Anthony P Lyons

List of Publications by Year
in descending order

41 papers	573 citations	758635 12 h-index	642321 23 g-index
84 all docs	84 docs citations	84 times ranked	405 citing authors

#	Article	IF	Citations
1	Development and Experimental Validation of Endfire Synthetic Aperture Sonar for Sediment Acoustics Studies. IEEE Journal of Oceanic Engineering, 2022, 47, 472-482.	2.1	1
2	Resolution dependence of rough surface scattering using a power law roughness spectrum. Journal of the Acoustical Society of America, 2021, 149, 28-48.	0.5	4
3	Direct inference of first-year sea ice thickness using broadband acoustic backscattering. Journal of the Acoustical Society of America, 2020, 147, 824-838.	0.5	2
4	Scattering statistics of rock outcrops: Model-data comparisons and Bayesian inference using mixture distributions. Journal of the Acoustical Society of America, 2019, 145, 761-774.	0.5	4
5	Matched-Filter Loss From Time-Varying Rough-Surface Reflection With a Small Effective Ensonified Area. IEEE Journal of Oceanic Engineering, 2018, 43, 506-522.	2.1	5
6	An Empirical Mode Decomposition-based detection and classification approach for marine mammal vocal signals. Journal of the Acoustical Society of America, 2018, 144, 3181-3190.	0.5	25
7	Measurements of two-dimensional spatial coherence of normal-incidence seafloor scattering. Journal of the Acoustical Society of America, 2018, 144, 2095-2108.	0.5	4
8	A metric for characterization of two-dimensional spatial coherence. Journal of the Acoustical Society of America, 2017, 142, EL313-EL318.	0.5	4
9	Measurements of high-frequency acoustic scattering from glacially eroded rock outcrops. Journal of the Acoustical Society of America, 2016, 139, 1833-1847.	0.5	6
10	Matched-filter loss from time-varying rough-surface reflection with a small ensonified area. , 2016, , .		2
11	Moment-based method to statistically categorize rock outcrops based on their topographical features. , 2015, , .		2
12	The Effect of Internal Wave-Related Features on Synthetic Aperture Sonar. IEEE Journal of Oceanic Engineering, 2015, 40, 621-631.	2.1	8
13	Scale-model scattering experiments using 3D printed representations of ocean bottom features. , 2015, , .		0
14	The Impact of the Temporal Variability of Seafloor Roughness on Synthetic Aperture Sonar Repeatâ€“Pass Interferometry. IEEE Journal of Oceanic Engineering, 2013, 38, 91-97.	2.1	20
15	The impact of finite ensonified area on the scattering cross section. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
16	Seafloor measurements using synthetic aperture sonar. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
17	Consistency in statistical moments as a test for bubble cloud clustering. Journal of the Acoustical Society of America, 2011, 130, 3396-3405.	0.5	1
18	Modeling the Effect of Seafloor Ripples on Synthetic Aperture Sonar Speckle Statistics. IEEE Journal of Oceanic Engineering, 2010, 35, 242-249.	2.1	18

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19	Editorial: Non-Rayleigh Reverberation and Clutter. IEEE Journal of Oceanic Engineering, 2010, 35, 147-151.	2.1	2
20	Measurement and modeling of seabed particle motion using buried vector sensors. IEEE Journal of Oceanic Engineering, 2010, 35, 516-537.	2.1	8
21	Reliable Methods for Estimating the K-Distribution Shape Parameter. IEEE Journal of Oceanic Engineering, 2010, 35, 288-302.	2.1	55
22	High-Frequency Scattered Envelope Statistics of Patchy Seafloors. IEEE Journal of Oceanic Engineering, 2009, 34, 451-458.	2.1	12
23	Fluid-Filled Passive Sonar Calibration Spheres: Design, Modeling, and Measurement. IEEE Journal of Oceanic Engineering, 2009, 34, 93-100.	2.1	9
24	Comparison of Seafloor Roughness and Scattered Acoustic Temporal Decorrelation. IEEE Journal of Oceanic Engineering, 2009, 34, 423-430.	2.1	5
25	Acoustic Observation of the Time Dependence of the Roughness of Sandy Seafloors. IEEE Journal of Oceanic Engineering, 2009, 34, 407-422.	2.1	13
26	Corrections to Fluid-Filled Passive Sonar Calibration Spheres: Design, Modeling, and Measurement [Jan 09 93-100]. IEEE Journal of Oceanic Engineering, 2009, 34, 202-202.	2.1	2
27	The Impact of Multipath on High-Resolution SAS Image Statistics. IEEE Journal of Oceanic Engineering, 2009, 34, 476-484.	2.1	4
28	Acoustic Propagation Through Clustered Bubble Clouds. IEEE Journal of Oceanic Engineering, 2007, 32, 513-523.	2.1	6
29	Bootstrapped K-Distribution Parameter Estimation. , 2006, , .		6
30	Shallow seabed methane gas could pose coastal hazard. Eos, 2006, 87, 213.	0.1	43
31	Roughness Spectra and Acoustic Response from a Diver-Manipulated Sea Floor. , 2006, , .		0
32	A simple model for timeâ€dependent scattering by changing seafloor roughness. Journal of the Acoustical Society of America, 2006, 120, 3180-3180.	0.5	0
33	Measurement and modeling of elliptical particle motion in the seabed. Journal of the Acoustical Society of America, 2006, 120, 3142-3142.	0.5	0
34	An estimate of the gas transfer rate from oceanic bubbles derived from multibeam sonar observations of a ship wake. Journal of Geophysical Research, 2005, 110, .	3.3	17
35	Advances in high-resolution seafloor characterization in support of high-frequency underwater acoustics studies: techniques and examples. Measurement Science and Technology, 2004, 15, R59-R72.	1.4	7
36	Normal incidence reflection loss from a sandy sediment. Journal of the Acoustical Society of America, 2002, 112, 1831-1841.	0.5	32

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37	Statistical characterization of high-frequency shallow-water seafloor backscatter. Journal of the Acoustical Society of America, 1999, 106, 1307-1315.	0.5	107
38	Predictions of the acoustic scattering response of freeâ€methane bubbles in muddy sediments. Journal of the Acoustical Society of America, 1996, 99, 163-172.	0.5	52
39	On the relative importance of refractive index fluctuations and sea surface roughness to amplitude variability in a multipath environment. Journal of the Acoustical Society of America, 1996, 100, 2702-2702.	0.5	0
40	Acoustic scattering from the seafloor: Modeling and data comparison. Journal of the Acoustical Society of America, 1994, 95, 2441-2451.	0.5	57
41	Measuring shallow-water bathymetric signal strength in lidar point attribute data using machine learning. International Journal of Geographical Information Science, 0, , 1-19.	2.2	5