## Philippe Roux

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5095730/publications.pdf

Version: 2024-02-01

254 papers

11,391 citations

54 h-index 96 g-index

266 all docs 266 docs citations

266 times ranked 6434 citing authors

#	Article	IF	CITATIONS
1	Time-reversed acoustics. Reports on Progress in Physics, 2000, 63, 1933-1995.	20.1	566
2	Surface wave tomography from microseisms in Southern California. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	497
3	Extracting time-domain Green's function estimates from ambient seismic noise. Geophysical Research Letters, 2005, 32, .	4.0	420
4	Robust Acoustic Time Reversal with High-Order Multiple Scattering. Physical Review Letters, 1995, 75, 4206-4209.	7.8	384
5	Ambient noise cross correlation in free space: Theoretical approach. Journal of the Acoustical Society of America, 2005, 117, 79-84.	1.1	358
6	Extracting coherent wave fronts from acoustic ambient noise in the ocean. Journal of the Acoustical Society of America, 2004, 116, 1995-2003.	1,1	281
7	A seismic metamaterial: The resonant metawedge. Scientific Reports, 2016, 6, 27717.	3.3	264
8	P-waves from cross-correlation of seismic noise. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	262
9	Forests as a natural seismic metamaterial: Rayleigh wave bandgaps induced by local resonances. Scientific Reports, 2016, 6, 19238.	3.3	251
10	Stability of monitoring weak changes in multiply scattering media with ambient noise correlation: Laboratory experiments. Journal of the Acoustical Society of America, 2009, 125, 3688-3695.	1.1	204
11	Crossâ€correlation of random fields: mathematical approach and applications. Geophysical Prospecting, 2008, 56, 375-393.	1.9	186
12	Emergence rate of the time-domain Green's function from the ambient noise cross-correlation function. Journal of the Acoustical Society of America, 2005, 118, 3524-3531.	1.1	159
13	Life cycle assessments of urban water systems: A comparative analysis of selected peer-reviewed literature. Water Research, 2014, 67, 187-202.	11.3	154
14	Estimation of the effect of nonisotropically distributed energy on the apparent arrival time in correlations. Geophysics, 2010, 75, SA85-SA93.	2.6	153
15	Seismic metasurfaces: Sub-wavelength resonators and Rayleigh wave interaction. Journal of the Mechanics and Physics of Solids, 2017, 99, 379-393.	4.8	152
16	Environmental assessment of a territory: An overview of existing tools and methods. Journal of Environmental Management, 2012, 112, 213-225.	7.8	151
17	Arrival-time structure of the time-averaged ambient noise cross-correlation function in an oceanic waveguide. Journal of the Acoustical Society of America, 2005, 117, 164-174.	1.1	131
18	Near-surface study at the Valhall oil field from ambient noise surface wave tomography. Geophysical Journal International, 2013, 193, 1627-1643.	2.4	125

#	Article	IF	CITATIONS
19	Experimental Demonstration of Ordered and Disordered Multiresonant Metamaterials for Lamb Waves. Physical Review Letters, 2014, 112, 234301.	7.8	124
20	Green's functions extraction and surface-wave tomography from microseisms in southern California. Geophysics, 2006, 71, SI23-SI31.	2.6	120
21	Time-Dependent Coherent Backscattering of Acoustic Waves. Physical Review Letters, 1997, 79, 3637-3639.	7.8	117
22	Teleseismic correlations of ambient seismic noise for deep global imaging of the Earth. Geophysical Journal International, 2013, 194, 844-848.	2.4	117
23	How to Conduct a Proper Sensitivity Analysis in Life Cycle Assessment: Taking into Account Correlations within LCI Data and Interactions within the LCA Calculation Model. Environmental Science & Env	10.0	116
24	Seismic Tomography of the Southern California Plate Boundary Region from Noise-Based Rayleigh and Love Waves. Pure and Applied Geophysics, 2015, 172, 1007-1032.	1.9	112
25	Time reversal in a waveguide: Study of the temporal and spatial focusing. Journal of the Acoustical Society of America, 2000, 107, 2418-2429.	1.1	106
26	Using Ocean Ambient Noise for Array Self-Localization and Self-Synchronization. IEEE Journal of Oceanic Engineering, 2005, 30, 338-347.	3.8	99
27	Territorial Life Cycle Assessment (LCA): What exactly is it about? A proposal towards using a common terminology and a research agenda. Journal of Cleaner Production, 2018, 176, 474-485.	9.3	92
28	Life cycle assessment of urban wastewater systems: Quantifying the relative contribution of sewer systems. Water Research, 2015, 77, 35-48.	11.3	91
29	Green's function estimation using secondary sources in a shallow water environment. Journal of the Acoustical Society of America, 2003, 113, 1406-1416.	1.1	90
30	Ambient noise surface wave tomography to determine the shallow shear velocity structure at Valhall: depth inversion with a Neighbourhood Algorithm. Geophysical Journal International, 2014, 198, 1514-1525.	2.4	86
31	Multiple-Input–Multiple-Output Coherent Time Reversal Communications in a Shallow-Water Acoustic Channel. IEEE Journal of Oceanic Engineering, 2006, 31, 170-178.	3.8	85
32	Passive in vivo elastography from skeletal muscle noise. Applied Physics Letters, 2007, 90, 194101.	3.3	85
33	Time-reversal in an ultrasonic waveguide. Applied Physics Letters, 1997, 70, 1811-1813.	3.3	84
34	Enhanced sensing and conversion of ultrasonic Rayleigh waves by elastic metasurfaces. Scientific Reports, 2017, 7, 6750.	3.3	84
35	Passive elastography: shear-wave tomography from physiological-noise correlation in soft tissues. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1122-1126.	3.0	81
36	Adapting the LCA framework to environmental assessment in land planning. International Journal of Life Cycle Assessment, 2013, 18, 1533-1548.	4.7	79

#	Article	IF	CITATIONS
37	Triggering of tremors and slow slip event in Guerrero, Mexico, by the 2010 Mw 8.8 Maule, Chile, earthquake. Journal of Geophysical Research, 2012, 117, .	3.3	77
38	Synthetic aperture time-reversal communications in shallow water: Experimental demonstration at sea. Journal of the Acoustical Society of America, 2005, 118, 2365-2372.	1.1	75
39	Reconstruction of Rayleigh–Lamb dispersion spectrum based on noise obtained from an air-jet forcing. Journal of the Acoustical Society of America, 2007, 122, 3437-3444.	1.1	<b>7</b> 5
40	A methodological approach towards high-resolution surface wave imaging of the San Jacinto Fault Zone using ambient-noise recordings at a spatially dense array. Geophysical Journal International, 2016, 206, 980-992.	2.4	74
41	Modal Doppler theory of an arbitrarily accelerating continuous-wave source applied to mode extraction in the oceanic waveguide. Journal of the Acoustical Society of America, 2007, 122, 1426-1439.	1.1	73
42	Body and surface wave reconstruction from seismic noise correlations between arrays at Piton de la Fournaise volcano. Geophysical Research Letters, 2016, 43, 1047-1054.	4.0	70
43	Reverberations, coda waves and ambient noise: Correlations at the global scale and retrieval of the deep phases. Earth and Planetary Science Letters, 2014, 391, 137-145.	4.4	69
44	Theory of multiresonant metamaterials for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>A</mml:mi><mml:mn>0<td>าก<i>&gt; <b>ฝ</b>ุก</i><b>อ</b>ml:r</td><td>msubs </td></mml:mn></mml:msub></mml:math>	าก <i>&gt; <b>ฝ</b>ุก</i> <b>อ</b> ml:r	msubs
45	The structure of raylike arrivals in a shallow-water waveguide. Journal of the Acoustical Society of America, 2008, 124, 3430-3439.	1.1	67
46	The plumbing of Old Faithful Geyser revealed by hydrothermal tremor. Geophysical Research Letters, 2013, 40, 1989-1993.	4.0	67
47	The Analysis of Longâ€Term Frequency and Damping Wandering in Buildings Using the Random Decrement Technique. Bulletin of the Seismological Society of America, 2013, 103, 236-246.	2.3	66
48	Locating hydrothermal acoustic sources at Old Faithful Geyser using Matched Field Processing. Geophysical Journal International, 2011, 187, 385-393.	2.4	65
49	Passive seismic imaging with directive ambient noise: application to surface waves and the San Andreas Fault in Parkfield, CA. Geophysical Journal International, 2009, 179, 367-373.	2.4	64
50	Implementation of an adapted LCA framework to environmental assessment of a territory: important learning points from a French Mediterranean case study. Journal of Cleaner Production, 2014, 80, 17-29.	9.3	62
51	Directional cloaking of flexural waves in a plate with a locally resonant metamaterial. Journal of the Acoustical Society of America, 2015, 137, 1783-1789.	1.1	62
52	The Glasgow consensus on the delineation between pesticide emission inventory and impact assessment for LCA. International Journal of Life Cycle Assessment, 2015, 20, 765-776.	4.7	62
53	Body-wave reconstruction from ambient seismic noise correlations in an underground mine. Geophysics, 2015, 80, KS11-KS25.	2.6	59
54	Generation of very high pressure pulses with 1-bit time reversal in a solid waveguide. Journal of the Acoustical Society of America, 2001, 110, 2849-2857.	1.1	58

#	Article	IF	CITATIONS
55	Shallow three-dimensional structure of the San Jacinto fault zone revealed from ambient noise imaging with a dense seismic array. Geophysical Journal International, 2019, 216, 896-905.	2.4	58
56	Current limits of life cycle assessment framework in evaluating environmental sustainability – case of two evolving biofuel technologies. Journal of Cleaner Production, 2013, 54, 215-228.	9.3	55
57	Sub-wavelength energy trapping of elastic waves in a metamaterial. Journal of the Acoustical Society of America, 2014, 136, EL192-EL198.	1.1	55
58	The Aharonov-Bohm Effect Revisited by an Acoustic Time-Reversal Mirror. Physical Review Letters, 1997, 79, 3170-3173.	7.8	53
59	Improving temporal resolution in ambient noise monitoring of seismic wave speed. Journal of Geophysical Research, 2011, 116, .	3.3	53
60	Multiple scattering in a reflecting cavity: Application to fish counting in a tank. Journal of the Acoustical Society of America, 2001, 109, 2587-2597.	1.1	50
61	A passive inverse filter for Green's function retrieval. Journal of the Acoustical Society of America, 2012, 131, EL21-EL27.	1.1	48
62	Ultrasound shock wave generator with one-bit time reversal in a dispersive medium, application to lithotripsy. Applied Physics Letters, 2002, 80, 897-899.	3.3	45
63	A nonreciprocal implementation of time reversal in the ocean. Journal of the Acoustical Society of America, 2004, 116, 1009-1015.	1.1	45
64	Acoustical monitoring of fish density, behavior, and growth rate in a tank. Aquaculture, 2006, 251, 314-323.	3.5	45
65	Fluctuations of correlations and Green's function reconstruction: Role of scattering. Journal of Applied Physics, 2008, 103, .	2.5	45
66	Modal depth function estimation using time-frequency analysis. Journal of the Acoustical Society of America, 2011, 130, 61-71.	1.1	45
67	Multiscale matched-field processing for noise-source localization in exploration geophysics. Geophysics, 2012, 77, KS33-KS41.	2.6	45
68	Toward 4D Noiseâ€Based Seismic Probing of Volcanoes: Perspectives from a Largeâ€ <i>N</i> Experiment on Piton de la Fournaise Volcano. Seismological Research Letters, 2016, 87, 15-25.	1.9	45
69	Focal spot imaging based on zero lag crossâ€correlation amplitude fields: Application to dense array data at the San Jacinto fault zone. Journal of Geophysical Research: Solid Earth, 2016, 121, 8048-8067.	3.4	45
70	Rayleigh wave three-component beamforming: signed ellipticity assessment from high-resolution frequency-wavenumber processing of ambient vibration arrays. Geophysical Journal International, 2018, 215, 507-523.	2.4	45
71	Convergence of the two-point correlation function toward the Green's function in the context of a seismic-prospecting data set. Geophysics, 2008, 73, V47-V53.	2.6	44
72	Experimental demonstration of adaptive reverberation nulling using time reversal. Journal of the Acoustical Society of America, 2005, 118, 1381-1387.	1,1	43

#	Article	IF	CITATIONS
73	Elastic Wave Control Beyond Band-Gaps: Shaping the Flow of Waves in Plates and Half-Spaces with Subwavelength Resonant Rods. Frontiers in Mechanical Engineering, 2017, 3, .	1.8	43
74	On the temporal stability of the coda of ambient noise correlations. Comptes Rendus - Geoscience, 2014, 346, 307-316.	1.2	42
75	Toward Seismic Metamaterials: The METAFORET Project. Seismological Research Letters, 2018, 89, 582-593.	1.9	42
76	To what extent are short food supply chains (SFSCs) environmentally friendly? Application to French apple distribution using Life Cycle Assessment. Journal of Cleaner Production, 2020, 276, 124166.	9.3	42
77	Estimating Water Consumption of Potential Natural Vegetation on Global Dry Lands: Building an LCA Framework for Green Water Flows. Environmental Science & Environmental Science & 12258-12265.	10.0	41
78	Inverse scattering analysis with an acoustic time-reversal mirror. Physical Review Letters, 1994, 72, 637-640.	7.8	40
79	How environmentally significant is water consumption during wastewater treatment?: Application of recent developments in LCA to WWT technologies used at 3 contrasted geographical locations. Water Research, 2014, 57, 20-30.	11.3	40
80	Experimental demonstration of iterative time-reversed reverberation focusing in a rough waveguide. Application to target detection. Journal of the Acoustical Society of America, 2006, 120, 1305-1314.	1.1	39
81	Phase-velocity dispersion curves and small-scale geophysics using noise correlation slantstack technique. Geophysical Journal International, 2008, 172, 971-981.	2.4	39
82	Seismic fault zone trapped noise. Journal of Geophysical Research: Solid Earth, 2014, 119, 5786-5799.	3.4	39
83	Investigation of coseismic and postseismic processes using in situ measurements of seismic velocity variations in an underground mine. Geophysical Research Letters, 2015, 42, 9261-9269.	4.0	39
84	Joint Inversion of Body-Wave Arrival Times and Surface-Wave Dispersion for Three-Dimensional Seismic Structure Around SAFOD. Pure and Applied Geophysics, 2014, 171, 3013-3022.	1.9	38
85	Extracting the local Green's function on a horizontal array from ambient ocean noise. Journal of the Acoustical Society of America, 2008, 124, EL183-EL188.	1.1	37
86	Transformation seismology: composite soil lenses for steering surface elastic Rayleigh waves. Scientific Reports, 2016, 6, 25320.	3.3	36
87	Near-field time-reversal amplification. Journal of the Acoustical Society of America, 2007, 121, 3602.	1.1	35
88	A new feller-buncher for harvesting energy wood: Results from a European test programme. Biomass and Bioenergy, 2007, 31, 205-210.	5.7	35
89	Phase velocity tomography of surface waves using ambient noise cross correlation and array processing. Journal of Geophysical Research: Solid Earth, 2014, 119, 519-529.	3.4	35
90	Field Fluctuation Spectroscopy in a Reverberant Cavity with Moving Scatterers. Physical Review Letters, 2003, 90, 094302.	7.8	34

#	Article	IF	Citations
91	Bridging the gap between life cycle inventory and impact assessment for toxicological assessments of pesticides used in crop production. Chemosphere, 2014, 100, 175-181.	8.2	34
92	Helmholtz tomography of ambient noise surface wave data to estimate Scholte wave phase velocity at Valhall Life of the Field. Geophysics, 2013, 78, WA99-WA109.	2.6	33
93	Coherent processing of shipping noise for ocean monitoring. Journal of the Acoustical Society of America, 2013, 133, EL108-EL113.	1.1	33
94	Using glacier seismicity for phase velocity measurements and Green's function retrieval. Geophysical Journal International, 2015, 201, 1722-1737.	2.4	33
95	Impacts from urban water systems on receiving waters – How to account for severe wet-weather events in LCA?. Water Research, 2018, 128, 412-423.	11.3	33
96	Experimental Evidence in Acoustics of the Violation of Time-Reversal Invariance Induced by Vorticity. Europhysics Letters, 1995, 32, 25-29.	2.0	32
97	The San Andreas Fault revisited through seismic-noise and surface-wave tomography. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	32
98	Environmental Impacts of Contrasted Groundwater Pumping Systems Assessed by Life Cycle Assessment Methodology: Contribution to the Water†Energy Nexus Study. Irrigation and Drainage, 2015, 64, 124-138.	1.7	32
99	Enhancing the emergence rate of coherent wavefronts from ocean ambient noise correlations using spatio-temporal filters. Journal of the Acoustical Society of America, 2012, 132, 883-893.	1.1	31
100	Subâ€Permil Interlaboratory Consistency for Solutionâ€Based Boron Isotope Analyses on Marine Carbonates. Geostandards and Geoanalytical Research, 2021, 45, 59-75.	3.1	31
101	Underwater Acoustics. , 2007, , 149-204.		30
102	Passive monitoring of anisotropy change associated with the Parkfield 2004 earthquake. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	30
103	Reconstructing the Green's function through iteration of correlations. Comptes Rendus - Geoscience, 2011, 343, 623-632.	1.2	30
104	Streamlining life cycle inventory data generation in agriculture using traceability data and information and communication technologies – part I: concepts and technical basis. Journal of Cleaner Production, 2014, 69, 60-66.	9.3	30
105	Streamlining life cycle inventory data generation in agriculture using traceability data and information and communication technologies – part II: application to viticulture. Journal of Cleaner Production, 2015, 87, 119-129.	9.3	30
106	Nonlinear dynamics induced in a structure by seismic and environmental loading. Journal of the Acoustical Society of America, 2016, 140, 582-590.	1.1	30
107	Salinisation impacts in life cycle assessment: a review of challenges and options towards their consistent integration. International Journal of Life Cycle Assessment, 2016, 21, 577-594.	4.7	28
108	Azimuthal anisotropy at Valhall: The Helmholtz equation approach. Geophysical Research Letters, 2013, 40, 2636-2641.	4.0	27

#	Article	IF	Citations
109	Anatomy of a fumarolic system inferred from a multiphysics approach. Scientific Reports, 2018, 8, 7580.	3.3	27
110	Observing the subglacial hydrology network and its dynamics with a dense seismic array. Proceedings of the National Academy of Sciences of the United States of America, 2021, $118$ , .	7.1	27
111	Self-potential and passive seismic monitoring of hydrothermal activity: A case study at lodine Pool, Waimangu geothermal valley, New Zealand. Journal of Volcanology and Geothermal Research, 2009, 179, 11-18.	2.1	25
112	Travel-time tomography in shallow water: Experimental demonstration at an ultrasonic scale. Journal of the Acoustical Society of America, 2011, 130, 1232-1241.	1.1	25
113	Target detection and localization in shallow water: An experimental demonstration of the acoustic barrier problem at the laboratory scale. Journal of the Acoustical Society of America, 2011, 129, 85-97.	1.1	25
114	Double beamforming processing in a seismic prospecting context. Geophysics, 2013, 78, V101-V108.	2.6	25
115	Structural-change localization and monitoring through a perturbation-based inverse problem. Journal of the Acoustical Society of America, 2014, 136, 2586-2597.	1.1	25
116	A Rapid Method for Determining Boron Concentration ( <scp>ID</scp> â€ <scp>ICP</scp> â€ <scp>MS</scp> ) and Î' <sup>11</sup> B ( <scp>MC</scp> â€ <scp>ICP</scp> â€ <scp>MS</scp> ) in Vegetation Samples after Microwave Digestion and Cation Exchange Chemical Purification. Geostandards and Geoanalytical Research, 2015, 39, 453-466.	3.1	25
117	Using the Reliability Theory for Assessing the Decision Confidence Probability for Comparative Life Cycle Assessments. Environmental Science & Environ	10.0	25
118	Experimental demonstration of a high-frequency forward scattering acoustic barrier in a dynamic coastal environment. Journal of the Acoustical Society of America, 2010, 127, 3430-3439.	1.1	24
119	Silicon dynamics through the lens of soil-plant-animal interactions: perspectives for agricultural practices. Plant and Soil, 2021, 467, 1-28.	3.7	24
120	An LCA framework to assess environmental efficiency of water reuse: Application to contrasted locations for wastewater reuse in agriculture. Journal of Cleaner Production, 2021, 316, 128151.	9.3	24
121	Seismic, Ambient Noise Correlation. Encyclopedia of Earth Sciences Series, 2011, , 1230-1236.	0.1	24
122	Multiple scattering from icequakes at Erebus volcano, Antarctica: Implications for imaging at glaciated volcanoes. Journal of Geophysical Research: Solid Earth, 2015, 120, 1129-1141.	3.4	23
123	An innovative implementation of LCA within the EIA procedure: Lessons learned from two Wastewater Treatment Plant case studies. Environmental Impact Assessment Review, 2017, 63, 95-106.	9.2	23
124	Extracting coherent coda arrivals from cross-correlations of long period seismic waves during the Mount St. Helens 2004 eruption. Geophysical Research Letters, 2006, 33, .	4.0	22
125	Application of acoustic noise and self-potential localization techniques to a buried hydrothermal vent (Waimangu Old Geyser site, New Zealand). Geophysical Journal International, 2010, 180, 883-890.	2.4	22
126	Assessing Water Deprivation at the Sub-river Basin Scale in LCA Integrating Downstream Cascade Effects. Environmental Science & Environmental Science	10.0	22

#	Article	IF	Citations
127	Up to what point is loss reduction environmentally friendly?: The LCA of loss reduction scenarios in drinking water networks. Water Research, 2016, 104, 231-241.	11.3	22
128	Green's function retrieval through cross-correlations in a two-dimensional complex reverberating medium. Journal of the Acoustical Society of America, 2014, 135, 1034-1043.	1.1	21
129	WaLA, a versatile model for the life cycle assessment of urban water systems: Formalism and framework for a modular approach. Water Research, 2016, 88, 69-82.	11.3	21
130	High-resolution shallow seismic tomography of a hydrothermal area: application to the Solfatara, Pozzuoli. Geophysical Journal International, 2012, 189, 1725-1733.	2.4	20
131	Monitoring fault zone environments with correlations of earthquake waveforms. Geophysical Journal International, 2014, 196, 1073-1081.	2.4	20
132	On the Green's function emergence from interferometry of seismic wave fields generated in high-melt glaciers: implications for passive imaging and monitoring. Cryosphere, 2020, 14, 1139-1171.	3.9	20
133	Shallow-Water Acoustic Tomography Performed From a Double-Beamforming Algorithm: Simulation Results. IEEE Journal of Oceanic Engineering, 2009, 34, 140-149.	3.8	19
134	Elastic-wave identification and extraction through array processing: An experimental investigation at the laboratory scale. Journal of Applied Geophysics, 2011, 74, 81-88.	2.1	19
135	Anatomy of the high â $\in$ frequency ambient seismic wave field at the TCDP borehole. Journal of Geophysical Research, 2012, 117, .	3.3	19
136	Rayleigh phase velocities in Southern California from beamforming short-duration ambient noise. Geophysical Journal International, 2017, 211, 450-454.	2.4	19
137	Integrated tomographic methods for seismic imaging and monitoring of volcanic caldera structures and geothermal areas. Journal of Applied Geophysics, 2018, 156, 16-30.	2.1	19
138	Acoustical imaging through a multiple scattering medium using a time-reversal mirror. Journal of the Acoustical Society of America, 2000, 107, L7-L12.	1.1	18
139	Time reversal of ocean noise. Journal of the Acoustical Society of America, 2005, 117, 131-136.	1.1	18
140	Super-resolution experiments on Lamb waves using a single emitter. Applied Physics Letters, 2015, 106, .	3.3	18
141	A worldwide-regionalised water supply mix (WSmix) for life cycle inventory of water use. Journal of Cleaner Production, 2018, 172, 302-313.	9.3	18
142	A high-resolution algorithm for wave number estimation using holographic array processing. Journal of the Acoustical Society of America, 2004, 115, 1059-1067.	1.1	17
143	Weak Localization and Time Reversal of Ultrasound in a Rotational Flow. Physical Review Letters, 2005, 95, 074301.	7.8	17
144	Absolute measurements of total target strength from reverberation in a cavity. Journal of the Acoustical Society of America, 2003, 113, 1387-1394.	1.1	16

#	Article	IF	CITATIONS
145	Long-range propagation of finite-amplitude acoustic waves in an ocean waveguide. Journal of the Acoustical Society of America, 2004, 116, 2004-2010.	1.1	16
146	Synchronized time-reversal focusing with application to remote imaging from a distant virtual source array. Journal of the Acoustical Society of America, 2009, 125, 3828-3834.	1.1	16
147	Extraction of phase and group velocities from ambient surface noise in a patch-array configuration. Geophysics, 2016, 81, KS231-KS240.	2.6	16
148	Spatialized freshwater ecosystem life cycle impact assessment of water consumption based on instream habitat change modeling. Water Research, 2019, 163, 114884.	11.3	16
149	High-sensitivity microseismic monitoring: Automatic detection and localization of subsurface noise sources using matched-field processing and dense patch arrays. Geophysics, 2019, 84, KS211-KS223.	2.6	16
150	Coherent backscattering and far-field beamforming in acoustics. Journal of the Acoustical Society of America, 2007, 121, 70-77.	1,1	15
151	A strongly heterogeneous hydrothermal area imaged by surface waves: the case of Solfatara, Campi Flegrei, Italy. Geophysical Journal International, 2016, 205, 1813-1822.	2.4	15
152	Analysis of surface and seismic sources in dense array data with match field processing and Markov chain Monte Carlo sampling. Geophysical Journal International, 2019, 218, 1044-1056.	2.4	15
153	Stickâ€Slip Tremor Beneath an Alpine Glacier. Geophysical Research Letters, 2021, 48, e2020GL090528.	4.0	15
154	Data-based mode extraction with a partial water column spanning array. Journal of the Acoustical Society of America, 2005, 118, 1518-1525.	1,1	14
155	Focal depth shifting of a time reversal mirror in a range-independent waveguide. Journal of the Acoustical Society of America, 2005, 118, 1341-1347.	1.1	14
156	Small-scale seismic inversion using surface waves extracted from noise cross correlation. Journal of the Acoustical Society of America, 2008, 123, EL26-EL31.	1.1	14
157	Travel-time sensitivity kernels versus diffraction patterns obtained through double beam-forming in shallow water. Journal of the Acoustical Society of America, 2009, 126, 713-720.	1.1	14
158	Application of the coherent-to-incoherent intensity ratio to estimation of ocean surface roughness from high-frequency, shallow-water propagation measurements. Journal of the Acoustical Society of America, 2010, 127, 1258-1266.	1.1	14
159	Boron Dissolved and Particulate Atmospheric Inputs to a Forest Ecosystem (Northeastern France). Environmental Science & Dr. Technology, 2017, 51, 14038-14046.	10.0	14
160	Detection and analysis of a transient energy burst with beamforming of multiple teleseismic phases. Geophysical Journal International, 2018, 212, 14-24.	2.4	14
161	Characterization of a large vortex using acoustic time-reversal mirrors. European Physical Journal B, 1999, 9, 545-549.	1.5	13
162	Measurement of the scattering and absorption cross sections of the human body. Applied Physics Letters, 2004, 84, 819-821.	3.3	13

#	Article	IF	Citations
163	Active waveguide Green's function estimation with application to time-reversal focusing without a probe source in a range-independent waveguide. Journal of the Acoustical Society of America, 2006, 120, 2755-2763.	1.1	13
164	A methodology to assess habitat fragmentation effects through regional indexes: Illustration with forest biodiversity hotspots. Ecological Indicators, 2018, 89, 543-551.	6.3	13
165	Time-reversal mirrors and rough surfaces: Theory. Journal of the Acoustical Society of America, 1999, 106, 716-723.	1.1	12
166	Iterative high-resolution wavenumber inversion applied to broadband acoustic data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2306-2311.	3.0	12
167	Symmetry issues in the hybridization of multi-mode waves with resonators: an example with Lamb waves metamaterial. Scientific Reports, 2015, 5, 13714.	3.3	12
168	On the practical convergence of coda-based correlations: a window optimization approach. Geophysical Journal International, 2016, 204, 736-747.	2.4	12
169	Application of mobile acoustic techniques fish surveys in shallow water: The river seine. River Research and Applications, 1994, 9, 121-126.	0.8	11
170	Wave separation in ambient seismic noise using intrinsic coherence and polarization filtering. Signal Processing, 2009, 89, 410-421.	3.7	11
171	Analyzing sound speed fluctuations in shallow water from group-velocity versus phase-velocity data representation. Journal of the Acoustical Society of America, 2013, 133, 1945-1952.	1.1	11
172	Time-angle sensitivity kernels for sound-speed perturbations in a shallow ocean. Journal of the Acoustical Society of America, 2013, 134, 88-96.	1,1	11
173	Evidence of reactivation of a hydrothermal system from seismic anisotropy changes. Nature Communications, 2019, 10, 5278.	12.8	11
174	A Multi-Physics Experiment with a Temporary Dense Seismic Array on the Argentià re Glacier, French Alps: The RESOLVE Project. Seismological Research Letters, 2021, 92, 1185-1201.	1.9	11
175	Relationship between time reversal and linear equalization in digital communications. Journal of the Acoustical Society of America, 2006, 120, 35-37.	1.1	10
176	Sensitivity kernel for surface scattering in a waveguide. Journal of the Acoustical Society of America, 2012, 131, 111-118.	1,1	10
177	Experimental measurement of the acoustic sensitivity kernel. Journal of the Acoustical Society of America, 2013, 134, EL38-EL44.	1.1	10
178	The fluctuation–dissipation theorem used as a proxy for damping variations in real engineering structures. Engineering Structures, 2018, 167, 65-73.	5.3	10
179	Evidence of metamaterial physics at the geophysics scale: the METAFORET experiment. Geophysical Journal International, 0, , .	2.4	10
180	Water supply scenarios of agricultural areas: Environmental performance through Territorial Life Cycle Assessment. Journal of Cleaner Production, 2022, 366, 132862.	9.3	10

#	Article	IF	Citations
181	Scattering of sound by a vorticity filament: $\hat{a} \in f$ An experimental and numerical investigation. Physical Review E, 2001, 63, 036607.	2.1	9
182	On band gap predictions for multiresonant metamaterials on plates. Journal of the Acoustical Society of America, 2016, 139, 1282-1284.	1.1	9
183	Monitoring of seismic anisotropy at the time of the 2008 Iwate-Miyagi (Japan) earthquake. Geophysical Journal International, 2017, 211, 483-497.	2.4	9
184	Time-reversal mirrors and rough surfaces: Experiment. Journal of the Acoustical Society of America, 1999, 106, 724-732.	1.1	8
185	Ocean acoustic noise and passive coherent array processing. Comptes Rendus - Geoscience, 2011, 343, 533-547.	1.2	8
186	Instantaneous phase variation for seismic velocity monitoring from ambient noise at the exploration scale. Geophysics, 2012, 77, Q37-Q44.	2.6	8
187	Influence of seismic anisotropy on the cross correlation tensor: numerical investigations. Geophysical Journal International, 2015, 201, 595-604.	2.4	8
188	Ambient noise correlations on a mobile, deformable array. Journal of the Acoustical Society of America, 2016, 140, 4260-4270.	1.1	8
189	A multi-wave elastic metamaterial based on degenerate local resonances. Journal of the Acoustical Society of America, 2017, 142, EL75-EL81.	1.1	8
190	Addressing water needs of freshwater ecosystems in life cycle impact assessment of water consumption: state of the art and applicability of ecohydrological approaches to ecosystem quality characterization. International Journal of Life Cycle Assessment, 2018, 23, 2071-2088.	4.7	8
191	Data-based diffraction kernels for surface waves from convolution and correlation processes through active seismic interferometry. Geophysical Journal International, 2018, 214, 1468-1480.	2.4	8
192	The issue of considering water quality in life cycle assessment of water use. International Journal of Life Cycle Assessment, 2019, 24, 590-603.	4.7	8
193	Effective impedance of a locally resonant metasurface. Physical Review Materials, 2019, 3, .	2.4	8
194	Dynamic Imaging of Glacier Structures at Highâ€Resolution Using Source Localization With a Dense Seismic Array. Geophysical Research Letters, 2022, 49, .	4.0	8
195	Recovering and monitoring the thickness, density, and elastic properties of sea ice from seismic noise recorded in Svalbard. Cryosphere, 2022, 16, 2527-2543.	3.9	8
196	Characterization of scatterer motion in a reverberant medium. Journal of the Acoustical Society of America, 2006, 119, 769.	1.1	7
197	Source depopulation potential and surface-wave tomography using a crosscorrelation method in a scattering medium. Geophysics, 2011, 76, SA51-SA61.	2.6	7
198	Coherent backscattering enhancement in cavities. Wave Motion, 2011, 48, 214-222.	2.0	7

#	Article	IF	Citations
199	Target localization through a data-based sensitivity kernel: A perturbation approach applied to a multistatic configuration. Journal of the Acoustical Society of America, 2014, 135, 1800-1807.	1.1	7
200	Negative index metamaterial through multi-wave interactions: numerical proof of the concept of low-frequency Lamb-wave multiplexing. Scientific Reports, 2021, 11, 561.	3.3	7
201	Depth and range shifting of a focal spot using a time-reversal mirror in an acoustic waveguide. Applied Physics Letters, 2002, 80, 3647-3649.	3.3	6
202	MODE AND WAVENUMBER INVERSION IN SHALLOW WATER USING AN ADJOINT METHOD. Journal of Computational Acoustics, 2004, 12, 521-542.	1.0	6
203	Localization of a small change in a multiple scattering environment without modeling of the actual medium. Journal of the Acoustical Society of America, 2011, 130, 3566-3573.	1.1	6
204	Antipodal focusing of seismic waves observed with the USArray. Geophysical Journal International, 2014, 199, 1030-1042.	2.4	6
205	Developing characterisation factors for land fragmentation impacts on biodiversity in LCA: key learnings from a sugarcane case study. International Journal of Life Cycle Assessment, 2018, 23, 2126-2136.	4.7	6
206	Raypath Separation With a High-Resolution Algorithm in a Shallow-Water Waveguide. IEEE Journal of Oceanic Engineering, 2018, 43, 119-130.	3.8	6
207	Localized modes on a metasurface through multiwave interactions. Physical Review Materials, 2020, 4,	2.4	6
208	Geoacoustic inversion with two source-receiver arrays in shallow water. Journal of the Acoustical Society of America, 2010, 128, 702-710.	1.1	5
209	Double-Capon and double-MUSICAL for arrival separation and observable estimation in an acoustic waveguide. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	5
210	Tracking of velocity variations at depth in the presence of surface velocity fluctuations. Geophysics, 2013, 78, U1-U8.	2.6	5
211	Inverting for a deterministic surface gravity wave using the sensitivity-kernel approach. Journal of the Acoustical Society of America, 2014, 135, 1789-1799.	1.1	5
212	Timelapse ultrasonic tomography for measuring damage localization in geomechanics laboratory tests. Journal of the Acoustical Society of America, 2015, 137, 1389-1400.	1.1	5
213	Active wideband higher-order raypath separation in multipath environment. Journal of the Acoustical Society of America, 2017, 141, EL38-EL44.	1.1	5
214	Slow dynamics process observed in civil engineering structures to detect structural heterogeneities. Engineering Structures, 2020, 202, 109833.	5.3	5
215	Characterization with dense array data of seismic sources in the shallow part of the San Jacinto fault zone. Geophysical Journal International, 2020, 224, 1133-1140.	2.4	5
216	Application of the parabolic equation method to medical ultrasonics. Wave Motion, 2000, 31, 181-196.	2.0	4

#	Article	IF	CITATIONS
217	A High-Frequency Active Underwater Acoustic Barrier Experiment Using a Time Reversal Mirror; Model-Data Comparison. AIP Conference Proceedings, 2004, , .	0.4	4
218	Shallow-water acoustic tomography from angle measurements instead of travel-time measurements. Journal of the Acoustical Society of America, 2013, 134, EL373-EL379.	1.1	4
219	Experimental estimation of in vacuo structural admittance using random sources in a non-anechoic room. Journal of the Acoustical Society of America, 2017, 142, 103-109.	1.1	4
220	Self-Localization of a Deforming Swarm of Underwater Vehicles Using Impulsive Sound Sources of Opportunity. IEEE Access, 2018, 6, 1635-1646.	4.2	4
221	Insight Into the Wave Scattering Properties of the Solfatara Volcano, Campi Flegrei, Italy. Frontiers in Earth Science, 2019, 7, .	1.8	4
222	Diffuse reverberant acoustic wave spectroscopy with absorbing scatterers. Applied Physics Letters, 2005, 87, 154104.	3.3	3
223	Application of acoustic feedback to target detection in a waveguide: Experimental demonstration at the ultrasonic scale. Journal of the Acoustical Society of America, 2011, 130, 13-19.	1.1	3
224	Coherent backscattering enhancement in cavities. Highlights of the role of symmetry. Journal of the Acoustical Society of America, 2011, 129, 1963-1971.	1.1	3
225	Coda reconstruction from cross-correlation of a diffuse field on thin elastic plates. Physical Review E, 2017, 96, 032137.	2.1	3
226	Self-localization of a mobile swarm using noise correlations with local sources of opportunity. Journal of the Acoustical Society of America, 2018, 144, 2811-2823.	1.1	3
227	Acoustic density estimation of dense fish shoals. Journal of the Acoustical Society of America, 2020, 148, EL234-EL239.	1.1	3
228	Mesoscopic wave physics in fish shoals. AIP Advances, 2020, 10, .	1.3	3
229	ELDAM: A Python software for Life Cycle Inventory data management. Journal of Open Source Software, 2021, 6, 2765.	4.6	3
230	Underwater Acoustics. , 2014, , 157-212.		3
231	Reply to the Comment on "Multiple scattering in a reflecting cavity: Application to fish scattering―[J. Acoust. Soc. Am.113, 2978–2979 (2003)] (L). Journal of the Acoustical Society of America, 2004, 115, 31-34.	1.1	2
232	Range, velocity and immersion estimation of a moving target in a water-filled tank with an active sonar system. , 2015, , .		2
233	Using slowness and azimuth fluctuations as new observables for fourâ€dimensional reservoir seismic monitoring. Geophysical Prospecting, 2016, 64, 1537-1555.	1.9	2
234	New Trends Toward Locally-Resonant Metamaterials at the Mesoscopic Scale. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 251-299.	0.1	2

#	Article	IF	CITATIONS
235	Fast raypath separation based on low-rank matrix approximation in a shallow-water waveguide. Journal of the Acoustical Society of America, 2018, 143, EL271-EL277.	1.1	2
236	Topological Effects of a Vorticity Filament on the Coherent Backscattering Cone. Physical Review Letters, 2019, 123, 035503.	7.8	2
237	Dynamic imaging of a capillary-gravity wave in shallow water using amplitude variations of eigenbeams. Journal of the Acoustical Society of America, 2019, 146, 3353-3361.	1.1	2
238	Phase-velocity inversion from data-based diffraction kernels: seismic Michelson interferometer. Geophysical Journal International, 2020, 224, 1287-1300.	2.4	2
239	One-channel inverse filter: Spatio-temporal control of a complex wave-field from a single point. Applied Physics Letters, 2014, 104, .	3.3	1
240	Using underwater ambient sound to localize swarms of underwater vehicles., 2015,,.		1
241	Processing passive seismic data recorded on a dense array for CCS site characterization. , 2018, , .		1
242	Surface perturbation inverted from angle variations of eigenbeams in an ultrasonic waveguide. Journal of the Acoustical Society of America, 2020, 148, 2841-2850.	1.1	1
243	Seismic, Ambient Noise Correlation. Encyclopedia of Earth Sciences Series, 2021, , 1557-1562.	0.1	1
244	Ultra slow acoustic energy transport in dense fish aggregates. Scientific Reports, 2021, 11, 17541.	3.3	1
245	Hierarchical waveform inversion with double beamforming. , 2011, , .		1
246	Messages in the Bubbles. Eos, 2020, 101, .	0.1	1
247	Problèmes inverses en diffusion acoustique avec des miroirs à retournement temporel. European Physical Journal Special Topics, 1994, 04, C5-889-C5-892.	0.2	0
248	4. Green's Function Reconstruction. , 2008, , 99-329.		0
249	Acoustical tomography in the shallow water ocean: Dream or reality?. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
250	Self-synchronization of multiple vehicles using ambient impulsive noise. , 2018, , .		0
251	Random versus regular square lattice experimental comparison for a subwavelength resonant metasurface. Journal of the Acoustical Society of America, 2021, 149, 3645-3653.	1.1	0
252	Seismic, Ambient Noise Correlation. Encyclopedia of Earth Sciences Series, 2020, , 1-6.	0.1	0

#	Article	IF	CITATIONS
253	Modal formulation and paraxial approximation for acoustic wave propagation in waveguides with surface perturbations. Journal of the Acoustical Society of America, 2022, 151, 3239-3254.	1.1	o
254	Three-dimensional higher-order raypath separation in a shallow-water waveguide. JASA Express Letters, 2022, 2, 076001.	1.1	0