

# Preston S Wilson

## List of Publications by Year in descending order

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94  
papers

1,093  
citations

471061

17  
h-index

476904

29  
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104  
all docs

104  
docs citations

104  
times ranked

788  
citing authors

#	ARTICLE	IF	CITATIONS
1	Transdimensional Inversion on the New England Mud Patch Using High-Order Modes. IEEE Journal of Oceanic Engineering, 2022, 47, 607-619.	2.1	9
2	Statistical Inference of Sound Speed and Attenuation Dispersion of a Fine-Grained Marine Sediment. IEEE Journal of Oceanic Engineering, 2022, 47, 553-564.	2.1	6
3	Transdimensional Geoacoustic Inversion Using Prior Information on Range-Dependent Seabed Layering. IEEE Journal of Oceanic Engineering, 2022, 47, 594-606.	2.1	5
4	Passive Acoustic Glider for Seabed Characterization at the New England Mud Patch. IEEE Journal of Oceanic Engineering, 2022, 47, 541-552.	2.1	9
5	Estimation of Frequency-Wavenumber Diagrams Using a Physics-Based Grid-Free Compressed Sensing Method. IEEE Journal of Oceanic Engineering, 2022, 47, 565-577.	2.1	0
6	Seabed Characterization Experiment: Analysis of Broadband Data. IEEE Journal of Oceanic Engineering, 2022, 47, 531-540.	2.1	0
7	Design and characterization of a three-dimensional anisotropic additively manufactured pentamode material. Journal of the Acoustical Society of America, 2022, 151, 168-179.	0.5	15
8	Acoustic scattering from a toroidal bubble. JASA Express Letters, 2022, 2, 036001.	0.5	2
9	Head-related transfer function measurements in a compartment fire. Journal of the Acoustical Society of America, 2022, 151, 1730-1740.	0.5	0
10	Model-data comparison of sound propagation in a glacierized fjord with a simulated brash ice surface. Journal of the Acoustical Society of America, 2022, 151, 2367-2377.	0.5	2
11	Maximum entropy inference of seabed properties using waveguide invariant features from surface ships. Journal of the Acoustical Society of America, 2022, 151, 2885-2896.	0.5	4
12	Guest Editorial: Continued Exploration of Fine-Grained Sediments from SBCEX2017. IEEE Journal of Oceanic Engineering, 2022, 47, 497-502.	2.1	1
13	Characterization of an underwater metamaterial made of aluminum honeycomb panels at low frequencies. Journal of the Acoustical Society of America, 2021, 149, 1829-1837.	0.5	5
14	Influence of seabed on very low frequency sound recorded during passage of merchant ships on the New England shelf. Journal of the Acoustical Society of America, 2021, 149, 3294-3300.	0.5	4
15	Covariation among multimodal components in the courtship display of the t <sup>h</sup> ngara frog. Journal of Experimental Biology, 2021, 224, .	0.8	6
16	Variability of the low-frequency acoustic response along leaf blades and between species of seagrass (Posidonia oceanica and Cymodocea nodosa). JASA Express Letters, 2021, 1, 080801.	0.5	1
17	Short-Range Signatures of Explosive Sounds in Shallow Water Used for Seabed Characterization. IEEE Journal of Oceanic Engineering, 2020, 45, 14-25.	2.1	13
18	Broadband Waveform Geoacoustic Inversions With Absolute Travel Time. IEEE Journal of Oceanic Engineering, 2020, 45, 174-188.	2.1	20

#	ARTICLE	IF	CITATIONS
19	<i>In Situ</i> Measurements of Compressional Wave Speed During Gravity Coring Operations in the New England Mud Patch. IEEE Journal of Oceanic Engineering, 2020, 45, 26-38.	2.1	34
20	Estimates of Low-Frequency Sound Speed and Attenuation in a Surface Mud Layer Using Low-Order Modes. IEEE Journal of Oceanic Engineering, 2020, 45, 201-211.	2.1	15
21	Experimental observations of a rupture induced underwater sound source. Journal of the Acoustical Society of America, 2020, 148, EL370-EL374.	0.5	3
22	Arc-Phase Spark Plug Energy Deposition Characteristics Measured Using a Spark Plug Calorimeter Based on Differential Pressure Measurement. Energies, 2020, 13, 3550.	1.6	8
23	Change in acoustic impulse response of a room due to a fire. Journal of the Acoustical Society of America, 2020, 147, EL546-EL551.	0.5	6
24	Application of acoustical remote sensing techniques for ecosystem monitoring of a seagrass meadow. Journal of the Acoustical Society of America, 2020, 147, 2002-2019.	0.5	7
25	Guest Editorial An Overview of the Seabed Characterization Experiment. IEEE Journal of Oceanic Engineering, 2020, 45, 1-13.	2.1	50
26	Impacts of simulated infaunal activities on acoustic wave propagation in marine sediments. Journal of the Acoustical Society of America, 2020, 147, 812-823.	0.5	6
27	Maximum Entropy Derived Statistics of Sound-Speed Structure in a Fine-Grained Sediment Inferred From Sparse Broadband Acoustic Measurements on the New England Continental Shelf. IEEE Journal of Oceanic Engineering, 2020, 45, 161-173.	2.1	30
28	Inferring elastic properties of seagrass tissue from its acoustic response using finite element analysis. Proceedings of Meetings on Acoustics, 2020, , .	0.3	1
29	Investigation of a rupture-induced underwater sound source. Proceedings of Meetings on Acoustics, 2020, , .	0.3	1
30	Broadband sound propagation in a seagrass meadow throughout a diurnal cycle. Journal of the Acoustical Society of America, 2019, 146, EL335-EL341.	0.5	6
31	An illustration of the effect of neglecting poroelastic physics of water-saturated glass beads in a laboratory phase speed inference process. Journal of the Acoustical Society of America, 2019, 146, 1326-1334.	0.5	3
32	Laboratory measurements and simulations of reflections from a water/clay interface during the diffusion of salt. Journal of the Acoustical Society of America, 2019, 146, 1384-1393.	0.5	4
33	Integration and Testing of a Low-Profile Hydrophone Array with REMUS 100 AUV for Seabed Characterization and Marine Mammal Detection Application. , 2019, , .		1
34	Toward the Ultrasonic Sensing of Organic Carbon in Seagrass-Bearing Sediments. Geophysical Research Letters, 2019, 46, 5968-5977.	1.5	4
35	Stratigraphic analysis of a sediment pond within the New England Mud Patch: New constraints from high-resolution chirp acoustic reflection data. Marine Geology, 2019, 412, 81-94.	0.9	37
36	Model-data comparison of sound propagation in a glacierized fjord with a brash ice top surface. Proceedings of Meetings on Acoustics, 2019, , .	0.3	3

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37	Predicting pressure sensitivity through ontogeny in larval red drum ( <i>Sciaenops ocellatus</i> ). Proceedings of Meetings on Acoustics, 2019, , .	0.3	5
38	Ontogenetic change in predicted acoustic pressure sensitivity in larval red drum ( <i>Sciaenops ocellatus</i> ). Proceedings of Meetings on Acoustics, 2019, , .	0.8	14
39	Modelling the production of complex calls in the tãngara frog ( <i>Physalaemus pustulosus</i> ). Bioacoustics, 2019, 28, 345-363.	0.7	6
40	Acoustic communication in the Bocon toadfish ( <i>Amphichthys cryptocentrus</i> ). Environmental Biology of Fishes, 2018, 101, 1175-1193.	0.4	7
41	The Airy phase of explosive sounds in shallow water. Journal of the Acoustical Society of America, 2018, 143, EL199-EL205.	0.5	26
42	Measurements and modeling of acoustic propagation in a seagrass meadow. Proceedings of Meetings on Acoustics, 2018, , .	0.3	1
43	Acoustic detection of electrostatic suppression of the Leidenfrost state. Physical Review E, 2018, 98, 013103.	0.8	8
44	Acoustics of biologically active marine sediments. Proceedings of Meetings on Acoustics, 2018, , .	0.3	0
45	Using one-dimensional waveguide resonators to measure phase velocities in bubbly liquids. Journal of the Acoustical Society of America, 2017, 141, 2832-2839.	0.5	3
46	Sound speed and attenuation measurements within a seagrass meadow from the water column into the seabed. Journal of the Acoustical Society of America, 2017, 141, EL402-EL406.	0.5	12
47	Broadband focusing of underwater sound using a transparent pentamode lens. Journal of the Acoustical Society of America, 2017, 141, 4408-4417.	0.5	85
48	Experimental evidence of Willis coupling in a one-dimensional effective material element. Nature Communications, 2017, 8, 15625.	5.8	103
49	Impulse scattering from clouds of acoustically coupled gas bubbles in fluids. Journal of the Acoustical Society of America, 2017, 141, 2191-2203.	0.5	0
50	Sound speed and attenuation in seagrass from the water column into the seabed. Proceedings of Meetings on Acoustics, 2017, , .	0.3	1
51	Radiation damping of, and scattering from, an arbitrarily shaped bubble. Journal of the Acoustical Society of America, 2017, 142, 160-166.	0.5	12
52	Measurement of low-frequency tissue response of the seagrass <i>Posidonia oceanica</i> . Journal of the Acoustical Society of America, 2017, 141, EL433-EL438.	0.5	4
53	Low frequency acoustic properties of <i>Posidonia oceanica</i> seagrass leaf blades. Journal of the Acoustical Society of America, 2017, 141, EL555-EL560.	0.5	6
54	Comparative review of low-frequency acoustic properties of Western Mediterranean and Gulf of Mexico seagrass species. , 2017, , .		0

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55	Physical and acoustical properties of marine sediments containing a wide particle size distribution. Proceedings of Meetings on Acoustics, 2017, , .	0.3	1
56	Comparison between infauna abundance and seabed geoacoustic properties. Proceedings of Meetings on Acoustics, 2017, , .	0.3	0
57	Core and resonance logger (CARL) measurements of fine-grained sediments containing infauna. Proceedings of Meetings on Acoustics, 2017, , .	0.3	2
58	Development of a system for in situ measurements of geoacoustic properties during sediment coring. Proceedings of Meetings on Acoustics, 2016, , .	0.3	3
59	<i>In situ</i> measurements of sediment acoustic properties in Currituck Sound and comparison to models. Journal of the Acoustical Society of America, 2016, 140, 3593-3606.	0.5	17
60	Shipboard low frequency sound speed measurements in the New England Mud Patch (NEMP). Proceedings of Meetings on Acoustics, 2016, , .	0.3	0
61	Improved object detection sonar using nonlinear acoustical effects in bubbly media. Proceedings of Meetings on Acoustics, 2016, , .	0.3	1
62	Laboratory measurements of reflection coefficient from a water-mud interface after varying bottom water salinity. Proceedings of Meetings on Acoustics, 2016, , .	0.3	0
63	Passive Underwater Noise Attenuation Using Large Encapsulated Air Bubbles. Advances in Experimental Medicine and Biology, 2016, 875, 607-614.	0.8	0
64	Subwavelength acoustic metamaterial panels for underwater noise isolation. Journal of the Acoustical Society of America, 2015, 138, EL254-EL257.	0.5	10
65	Exploitation of nonlinear acoustical effects or air bubbles in water for a bubble/target discriminating sonar. Proceedings of Meetings on Acoustics, 2015, , .	0.3	0
66	The effects of environmental variability and spatial sampling on the three-dimensional inversion problem. Journal of the Acoustical Society of America, 2014, 135, 3295-3304.	0.5	4
67	An impulsive source with variable output and stable bandwidth for underwater acoustic experiments. Journal of the Acoustical Society of America, 2014, 136, EL8-EL12.	0.5	9
68	Attenuation of standing waves in a large water tank using arrays of large tethered encapsulated bubbles. Journal of the Acoustical Society of America, 2014, 135, 1700-1708.	0.5	12
69	Coffee roasting acoustics. Journal of the Acoustical Society of America, 2014, 135, EL265-EL269.	0.5	13
70	Crossmodal Comparisons of Signal Components Allow for Relative-Distance Assessment. Current Biology, 2014, 24, 1751-1755.	1.8	35
71	Protection of a receiving area from underwater pile driving noise using large encapsulated air bubbles. , 2013, , .		1
72	Assessing the low frequency acoustic characteristics of <i>Macrocystis pyrifera</i> , <i>Egrecia menziessi</i> , and <i>Laminaria solidungula</i> . Journal of the Acoustical Society of America, 2013, 133, 3819-3826.	0.5	6

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73	Attenuation of underwater sound through stationary arrays of large tethered encapsulated bubbles. , 2013, , .		0
74	Multi-frequency modes in dispersive media. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
75	Attenuation of sound in water through collections of very large bubbles with elastic shells. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
76	Investigation of low-frequency acoustic tissue properties of seagrass. Proceedings of Meetings on Acoustics, 2013, , .	0.3	7
77	A towable combustive sound source for ocean surveys and ocean acoustics experiments. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
78	Mitigation of low-frequency underwater sound using large encapsulated bubbles and freely-rising bubble clouds. Proceedings of Meetings on Acoustics, 2012, , .	0.3	3
79	An acoustic investigation of seagrass photosynthesis. Marine Biology, 2012, 159, 2311-2322.	0.7	19
80	Mitigation of low-frequency underwater anthropogenic noise using stationary encapsulated gas bubbles. Proceedings of Meetings on Acoustics, 2012, , .	0.3	3
81	Sound propagation in water containing large tethered spherical encapsulated gas bubbles with resonance frequencies in the 50 Hz to 100 Hz range. Journal of the Acoustical Society of America, 2011, 130, 3325-3332.	0.5	32
82	A homemade Edison tinfoil phonograph. Proceedings of Meetings on Acoustics, 2011, , .	0.3	1
83	Sound speed in water-saturated glass beads as a function of frequency and porosity. Journal of the Acoustical Society of America, 2011, 129, EL101-EL107.	0.5	8
84	Laboratory measurements on gas hydrates and bubbly liquids using active and passive low-frequency acoustic techniques. Proceedings of Meetings on Acoustics, 2011, , .	0.3	2
85	An investigation of the combustive sound source. Proceedings of Meetings on Acoustics, 2010, , .	0.3	11
86	Seagrass leaves in 3-D: Using computed tomography and low-frequency acoustics to investigate the material properties of seagrass tissue. Journal of Experimental Marine Biology and Ecology, 2010, 395, 128-134.	0.7	24
87	Laboratory investigation of the acoustic response of seagrass tissue in the frequency band 0.5â€“2.5 kHz. Journal of the Acoustical Society of America, 2009, 125, 1951-1959.	0.5	78
88	The low-frequency sound speed of fluid-like gas-bearing sediments. Journal of the Acoustical Society of America, 2008, 123, EL99-EL104.	0.5	10
89	Evidence of dispersion in an artificial water-saturated sand sediment. Journal of the Acoustical Society of America, 2007, 121, 824-832.	0.5	17
90	Low-frequency dispersion in bubbly liquids. Acoustics Research Letters Online: ARLO, 2005, 6, 188-194.	0.7	8

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91	Phase speed and attenuation in bubbly liquids inferred from impedance measurements near the individual bubble resonance frequency. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1895-1910.	0.5	52
92	An improved water-filled impedance tube. <i>Journal of the Acoustical Society of America</i> , 2003, 113, 3245.	0.5	35
93	Acoustic scattering from a bubbly-liquid-filled compliant cylinder. <i>Acoustics Research Letters Online: ARLO</i> , 2001, 2, 103-108.	0.7	2
94	Experimental investigation of the combustive sound source. <i>IEEE Journal of Oceanic Engineering</i> , 1995, 20, 311-320.	2.1	20