

Barbara Nicolas

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

813
citations

516561

16
h-index

526166

27
g-index

57
all docs

57
docs citations

57
times ranked

555
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimation of modal group velocities with a single receiver for geoacoustic inversion in shallow water. <i>Journal of the Acoustical Society of America</i> , 2010, 128, 719-727.	0.5	87
2	Matched Representations and Filters for Guided Waves. <i>IEEE Transactions on Signal Processing</i> , 2009, 57, 1783-1795.	3.2	67
3	Single-receiver geoacoustic inversion using modal reversal. <i>Journal of the Acoustical Society of America</i> , 2012, 131, 119-128.	0.5	58
4	Basal icequakes recorded beneath an Alpine glacier (Glacier d'Argentière, Mont Blanc, France): Evidence for stick-slip motion?. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 379-401.	1.0	53
5	High-Frame-Rate Speckle-Tracking Echocardiography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018, 65, 720-728.	1.7	49
6	Modal depth function estimation using time-frequency analysis. <i>Journal of the Acoustical Society of America</i> , 2011, 130, 61-71.	0.5	45
7	A Nonlinear Beamformer Based on p-th Root Compression—Application to Plane Wave Ultrasound Imaging. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 599.	1.3	44
8	Physics-Based Time-Frequency Representations for Underwater Acoustics: Power Class Utilization with Waveguide-Invariant Approximation. <i>IEEE Signal Processing Magazine</i> , 2013, 30, 120-129.	4.6	40
9	Intermediate-depth icequakes and harmonic tremor in an Alpine glacier (Glacier d'Argentière, France): Evidence for hydraulic fracturing?. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 402-416.	1.0	30
10	Source depth discrimination with a vertical line array. <i>Journal of the Acoustical Society of America</i> , 2016, 140, EL434-EL440.	0.5	30
11	Geoacoustical parameters estimation with impulsive and boat-noise sources. <i>IEEE Journal of Oceanic Engineering</i> , 2003, 28, 494-501.	2.1	25
12	Travel-time tomography in shallow water: Experimental demonstration at an ultrasonic scale. <i>Journal of the Acoustical Society of America</i> , 2011, 130, 1232-1241.	0.5	25
13	Target detection and localization in shallow water: An experimental demonstration of the acoustic barrier problem at the laboratory scale. <i>Journal of the Acoustical Society of America</i> , 2011, 129, 85-97.	0.5	25
14	Using the trapped energy ratio for source depth discrimination with a horizontal line array: Theory and experimental results. <i>Journal of the Acoustical Society of America</i> , 2017, 142, 2776-2786.	0.5	24
15	Source Depth Estimation Using a Horizontal Array by Matched-Mode Processing in the Frequency-Wavenumber Domain. <i>Eurasip Journal on Advances in Signal Processing</i> , 2006, 2006, 1.	1.0	19
16	Shallow-Water Acoustic Tomography Performed From a Double-Beamforming Algorithm: Simulation Results. <i>IEEE Journal of Oceanic Engineering</i> , 2009, 34, 140-149.	2.1	19
17	Localization and Contribution of Underwater Acoustical Sources of a Moving Surface Ship. <i>IEEE Journal of Oceanic Engineering</i> , 2018, 43, 536-546.	2.1	16
18	Travel-time sensitivity kernels versus diffraction patterns obtained through double beam-forming in shallow water. <i>Journal of the Acoustical Society of America</i> , 2009, 126, 713-720.	0.5	14

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19	Underwater Broadband Source Localization Based on Modal Filtering and Features Extraction. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.0	12
20	Time-angle sensitivity kernels for sound-speed perturbations in a shallow ocean. Journal of the Acoustical Society of America, 2013, 134, 88-96.	0.5	11
21	Experimental measurement of the acoustic sensitivity kernel. Journal of the Acoustical Society of America, 2013, 134, EL38-EL44.	0.5	10
22	Automatic and passive whale localization in shallow water using gunshots. , 2008, , .		9
23	An analytical solution for the complete sensor network attitude estimation problem. Signal Processing, 2013, 93, 652-660.	2.1	8
24	Source localization on a single hydrophone. , 2008, , .		7
25	Raypath separation with high resolution processing. , 2011, , .		7
26	A Noise-Robust Method with Smoothed  \hat{a} for Sparse Moving-Source Mapping. Signal Processing, 2017, 135, 96-106.	2.1	7
27	High-frame-rate 3-D echocardiography based on motion compensation: An in vitro evaluation. , 2017, , .		6
28	Use of the Cross-Spectral Density Matrix for Enhanced Passive Ultrasound Imaging of Cavitation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 910-925.	1.7	6
29	Double-Capon and double-MUSICAL for arrival separation and observable estimation in an acoustic waveguide. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.0	5
30	Inverting for a deterministic surface gravity wave using the sensitivity-kernel approach. Journal of the Acoustical Society of America, 2014, 135, 1789-1799.	0.5	5
31	Investigation on 3D high frame rate imaging with motion compensation (MoCo). , 2019, , .		5
32	Shallow-water acoustic tomography from angle measurements instead of travel-time measurements. Journal of the Acoustical Society of America, 2013, 134, EL373-EL379.	0.5	4
33	Passive synthetic aperture array to improve noise mapping of a moving ship. , 2015, , .		4
34	A computationally efficient nonlinear beamformer based on p-th root signal compression for enhanced ultrasound B-mode imaging. , 2017, , .		4
35	Advanced Beamforming Techniques for Passive Imaging of Stable and Inertial Cavitation. , 2018, , .		4
36	Influence of Beamforming Methods on Velocity Estimation: In Vitro Experiments. , 2018, , .		4

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37	Ward identities for visco-acoustic and visco-elastic propagation media. <i>Wave Motion</i> , 2012, 49, 484-489.	1.0	3
38	An Enhanced Chirp Modulated Golay Code for Ultrasound Diverging Wave Compounding. , 2018, , .		3
39	Mode Sign Estimation to Improve Source Depth Estimation. , 2008, , .		2
40	Cardiac Motion estimation based on transverse oscillation and ultrafast diverging wave imaging. , 2015, , .		2
41	On Green's correlation of Stokes' equation. <i>Wave Motion</i> , 2015, 56, 183-198.	1.0	2
42	Sparse deconvolution for moving-source localization. , 2016, , .		2
43	Dynamic imaging of a capillary-gravity wave in shallow water using amplitude variations of eigenbeams. <i>Journal of the Acoustical Society of America</i> , 2019, 146, 3353-3361.	0.5	2
44	High-frame-rate velocity vector imaging echocardiography: an in vitro evaluation. , 2016, , .		1
45	Inverse problem approaches for coded high frame rate ultrasound imaging. , 2017, , .		1
46	Surface perturbation inverted from angle variations of eigenbeams in an ultrasonic waveguide. <i>Journal of the Acoustical Society of America</i> , 2020, 148, 2841-2850.	0.5	1
47	Multiplane deconvolution in underwater acoustics: Simultaneous estimations of source level and position. <i>JASA Express Letters</i> , 2021, 1, 076001.	0.5	1
48	Frequency warping for waveguide characterization with a single hydrophone. , 2009, , .		1
49	Acoustic trajectory correction to improve mapping of moving sources. <i>Proceedings of Meetings on Acoustics</i> , 2016, , .	0.3	0
50	A BVMF-B algorithm for nonconvex nonlinear regularized decomposition of spectral x-ray projection images. , 2017, , .		0
51	Simultaneous coded plane wave imaging: Implementation on a research echograph. , 2017, , .		0
52	Jointly Optimized Modulation/Filtering Technique for Pseudo-Orthogonal Binary Sequences. , 2018, , .		0
53	A Resolution Enhancement Technique for Ultrafast Coded Medical Ultrasound. , 2018, , .		0
54	Estimation of Frequency-Wavenumber Diagrams Using a Physics-Based Grid-Free Compressed Sensing Method. <i>IEEE Journal of Oceanic Engineering</i> , 2022, 47, 565-577.	2.1	0

#	ARTICLE	IF	CITATIONS
55	Rapid inversion in shallow water with a single receiver using modal time-frequency pattern extraction. , 2009, , .		0