

Bruce M Howe

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

3,846
citations

159525

30
h-index

133188

59
g-index

146
all docs

146
docs citations

146
times ranked

2809
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Ocean ambient sound: Comparing the 1960s with the 1990s for a receiver off the California coast. <i>Acoustics Research Letters Online: ARLO</i> , 2002, 3, 65-70. | 0.7 | 325 |
| 2 | Global Assimilation of Ionospheric Measurements (GAIM). <i>Radio Science</i> , 2004, 39, n/a-n/a. | 0.8 | 309 |
| 3 | A test of basin-scale acoustic thermometry using a large-aperture vertical array at 3250-km range in the eastern North Pacific Ocean. <i>Journal of the Acoustical Society of America</i> , 1999, 105, 3185-3201. | 0.5 | 204 |
| 4 | Barotropic and Baroclinic Tides in the Central North Pacific Ocean Determined from Long-Range Reciprocal Acoustic Transmissions. <i>Journal of Physical Oceanography</i> , 1995, 25, 631-647. | 0.7 | 184 |
| 5 | Global Observing Needs in the Deep Ocean. <i>Frontiers in Marine Science</i> , 2019, 6, . | 1.2 | 166 |
| 6 | Application of stochastic inverse theory to ionospheric tomography. <i>Radio Science</i> , 1992, 27, 721-732. | 0.8 | 148 |
| 7 | Ocean acoustic tomography: Mesoscale velocity. <i>Journal of Geophysical Research</i> , 1987, 92, 3785-3805. | 3.3 | 120 |
| 8 | Tomography of the ionosphere: Four-dimensional simulations. <i>Radio Science</i> , 1998, 33, 109-128. | 0.8 | 120 |
| 9 | On equations for the speed of sound in seawater. <i>Journal of the Acoustical Society of America</i> , 1993, 93, 255-275. | 0.5 | 119 |
| 10 | Long-time trends in ship traffic noise for four sites off the North American West Coast. <i>Journal of the Acoustical Society of America</i> , 2011, 129, 642-651. | 0.5 | 118 |
| 11 | Comparisons of measured and predicted acoustic fluctuations for a 3250-km propagation experiment in the eastern North Pacific Ocean. <i>Journal of the Acoustical Society of America</i> , 1999, 105, 3202-3218. | 0.5 | 98 |
| 12 | Low-frequency ambient sound in the North Pacific: Long time series observations. <i>Journal of the Acoustical Society of America</i> , 1999, 106, 3189-3200. | 0.5 | 86 |
| 13 | Measured wavefront fluctuations in 1000-km pulse propagation in the Pacific Ocean. <i>Journal of the Acoustical Society of America</i> , 1992, 92, 939-955. | 0.5 | 80 |
| 14 | SMART Cables for Observing the Global Ocean: Science and Implementation. <i>Frontiers in Marine Science</i> , 2019, 6, . | 1.2 | 73 |
| 15 | The North Pacific Acoustic Laboratory deep-water acoustic propagation experiments in the Philippine Sea. <i>Journal of the Acoustical Society of America</i> , 2013, 134, 3359-3375. | 0.5 | 72 |
| 16 | Observing the Oceans Acoustically. <i>Frontiers in Marine Science</i> , 2019, 6, . | 1.2 | 69 |
| 17 | Passive and active acoustics using an autonomous wave glider. <i>Journal of Field Robotics</i> , 2012, 29, 911-923. | 3.2 | 67 |
| 18 | Multimegahertz-range acoustic data obtained by bottom-mounted hydrophone arrays for measurement of ocean temperature. <i>IEEE Journal of Oceanic Engineering</i> , 1999, 24, 202-214. | 2.1 | 65 |

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|----|---|-----|-----------|
| 19 | A TOPEX/POSEIDON global tidal model (TPXO.2) and barotropic tidal currents determined from long-range acoustic transmissions. <i>Progress in Oceanography</i> , 1997, 40, 337-367. | 1.5 | 61 |
| 20 | Power system considerations for undersea observatories. <i>IEEE Journal of Oceanic Engineering</i> , 2002, 27, 267-274. | 2.1 | 61 |
| 21 | Diversity-based acoustic communication with a glider in deep water. <i>Journal of the Acoustical Society of America</i> , 2014, 135, 1023-1026. | 0.5 | 59 |
| 22 | Reciprocal acoustic transmissions: Instrumentation for Mesoscale monitoring of ocean currents. <i>IEEE Journal of Oceanic Engineering</i> , 1985, 10, 123-137. | 2.1 | 58 |
| 23 | A comparison of measured and predicted broadband acoustic arrival patterns in travel time–depth coordinates at 1000–km range. <i>Journal of the Acoustical Society of America</i> , 1994, 95, 3118-3128. | 0.5 | 54 |
| 24 | A decade of acoustic thermometry in the North Pacific Ocean. <i>Journal of Geophysical Research</i> , 2009, 114, . | 3.3 | 52 |
| 25 | LOAPEX: The Long-Range Ocean Acoustic Propagation EXperiment. <i>IEEE Journal of Oceanic Engineering</i> , 2009, 34, 1-11. | 2.1 | 45 |
| 26 | A Smart Sensor Web for Ocean Observation: Fixed and Mobile Platforms, Integrated Acoustics, Satellites and Predictive Modeling. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2010, 3, 507-521. | 2.3 | 40 |
| 27 | Mode coherence at megameter ranges in the North Pacific Ocean. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1565-1581. | 0.5 | 39 |
| 28 | A review of recent results on ocean acoustic wave propagation in random media: basin scales. <i>IEEE Journal of Oceanic Engineering</i> , 1999, 24, 138-155. | 2.1 | 38 |
| 29 | NEPTUNE: Real-Time Ocean and Earth Sciences at the Scale of a Tectonic Plate. <i>Oceanography</i> , 2000, 13, 71-79. | 0.5 | 38 |
| 30 | Including Whale Call Detection in Standard Ocean Measurements: Application of Acoustic Seagliders. <i>Marine Technology Society Journal</i> , 2007, 41, 53-57. | 0.3 | 32 |
| 31 | North East Pacific Time-Integrated Undersea Networked Experiments (NEPTUNE): Cable Switching and Protection. <i>IEEE Journal of Oceanic Engineering</i> , 2005, 30, 232-240. | 2.1 | 31 |
| 32 | Barotropic currents and vorticity in the central North Pacific Ocean during summer 1987 determined from long-range reciprocal acoustic transmissions. <i>Journal of Geophysical Research</i> , 1994, 99, 3263. | 3.3 | 30 |
| 33 | High spatial resolution in vertical slice ocean acoustic tomography. <i>Journal of Geophysical Research</i> , 1987, 92, 11680-11692. | 3.3 | 29 |
| 34 | Estimating uncertainty in subsurface glider position using transmissions from fixed acoustic tomography sources. <i>Journal of the Acoustical Society of America</i> , 2013, 134, 3260-3271. | 0.5 | 29 |
| 35 | Ocean mixing studied near Hawaiian Ridge. <i>Eos</i> , 2000, 81, 545. | 0.1 | 27 |
| 36 | Variability of Heat Content in the Central North Pacific in Summer 1987 Determined from Long-Range Acoustic Transmissions. <i>Journal of Physical Oceanography</i> , 1993, 23, 2650-2666. | 0.7 | 26 |

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|----|---|-----|-----------|
| 37 | A numerical model for ocean ultra-low frequency noise: Wave-generated acoustic-gravity and Rayleigh modes. <i>Journal of the Acoustical Society of America</i> , 2013, 134, 3242-3259. | 0.5 | 26 |
| 38 | Ocean acoustic tomography at 1000km range using wavefronts measured with a large aperture vertical array. <i>Journal of Geophysical Research</i> , 1993, 98, 16365-16377. | 3.3 | 25 |
| 39 | A status report on applying discrete inverse theory to ionospheric tomography. <i>International Journal of Imaging Systems and Technology</i> , 1994, 5, 97-105. | 2.7 | 25 |
| 40 | Analysis of multipath acoustic field variability and coherence in the finale of broadband basin-scale transmissions in the North Pacific Ocean. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1538-1564. | 0.5 | 25 |
| 41 | Fault Location for the NEPTUNE Power System. <i>IEEE Transactions on Power Systems</i> , 2007, 22, 522-531. | 4.6 | 25 |
| 42 | Comparison of Profiles and Fluxes of Heat and Momentum Above and Below an Air-Water Interface. <i>Journal of Heat Transfer</i> , 1982, 104, 34-39. | 1.2 | 24 |
| 43 | Horizontal refraction of acoustic signals retrieved from North Pacific Acoustic Laboratory billboard array data. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1527-1537. | 0.5 | 24 |
| 44 | Statistics and vertical directionality of low-frequency ambient noise at the North Pacific Acoustics Laboratory site. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1643-1665. | 0.5 | 22 |
| 45 | Measuring the Kuroshio Current with ocean acoustic tomography. <i>Journal of the Acoustical Society of America</i> , 2013, 134, 3272-3281. | 0.5 | 19 |
| 46 | Actively Controllable Switching for Tree Topology Seafloor Observation Networks. <i>IEEE Journal of Oceanic Engineering</i> , 2015, 40, 993-1002. | 2.1 | 19 |
| 47 | Localization and Subsurface Position Error Estimation of Gliders Using Broadband Acoustic Signals at Long Range. <i>IEEE Journal of Oceanic Engineering</i> , 2016, 41, 501-508. | 2.1 | 19 |
| 48 | Acoustic Sensing for Ocean Research. <i>Marine Technology Society Journal</i> , 2004, 38, 144-154. | 0.3 | 18 |
| 49 | Acoustic measurements of internal wave rms displacement and rms horizontal current off Bermuda in late 1983. <i>Journal of Geophysical Research</i> , 1986, 91, 7721-7732. | 3.3 | 17 |
| 50 | ALOHA cabled observatory installation. , 2011, , . | | 17 |
| 51 | The effect of bottom interaction on transmissions from the North Pacific Acoustic Laboratory Kauai source. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1624-1634. | 0.5 | 16 |
| 52 | Modal analysis of the range evolution of broadband wavefields in the North Pacific Ocean: Low mode numbers. <i>Journal of the Acoustical Society of America</i> , 2012, 131, 4409-4427. | 0.5 | 16 |
| 53 | Acoustic measurement of the net transport through the Seto Inland Sea. <i>Acoustical Science and Technology</i> , 2016, 37, 10-20. | 0.3 | 15 |
| 54 | Deep seafloor arrivals: An unexplained set of arrivals in long-range ocean acoustic propagation. <i>Journal of the Acoustical Society of America</i> , 2009, 126, 599-606. | 0.5 | 14 |

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| 55 | Topology Error Identification for the NEPTUNE Power System. IEEE Transactions on Power Systems, 2005, 20, 1224-1232. | 4.6 | 13 |
| 56 | Evaluation of a Long-Range Joint Acoustic Navigation / Thermometry System. , 2006, , . | | 13 |
| 57 | A Seaglider-Integrated Digital Monitor for Bioacoustic Sensing. IEEE Journal of Oceanic Engineering, 2017, 42, 800-807. | 2.1 | 13 |
| 58 | SMART Subsea Cables for Observing the Earth and Ocean, Mitigating Environmental Hazards, and Supporting the Blue Economy. Frontiers in Earth Science, 2022, 9, . | 0.8 | 13 |
| 59 | Multiple receivers in single vertical slice ocean acoustic tomography experiments. Journal of Geophysical Research, 1987, 92, 9479-9486. | 3.3 | 12 |
| 60 | Transverse horizontal spatial coherence of deep arrivals at megameter ranges. Journal of the Acoustical Society of America, 2005, 117, 1511-1526. | 0.5 | 12 |
| 61 | Moored observations of episodic abyssal flow and mixing at station ALOHA. Geophysical Research Letters, 2011, 38, . | 1.5 | 11 |
| 62 | 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. | 0.5 | 11 |
| 63 | Real-Time Offshore Coastal Acoustic Tomography Enabled With Mirror-Transpond Functionality. IEEE Journal of Oceanic Engineering, 2020, 45, 645-655. | 2.1 | 10 |
| 64 | 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. | 0.5 | 10 |
| 65 | Estimating Range-Dependent Evaporation Duct Height. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1113-1123. | 0.5 | 9 |
| 66 | 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. | 1.0 | 9 |
| 67 | Cyre-Scale Reciprocal Acoustic Transmissions. , 1991, , 119-134. | | 9 |
| 68 | Deep seafloor arrivals in long range ocean acoustic propagation. Journal of the Acoustical Society of America, 2013, 134, 3307-3317. | 0.5 | 8 |
| 69 | Bottom interacting sound at 50â€‰km range in a deep ocean environment. Journal of the Acoustical Society of America, 2012, 132, 2224-2231. | 0.5 | 7 |
| 70 | Weakly dispersive modal pulse propagation in the North Pacific Ocean. Journal of the Acoustical Society of America, 2013, 134, 3386-3394. | 0.5 | 7 |
| 71 | The ALOHA cabled observatory. , 2015, , 439-463. | | 7 |
| 72 | The Deep Ocean Observing Strategy: Addressing Global Challenges in the Deep Sea Through Collaboration. Marine Technology Society Journal, 2022, 56, 50-66. | 0.3 | 7 |

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|----|---|-----|-----------|
| 73 | Deep-sea moorings in a tidal current. Deep-sea Research Part A, Oceanographic Research Papers, 1988, 35, 111-119. | 1.6 | 6 |
| 74 | 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. | 0.5 | 6 |
| 75 | Slice89: A Single Slice Tomography Experiment. , 1991, , 81-86. | | 6 |
| 76 | Commercial Underwater Cable Systems Could Reduce Disaster Impact. Eos, 2017, , . | 0.1 | 6 |
| 77 | Nonperturbative ocean acoustic tomography inversion of 1000â€m pulse propagation in the Pacific Ocean. Journal of the Acoustical Society of America, 1994, 96, 3054-3063. | 0.5 | 5 |
| 78 | Sensor Network Infrastructure: Moorings, Mobile Platforms, and Integrated Acoustics. , 2007, , . | | 5 |
| 79 | 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. | 0.5 | 5 |
| 80 | An Inductive Charging and Real-Time Communications System for Profiling Moorings. Journal of Atmospheric and Oceanic Technology, 2015, 32, 2243-2252. | 0.5 | 5 |
| 81 | NEPTUNE power system: startup power supply for 10 kV to 400 V Dc-Dc converters. , 2006, , . | | 4 |
| 82 | Barotropic Rossby wave radiation from a model Gulf Stream. Geophysical Research Letters, 2007, 34, . | 1.5 | 4 |
| 83 | Reduced rank models for travel time estimation of low order mode pulses. Journal of the Acoustical Society of America, 2013, 134, 3332-3346. | 0.5 | 4 |
| 84 | Underwater Time-Gated Standoff Raman Sensor for In Situ Chemical Sensing. Applied Spectroscopy, 2021, 75, 739-746. | 1.2 | 4 |
| 85 | Scientific Monitoring And Reliable Telecommunications (SMART) Cable Systems: Integration of Sensors into Telecommunications Repeaters. , 2018, , . | | 3 |
| 86 | 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. | 0.5 | 3 |
| 87 | A Numerical Study of SMART Cables Potential in Marine Hazard Early Warning for the Sumatra and Java Regions. Pure and Applied Geophysics, 0, , 1. | 0.8 | 3 |
| 88 | Optimization Based Load Management for the NEPTUNE Power System. IEEE Power Engineering Society General Meeting, 2007, , . | 0.0 | 2 |
| 89 | Ship-Suspended Acoustical Transmitter Position Estimation and Motion Compensation. IEEE Journal of Oceanic Engineering, 2010, 35, 797-810. | 2.1 | 2 |
| 90 | A Deep Cabled Observatory: Biology and Physics in the Abyss. Eos, 2014, 95, 429-430. | 0.1 | 2 |

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| 91 | Envisioning a Global Multi-Purpose Ocean Acoustic Network. Marine Technology Society Journal, 2021, 55, 78-79. | 0.3 | 2 |
| 92 | NEPTUNE Power System: Science Node Converter Startup Operations Design and Implementation Circuit. , 2006, , . | | 1 |
| 93 | Acoustic Systems for Global Observatory Studies. , 2006, , . | | 1 |
| 94 | Acoustic Seagliders in PhilSea10: Preliminary results. , 2011, , . | | 1 |
| 95 | Listening for Whales at the Station ALOHA Cabled Observatory. Modern Acoustics and Signal Processing, 2016, , 221-237. | 0.8 | 1 |
| 96 | Submarine Cable Systems for Future Societal Needs. Eos, 2016, 97, . | 0.1 | 1 |
| 97 | Deep seafloor arrivals: Scattering or multi-path from ocean thermal structure?. Journal of the Acoustical Society of America, 2009, 126, 2159. | 0.5 | 1 |
| 98 | Deep Trouble! Common Problems for Ocean Observatories. Eos, 2017, , . | 0.1 | 1 |
| 99 | SMART Cables Observing the Oceans and Earth. , 2021, , . | | 1 |
| 100 | Towards subsurface positioning of gliders using fixed acoustic tomography sources. Proceedings of Meetings on Acoustics, 2013, , . | 0.3 | 0 |
| 101 | SMART Subsea Cables for Observing the Ocean and Earth. Marine Technology Society Journal, 2021, 55, 62-63. | 0.3 | 0 |
| 102 | Oceanographic Measurements. , 2007, , 1179-1217. | | 0 |
| 103 | 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. | 0.5 | 0 |