

# Oleg A Godin

## List of Publications by Year in descending order

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112  
papers

2,175  
citations

257450

24  
h-index

276875

41  
g-index

122  
all docs

122  
docs citations

122  
times ranked

976  
citing authors

#	ARTICLE	IF	CITATIONS
1	Acoustics of Layered Media I. Springer Series on Wave Phenomena, 1990, , .	0.7	207
2	Acoustics of Layered Media II. Springer Series on Wave Phenomena, 1999, , .	0.7	203
3	Recovering the Acoustic Greenâ€™s Function from Ambient Noise Cross Correlation in an Inhomogeneous Moving Medium. Physical Review Letters, 2006, 97, 054301.	7.8	93
4	Reciprocity and energy theorems for waves in a compressible inhomogeneous moving fluid. Wave Motion, 1997, 25, 143-167.	2.0	84
5	Acoustics of Layered Media II. Springer Series on Wave Phenomena, 1992, , .	0.7	68
6	Anomalous Transparency of Water-Air Interface for Low-Frequency Sound. Physical Review Letters, 2006, 97, 164301.	7.8	54
7	An effective quiescent medium for sound propagating through an inhomogeneous, moving fluid. Journal of the Acoustical Society of America, 2002, 112, 1269-1275.	1.1	52
8	Ocean tomography with acoustic daylight. Geophysical Research Letters, 2010, 37, .	4.0	52
9	Sound transmission through waterâ€™air interfaces: new insights into an old problem. Contemporary Physics, 2008, 49, 105-123.	1.8	50
10	Reciprocity and energy conservation within the parabolic approximation. Wave Motion, 1999, 29, 175-194.	2.0	48
11	Dispersion of interface waves in sediments with power-law shear speed profiles. II. Experimental observations and seismo-acoustic inversions. Journal of the Acoustical Society of America, 2001, 110, 1908-1916.	1.1	42
12	Dispersion of interface waves in sediments with power-law shear speed profiles. I. Exact and approximate analytical results. Journal of the Acoustical Society of America, 2001, 110, 1890-1907.	1.1	41
13	Shear-speed gradients and ocean seismo-acoustic noise resonances. Journal of the Acoustical Society of America, 1999, 106, 2367-2382.	1.1	40
14	Computing the far field scattered or radiated by objects inside layered fluid media using approximate Greenâ€™s functions. Journal of the Acoustical Society of America, 2008, 123, 4051-4058.	1.1	40
15	A note on differential equations of coupled-mode propagation in fluids. Journal of the Acoustical Society of America, 1998, 103, 159-168.	1.1	39
16	Retrieval of Greenâ€™s functions of elastic waves from thermal fluctuations of fluid-solid systems. Journal of the Acoustical Society of America, 2009, 125, 1960-1970.	1.1	38
17	Transmission of low-frequency sound through the water-to-air interface. Acoustical Physics, 2007, 53, 305-312.	1.0	36
18	Low-frequency sound transmission through a gasâ€™liquid interface. Journal of the Acoustical Society of America, 2008, 123, 1866-1879.	1.1	35

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19	Emergence of the acoustic Green's function from thermal noise. Journal of the Acoustical Society of America, 2007, 121, EL96-EL102.	1.1	30
20	Acoustic Green's function extraction from ambient noise in a coastal ocean environment. Geophysical Research Letters, 2014, 41, 5555-5562.	4.0	29
21	Accuracy of the deterministic travel time retrieval from cross-correlations of non-diffuse ambient noise. Journal of the Acoustical Society of America, 2009, 126, EL183-EL189.	1.1	28
22	Air-sea interaction and feasibility of tsunami detection in the open ocean. Journal of Geophysical Research, 2004, 109, .	3.3	27
23	Acoustic-gravity waves in the atmosphere generated by infragravity waves in the ocean. Earth, Planets and Space, 2015, 67, .	2.5	27
24	Passive acoustic measurement of flow velocity in the Straits of Florida. Geoscience Letters, 2014, 1, .	3.3	25
25	Interferometry of infragravity waves off New Zealand. Journal of Geophysical Research: Oceans, 2014, 119, 1103-1122.	2.6	25
26	Oceans are a major source of waves in the thermosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 3452-3463.	2.4	24
27	Refraction of Sound in a Horizontally Inhomogeneous, Time-Dependent Ocean. IEEE Journal of Oceanic Engineering, 2006, 31, 384-401.	3.8	23
28	Restless rays, steady wave fronts. Journal of the Acoustical Society of America, 2007, 122, 3353-3363.	1.1	23
29	Journal of the Acoustical Society of America, 2010, 128, 600-610.	1.1	22
30	Variations in sea surface roughness induced by the 2004 Sumatra-Andaman tsunami. Natural Hazards and Earth System Sciences, 2009, 9, 1135-1147.	3.6	21
31	Acoustic-gravity waves in atmospheric and oceanic waveguides. Journal of the Acoustical Society of America, 2012, 132, 657-669.	1.1	20
32	Emergence of Acoustic Green's Functions from Time Averages of Ambient Noise. Acta Acustica United With Acustica, 2011, 97, 44-53.	0.8	19
33	Power spectra of infragravity waves in a deep ocean. Geophysical Research Letters, 2013, 40, 2159-2165.	4.0	19
34	Dissipation of acoustic-gravity waves: An asymptotic approach. Journal of the Acoustical Society of America, 2014, 136, EL411-EL417.	1.1	19
35	Waveform modeling and inversion of ambient noise cross-correlation functions in a coastal ocean environment. Journal of the Acoustical Society of America, 2015, 138, 1325-1333.	1.1	19
36	Head wave data inversion for geoacoustic parameters of the ocean bottom off Vancouver Island. Journal of the Acoustical Society of America, 1999, 106, 2540-2551.	1.1	18

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37	Passive acoustic measurements of wind velocity and sound speed in air. Journal of the Acoustical Society of America, 2014, 135, EL68-EL74.	1.1	18
38	Separation of acoustic modes in the Florida Straits using noise interferometry. Acoustical Physics, 2017, 63, 76-85.	1.0	17
39	Characterizing the seabed in the Straits of Florida by using acoustic noise interferometry and time warping. Journal of the Acoustical Society of America, 2019, 146, 2321-2334.	1.1	17
40	A 2-D DESCRIPTION OF SOUND PROPAGATION IN A HORIZONTALLY-INHOMOGENEOUS OCEAN. Journal of Computational Acoustics, 2002, 10, 123-151.	1.0	16
41	Low-frequency sound transmission through a gas–solid interface. Journal of the Acoustical Society of America, 2011, 129, EL45-EL51.	1.1	16
42	Wentzel–Kramers–Brillouin approximation for atmospheric waves. Journal of Fluid Mechanics, 2015, 777, 260-290.	3.4	16
43	Ocean acoustic remote sensing using ambient noise: results from the Florida Straits. Geophysical Journal International, 2016, 206, 574-589.	2.4	16
44	Rayleigh scattering of a spherical sound wave. Journal of the Acoustical Society of America, 2013, 133, 709-720.	1.1	15
45	Wide-angle parabolic equations for sound in a 3D inhomogeneous moving medium. Doklady Physics, 2002, 47, 643-646.	0.7	14
46	Acoustic noise interferometry in a time-dependent coastal ocean. Journal of the Acoustical Society of America, 2018, 143, 595-604.	1.1	14
47	Emergence of deterministic Green's functions from noise generated by finite random sources. Physical Review E, 2009, 80, 066605.	2.1	13
48	Resonance vibrations of the Ross Ice Shelf and observations of persistent atmospheric waves. Journal of Geophysical Research: Space Physics, 2016, 121, 10,157.	2.4	13
49	Application of time reversal to passive acoustic remote sensing of the ocean. Acoustical Physics, 2017, 63, 309-320.	1.0	13
50	Coupled-mode sound propagation in a range-dependent, moving fluid. Journal of the Acoustical Society of America, 2002, 111, 1984.	1.1	12
51	Fermat's principle for non-dispersive waves in non-stationary media. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2004, 460, 1631-1647.	2.1	12
52	Wave refraction at an interface: Snell's law versus Chapman's law. Journal of the Acoustical Society of America, 2009, 125, EL117-EL122.	1.1	12
53	Transmission of acoustic-gravity waves through gas–liquid interfaces. Journal of Fluid Mechanics, 2012, 709, 313-340.	3.4	12
54	The effect of anomalous transparency of the water-air interface for a volumetric sound source. Acoustical Physics, 2013, 59, 6-15.	1.0	12

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55	A perturbation model of radiometric manifestations of oceanic currents. <i>Radio Science</i> , 2003, 38, n/a-n/a.	1.6	11
56	Travel-time statistics for signals scattered at a rough surface. <i>Waves in Random and Complex Media</i> , 2003, 13, 205-221.	1.5	11
57	Scattering of a spherical wave by a small sphere: An elementary solution. <i>Journal of the Acoustical Society of America</i> , 2011, 130, EL135-EL141.	1.1	11
58	Passive geoacoustic inversion in the Mid-Atlantic Bight in the presence of strong water column variability. <i>Journal of the Acoustical Society of America</i> , 2020, 147, EL453-EL459.	1.1	11
59	Calculation of amplitudes of acoustic normal modes from the reciprocity principle. <i>Journal of the Acoustical Society of America</i> , 2006, 119, 2096-2100.	1.1	10
60	Incompressible Wave Motion of Compressible Fluids. <i>Physical Review Letters</i> , 2012, 108, 194501.	7.8	10
61	On the high-frequency theory of lateral waves. <i>Wave Motion</i> , 1984, 6, 105-117.	2.0	9
62	On the possibility of using acoustic reverberation for remote sensing of ocean dynamics. <i>Acoustical Physics</i> , 2012, 58, 129-138.	1.0	9
63	Passive acoustic tomography of the ocean using arrays of unknown shape. <i>Acoustical Physics</i> , 2013, 59, 170-178.	1.0	9
64	Normal mode dispersion and time warping in the coastal ocean. <i>Journal of the Acoustical Society of America</i> , 2019, 146, EL205-EL211.	1.1	9
65	Finite-amplitude acoustic-gravity waves: exact solutions. <i>Journal of Fluid Mechanics</i> , 2015, 767, 52-64.	3.4	8
66	Tomographic inversion of measured cross-correlation functions of ocean noise in shallow water using ray theory. <i>Acoustical Physics</i> , 2016, 62, 436-446.	1.0	8
67	On a modification of the wave equation for a layered medium. <i>Wave Motion</i> , 1985, 7, 515-528.	2.0	7
68	Simulations of Acoustic Imprints of Meddies in the Iberian Basin: Toward Acoustic Detection of Meddies. <i>Journal of Atmospheric and Oceanic Technology</i> , 1997, 14, 938-949.	1.3	7
69	Systematic distortions of signal propagation times in random inhomogeneous media. <i>Doklady Physics</i> , 2003, 48, 389-393.	0.7	7
70	Guided propagation of naturally occurring infrasound in the troposphere and stratosphere. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	7
71	Surface-to-volume wave conversion in shallow water with a gently sloping bottom. <i>Acoustical Physics</i> , 2007, 53, 714-720.	1.0	7
72	On the feasibility of tsunami detection using satellite-based sea surface roughness measurements. , 2010, , .		7

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73	Fermat Principle for a Nonstationary Medium. <i>Physical Review Letters</i> , 2003, 91, 044302.	7.8	6
74	Long-range correlations of microseism-band pressure fluctuations in the ocean. <i>Geophysical Journal International</i> , 2016, 206, 825-834.	2.4	6
75	Rayleigh scattering of a cylindrical sound wave by an infinite cylinder. <i>Journal of the Acoustical Society of America</i> , 2017, 142, 3613-3623.	1.1	6
76	Shear waves and sound attenuation in underwater waveguides. <i>Journal of the Acoustical Society of America</i> , 2021, 149, 3586-3598.	1.1	6
77	On sound propagation in a nonstationary ocean. <i>Doklady Physics</i> , 2002, 47, 639-642.	0.7	5
78	Stability of Acoustic Wave Fronts Propagating in Anisotropic Three-Dimensional Environments. <i>Acta Acustica United With Acustica</i> , 2009, 95, 963-974.	0.8	5
79	Physics-based characterization of soft marine sediments using vector sensors. <i>Journal of the Acoustical Society of America</i> , 2021, 149, 49-61.	1.1	5
80	Observations of acoustic noise bursts accompanying nonlinear internal gravity waves on the continental shelf off New Jersey. <i>Journal of the Acoustical Society of America</i> , 2021, 149, 1609-1622.	1.1	5
81	Detection of the 2010 Chilean tsunami using satellite altimetry. <i>Natural Hazards and Earth System Sciences</i> , 2011, 11, 2391-2406.	3.6	5
82	Passive acoustic characterization of sub-seasonal sound speed variations in a coastal ocean. <i>Journal of the Acoustical Society of America</i> , 2021, 150, 2717-2737.	1.1	5
83	An exact wave equation for sound in inhomogeneous, moving, and non-stationary fluids. , 2011, , .		4
84	Tracing Three-Dimensional Acoustic Wavefronts in Inhomogeneous, Moving Media. <i>Journal of Computational Acoustics</i> , 2014, 22, 1450002.	1.0	4
85	Shear waves in inhomogeneous, compressible fluids in a gravity field. <i>Journal of the Acoustical Society of America</i> , 2014, 135, 1071-1082.	1.1	4
86	Passive, broadband suppression of radiation of low-frequency sound. <i>Journal of the Acoustical Society of America</i> , 2018, 143, EL67-EL73.	1.1	4
87	Atmospheric resonances and their coupling to vibrations of the ground and waves in the ocean. <i>Earth, Planets and Space</i> , 2020, 72, .	2.5	4
88	Parabolic approximation in the theory of the sound propagation in three-dimensionally heterogeneous media. <i>Doklady Physics</i> , 2000, 45, 367-371.	0.7	3
89	Probability distributions of travel time and intensity of the earliest arrivals of a short pulse backscattered by a rough surface. <i>Waves in Random and Complex Media</i> , 2004, 14, 539-562.	1.5	3
90	Statistics of travel time and intensity of two first arrivals of short pulses backscattered by a rough 3D surface. <i>Waves in Random and Complex Media</i> , 2007, 17, 9-27.	2.7	3

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91	Passive ocean acoustic tomography. Doklady Earth Sciences, 2012, 444, 606-609.	0.7	3
92	Diffraction of acoustic-gravity waves in the presence of a turning point. Journal of the Acoustical Society of America, 2016, 140, 283-295.	1.1	3
93	Scattering of low frequency sound by fluid and solid cylinders. Journal of Sound and Vibration, 2018, 434, 336-357.	3.9	3
94	Bottom Attenuation Coefficient Inversion Based on the Modal Phase Difference Between Pressure and Vertical Velocity from a Single Vector Sensor. Journal of Theoretical and Computational Acoustics, 0, , 2150008.	1.1	3
95	Characterizing the seabed by using noise interferometry and time warping. Proceedings of Meetings on Acoustics, 2018, , .	0.3	3
96	On derivation of differential equations of coupled-mode propagation from the reciprocity principle (L). Journal of the Acoustical Society of America, 2003, 114, 3016-3019.	1.1	2
97	Surface-to-volume wave conversion in shallow water with a corrugated bottom. Acoustical Physics, 2008, 54, 346-352.	1.0	2
98	Rayleigh scattering of sound by spherically symmetric bodies. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
99	High Frequency Sound Fields. Springer Series on Wave Phenomena, 1999, , 193-208.	0.7	2
100	ACOUSTIC WAVEFRONT TRACING IN INHOMOGENEOUS, MOVING MEDIA. Journal of Computational Acoustics, 2012, 20, 1250009.	1.0	2
101	Contributions of gravity waves in the ocean to T-phase excitation by earthquakes. Journal of the Acoustical Society of America, 2021, 150, 3999-4017.	1.1	2
102	Studies of wave activity in the thermosphere-ionosphere system using Dynasonde techniques. , 2017, , .		1
103	Wave Propagation in a Range Dependent Waveguide. Springer Series on Wave Phenomena, 1999, , 243-360.	0.7	1
104	RECONSTRUCTION OF VERTICAL DISTRIBUTIONS OF SOUND AND FLOW VELOCITIES AT STRONG OCEANIC CURRENTS VIA INVERSION OF ACOUSTIC TRAVEL TIMES. European Physical Journal Special Topics, 1992, 02, C1-953-C1-956.	0.2	1
105	An opportunity for improved observation of ocean currents in the coastal zone. , 0, , .		0
106	Travel time and intensity statistics of the pulsed signals backscattered by a rough surface [geophysical remote-sensing applications]. , 2004, , .		0
107	Rayleigh scattering of spherical sound waves. , 2011, , .		0
108	Generation of acoustic-gravity waves by a submerged monopole source located near the water-air interface. , 2011, , .		0

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109	Fidelity of low-frequency underwater acoustic measurements by sensors mounted on compact platforms. <i>Journal of the Acoustical Society of America</i> , 2019, 146, EL405-EL411.	1.1	0
110	A Semi-Analytic, Numerically Efficient Model for Low-Frequency Sound Scattering by an Infinite Cylinder Located Near a Boundary. <i>Journal of Theoretical and Computational Acoustics</i> , 2020, 28, 2050010.	1.1	0
111	Modeling the Effects of Horizontal Refraction and Medium Non-Stationarity in Ocean Acoustics. , 2002, , 35-49.		0
112	Energy Conservation and Reciprocity for Waves in Three-Dimensionally Inhomogeneous Moving Media. <i>Springer Series on Wave Phenomena</i> , 1999, , 361-399.	0.7	0