cables for Observing the Ocean and Earth. Marine Technology Society Journal, 2021, 55, 62-63.	0.4	0
7	SMART Cables Observing the Oceans and Earth. , 2021, , .		1
8	Real-Time Offshore Coastal Acoustic Tomography Enabled With Mirror-Transpond Functionality. IEEE Journal of Oceanic Engineering, 2020, 45, 645-655.	3.8	10
9	Automated matching of measured long-range acoustic arrivals from autonomous gliders with acoustic predictions. Journal of the Acoustical Society of America, 2020, 148, 2663-2663.	1.1	0
10	SMART Cables for Observing the Global Ocean: Science and Implementation. Frontiers in Marine Science, 2019, 6, .	2.5	73
11	Observing the Oceans Acoustically. Frontiers in Marine Science, 2019, 6, .	2.5	69
12	Global Observing Needs in the Deep Ocean. Frontiers in Marine Science, 2019, 6, .	2.5	166
13	Variation of Residual Current in the Seto Inland Sea Driven by Sea Level Difference Between the Bungo and Kii Channels. Journal of Geophysical Research: Oceans, 2018, 123, 2921-2933.	2.6	9
14	Scientific Monitoring And Reliable Telecommunications (SMART) Cable Systems: Integration of Sensors into Telecommunications Repeaters. , 2018, , .		3
15	A Seaglider-Integrated Digital Monitor for Bioacoustic Sensing. IEEE Journal of Oceanic Engineering, 2017, 42, 800-807.	3.8	13
16	Estimating Range-Dependent Evaporation Duct Height. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1113-1123.	1.3	9
17	Commercial Underwater Cable Systems Could Reduce Disaster Impact. Eos, 2017, , .	0.1	6
18	Deep Trouble! Common Problems for Ocean Observatories. Eos, 2017, , .	0.1	1

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19	Listening for Whales at the Station ALOHA Cabled Observatory. Modern Acoustics and Signal Processing, 2016, , 221-237.	0.8	1
20	Acoustic measurement of the net transport through the Seto Inland Sea. Acoustical Science and Technology, 2016, 37, 10-20.	0.5	15
21	Localization and Subsurface Position Error Estimation of Gliders Using Broadband Acoustic Signals at Long Range. IEEE Journal of Oceanic Engineering, 2016, 41, 501-508.	3.8	19
22	Submarine Cable Systems for Future Societal Needs. Eos, 2016, 97, .	0.1	1
23	Actively Controllable Switching for Tree Topology Seafloor Observation Networks. IEEE Journal of Oceanic Engineering, 2015, 40, 993-1002.	3.8	19
24	An Inductive Charging and Real-Time Communications System for Profiling Moorings. Journal of Atmospheric and Oceanic Technology, 2015, 32, 2243-2252.	1.3	5
25	The ALOHA cabled observatory. , 2015, , 439-463.		7
26	A Deep Cabled Observatory: Biology and Physics in the Abyss. Eos, 2014, 95, 429-430.	0.1	2
27	Diversity-based acoustic communication with a glider in deep water. Journal of the Acoustical Society of America, 2014, 135, 1023-1026.	1.1	59
28	Estimating uncertainty in subsurface glider position using transmissions from fixed acoustic tomography sources. Journal of the Acoustical Society of America, 2013, 134, 3260-3271.	1.1	29
29	Observations and transport theory analysis of low frequency, acoustic mode propagation in the Eastern North Pacific Ocean. Journal of the Acoustical Society of America, 2013, 134, 3144-3160.	1.1	11
30	Deep seafloor arrivals in long range ocean acoustic propagation. Journal of the Acoustical Society of America, 2013, 134, 3307-3317.	1.1	8
31	The North Pacific Acoustic Laboratory deep-water acoustic propagation experiments in the Philippine Sea. Journal of the Acoustical Society of America, 2013, 134, 3359-3375.	1.1	72
32	Reduced rank models for travel time estimation of low order mode pulses. Journal of the Acoustical Society of America, 2013, 134, 3332-3346.	1.1	4
33	Weakly dispersive modal pulse propagation in the North Pacific Ocean. Journal of the Acoustical Society of America, 2013, 134, 3386-3394.	1.1	7
34	A numerical model for ocean ultra-low frequency noise: Wave-generated acoustic-gravity and Rayleigh modes. Journal of the Acoustical Society of America, 2013, 134, 3242-3259.	1.1	26
35	Measuring the Kuroshio Current with ocean acoustic tomography. Journal of the Acoustical Society of America, 2013, 134, 3272-3281.	1.1	19
36	Towards subsurface positioning of gliders using fixed acoustic tomography sources. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0

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37	Modal analysis of the range evolution of broadband wavefields in the North Pacific Ocean: Low mode numbers. Journal of the Acoustical Society of America, 2012, 131, 4409-4427.	1.1	16
38	Bottom interacting sound at 50â€‰km range in a deep ocean environment. Journal of the Acoustical Society of America, 2012, 132, 2224-2231.	1.1	7
39	Passive and active acoustics using an autonomous wave glider. Journal of Field Robotics, 2012, 29, 911-923.	6.0	67
40	Moored observations of episodic abyssal flow and mixing at station ALOHA. Geophysical Research Letters, 2011, 38, .	4.0	11
41	ALOHA cabled observatory installation. , 2011, , .		17
42	Acoustic Seagliders in PhilSea10: Preliminary results. , 2011, , .		1
43	Long-time trends in ship traffic noise for four sites off the North American West Coast. Journal of the Acoustical Society of America, 2011, 129, 642-651.	1.1	118
44	Ship-Suspended Acoustical Transmitter Position Estimation and Motion Compensation. IEEE Journal of Oceanic Engineering, 2010, 35, 797-810.	3.8	2
45	A Smart Sensor Web for Ocean Observation: Fixed and Mobile Platforms, Integrated Acoustics, Satellites and Predictive Modeling. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 507-521.	4.9	40
46	Long-time trends in low-frequency traffic noise for four sites off the North American west coast.. Journal of the Acoustical Society of America, 2010, 127, 1783-1783.	1.1	3
47	Deep seafloor arrivals: An unexplained set of arrivals in long-range ocean acoustic propagation. Journal of the Acoustical Society of America, 2009, 126, 599-606.	1.1	14
48	Temporal and vertical scales of acoustic fluctuations for 75-Hz, broadband transmissions to 87-km range in the eastern North Pacific Ocean. Journal of the Acoustical Society of America, 2009, 126, 1069-1083.	1.1	5
49	The interference component of the acoustic field corresponding to the Long-Range Ocean Acoustic Propagation Experiment. Journal of the Acoustical Society of America, 2009, 125, 1919-1929.	1.1	6
50	A decade of acoustic thermometry in the North Pacific Ocean. Journal of Geophysical Research, 2009, 114, .	3.3	52
51	LOAPEX: The Long-Range Ocean Acoustic Propagation EXperiment. IEEE Journal of Oceanic Engineering, 2009, 34, 1-11.	3.8	45
52	Deep seafloor arrivals: Scattering or multi-path from ocean thermal structure?. Journal of the Acoustical Society of America, 2009, 126, 2159.	1.1	1
53	Sensor Network Infrastructure: Moorings, Mobile Platforms, and Integrated Acoustics. , 2007, , .		5
54	Optimization Based Load Management for the NEPTUNE Power System. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	2

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55	Including Whale Call Detection in Standard Ocean Measurements: Application of Acoustic Seagliders. Marine Technology Society Journal, 2007, 41, 53-57.	0.4	32
56	Fault Location for the NEPTUNE Power System. IEEE Transactions on Power Systems, 2007, 22, 522-531.	6.5	25
57	Barotropic Rossby wave radiation from a model Gulf Stream. Geophysical Research Letters, 2007, 34, .	4.0	4
58	Oceanographic Measurements. , 2007, , 1179-1217.		0
59	NEPTUNE Power System: Science Node Converter Startup Operations Design and Implementation Circuit. , 2006, , .		1
60	NEPTUNE power system: startup power supply for 10 kV to 400 V Dc-Dc converters. , 2006, , .		4
61	Acoustic Systems for Global Observatory Studies. , 2006, , .		1
62	Evaluation of a Long-Range Joint Acoustic Navigation / Thermometry System. , 2006, , .		13
63	Analysis of multipath acoustic field variability and coherence in the finale of broadband basin-scale transmissions in the North Pacific Ocean. Journal of the Acoustical Society of America, 2005, 117, 1538-1564.	1.1	25
64	Horizontal refraction of acoustic signals retrieved from North Pacific Acoustic Laboratory billboard array data. Journal of the Acoustical Society of America, 2005, 117, 1527-1537.	1.1	24
65	Transverse horizontal spatial coherence of deep arrivals at megameter ranges. Journal of the Acoustical Society of America, 2005, 117, 1511-1526.	1.1	12
66	The effect of bottom interaction on transmissions from the North Pacific Acoustic Laboratory Kauai source. Journal of the Acoustical Society of America, 2005, 117, 1624-1634.	1.1	16
67	Mode coherence at megameter ranges in the North Pacific Ocean. Journal of the Acoustical Society of America, 2005, 117, 1565-1581.	1.1	39
68	Statistics and vertical directionality of low-frequency ambient noise at the North Pacific Acoustics Laboratory site. Journal of the Acoustical Society of America, 2005, 117, 1643-1665.	1.1	22
69	North East Pacific Time-Integrated Undersea Networked Experiments (NEPTUNE): Cable Switching and Protection. IEEE Journal of Oceanic Engineering, 2005, 30, 232-240.	3.8	31
70	Topology Error Identification for the NEPTUNE Power System. IEEE Transactions on Power Systems, 2005, 20, 1224-1232.	6.5	13
71	Global Assimilation of Ionospheric Measurements (GAIM). Radio Science, 2004, 39, n/a-n/a.	1.6	309
72	Acoustic Sensing for Ocean Research. Marine Technology Society Journal, 2004, 38, 144-154.	0.4	18

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73	Ocean ambient sound: Comparing the 1960s with the 1990s for a receiver off the California coast. Acoustics Research Letters Online: ARLO, 2002, 3, 65-70.	0.7	325
74	Power system considerations for undersea observatories. IEEE Journal of Oceanic Engineering, 2002, 27, 267-274.	3.8	61
75	NEPTUNE: Real-Time Ocean and Earth Sciences at the Scale of a Tectonic Plate. Oceanography, 2000, 13, 71-79.	1.0	38
76	Ocean mixing studied near Hawaiian Ridge. Eos, 2000, 81, 545.	0.1	27
77	Comparisons of measured and predicted acoustic fluctuations for a 3250-km propagation experiment in the eastern North Pacific Ocean. Journal of the Acoustical Society of America, 1999, 105, 3202-3218.	1.1	98
78	A test of basin-scale acoustic thermometry using a large-aperture vertical array at 3250-km range in the eastern North Pacific Ocean. Journal of the Acoustical Society of America, 1999, 105, 3185-3201.	1.1	204
79	Low-frequency ambient sound in the North Pacific: Long time series observations. Journal of the Acoustical Society of America, 1999, 106, 3189-3200.	1.1	86
80	Multimegameter-range acoustic data obtained by bottom-mounted hydrophone arrays for measurement of ocean temperature. IEEE Journal of Oceanic Engineering, 1999, 24, 202-214.	3.8	65
81	A review of recent results on ocean acoustic wave propagation in random media: basin scales. IEEE Journal of Oceanic Engineering, 1999, 24, 138-155.	3.8	38
82	Tomography of the ionosphere: Four-dimensional simulations. Radio Science, 1998, 33, 109-128.	1.6	120
83	A TOPEX/POSEIDON global tidal model (TPXO.2) and barotropic tidal currents determined from long-range acoustic transmissions. Progress in Oceanography, 1997, 40, 337-367.	3.2	61
84	Barotropic and Baroclinic Tides in the Central North Pacific Ocean Determined from Long-Range Reciprocal Acoustic Transmissions. Journal of Physical Oceanography, 1995, 25, 631-647.	1.7	184
85	A comparison of measured and predicted broadband acoustic arrival patterns in travel timeâ€“depth coordinates at 1000â€km range. Journal of the Acoustical Society of America, 1994, 95, 3118-3128.	1.1	54
86	Nonperturbative ocean acoustic tomography inversion of 1000â€km pulse propagation in the Pacific Ocean. Journal of the Acoustical Society of America, 1994, 96, 3054-3063.	1.1	5
87	A status report on applying discrete inverse theory to ionospheric tomography. International Journal of Imaging Systems and Technology, 1994, 5, 97-105.	4.1	25
88	Barotropic currents and vorticity in the central North Pacific Ocean during summer 1987 determined from long-range reciprocal acoustic transmissions. Journal of Geophysical Research, 1994, 99, 3263.	3.3	30
89	On equations for the speed of sound in seawater. Journal of the Acoustical Society of America, 1993, 93, 255-275.	1.1	119
90	Variability of Heat Content in the Central North Pacific in Summer 1987 Determined from Long-Range Acoustic Transmissions. Journal of Physical Oceanography, 1993, 23, 2650-2666.	1.7	26

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91	Ocean acoustic tomography at 1000â€km range using wavefronts measured with a largeâ€aperture vertical array. Journal of Geophysical Research, 1993, 98, 16365-16377.	3.3	25
92	Measured waveâ€front fluctuations in 1000â€km pulse propagation in the Pacific Ocean. Journal of the Acoustical Society of America, 1992, 92, 939-955.	1.1	80
93	Application of stochastic inverse theory to ionospheric tomography. Radio Science, 1992, 27, 721-732.	1.6	148
94	Slice89: A Single Slice Tomography Experiment. , 1991, , 81-86.		6
95	Gyre-Scale Reciprocal Acoustic Transmissions. , 1991, , 119-134.		9
96	Deep-sea moorings in a tidal current. Deep-sea Research Part A, Oceanographic Research Papers, 1988, 35, 111-119.	1.5	6
97	Ocean acoustic tomography: Mesoscale velocity. Journal of Geophysical Research, 1987, 92, 3785-3805.	3.3	120
98	Multiple receivers in single vertical slice ocean acoustic tomography experiments. Journal of Geophysical Research, 1987, 92, 9479-9486.	3.3	12
99	High spatial resolution in vertical slice ocean acoustic tomography. Journal of Geophysical Research, 1987, 92, 11680-11692.	3.3	29
100	Acoustic measurements of internal wave rms displacement and rms horizontal current off Bermuda in late 1983. Journal of Geophysical Research, 1986, 91, 7721-7732.	3.3	17
101	Reciprocal acoustic transmissions: Instrumentation for Mesoscale monitoring of ocean currents. IEEE Journal of Oceanic Engineering, 1985, 10, 123-137.	3.8	58
102	Comparison of Profiles and Fluxes of Heat and Momentum Above and Below an Air-Water Interface. Journal of Heat Transfer, 1982, 104, 34-39.	2.1	24
103	A Numerical Study of SMART Cables Potential in Marine Hazard Early Warning for the Sumatra and Java Regions. Pure and Applied Geophysics, 0, , 1.	1.9	3