

Larry Mayer

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8065240/larry-mayer-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

137
papers

7,633
citations

41
h-index

86
g-index

167
ext. papers

8,582
ext. citations

5
avg. IF

5.45
L-index

#	Paper	IF	Citations
137	Bubble vent localization for marine hydrocarbon seep surveys. <i>Interpretation</i> , 2022 , 10, SB107-SB128	1.4	1
136	Fine-scale mapping of deep-sea habitat-forming species densities reveals taxonomic specific environmental drivers. <i>Global Ecology and Biogeography</i> , 2021 , 30, 1286-1298	6.1	1
135	A deep scattering layer under the North Pole pack ice. <i>Progress in Oceanography</i> , 2021 , 194, 102560	3.8	6
134	The Holocene dynamics of Ryder Glacier and ice tongue in north Greenland. <i>Cryosphere</i> , 2021 , 15, 4073-4097	5.9	3
133	Tracking the spatiotemporal variability of the oxic–anoxic interface in the Baltic Sea with broadband acoustics. <i>ICES Journal of Marine Science</i> , 2020 , 77, 2814-2824	2.7	1
132	Basalts From the Chukchi Borderland: 40Ar/39Ar Ages and Geochemistry of Submarine Intraplate Lavas Dredged From the Western Arctic Ocean. <i>Journal of Geophysical Research: Solid Earth</i> , 2020 , 125, e2019JB017604	3.6	4
131	The effect of two 12 kHz multibeam mapping surveys on the foraging behavior of Cuvier's beaked whales off of southern California. <i>Journal of the Acoustical Society of America</i> , 2020 , 147, 3849	2.2	4
130	Mass wasting on Alpha Ridge in the Arctic Ocean: new insights from multibeam bathymetry and sub-bottom profiler data. <i>Geological Society Special Publication</i> , 2020 , 500, 323-340	1.7	2
129	Glacial sedimentation, fluxes and erosion rates associated with ice retreat in Petermann Fjord and Nares Strait, north-west Greenland. <i>Cryosphere</i> , 2020 , 14, 261-286	5.5	9
128	Applications of the Gulf of Maine Operational Forecast System to Enhance Spatio-Temporal Oceanographic Awareness for Ocean Mapping. <i>Frontiers in Marine Science</i> , 2020 , 6,	4.5	2
127	Standardized Geomorphic Classification of Seafloor Within the United States Atlantic Canyons and Continental Margin. <i>Frontiers in Marine Science</i> , 2020 , 7,	4.5	7
126	A global geographic grid system for visualizing bathymetry. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2020 , 9, 375-384	1.5	0
125	Geomorphology and microhabitats of large, isolated, immobile bedforms in the Great South Channel, Northwest Atlantic Ocean 2020 , 503-518		
124	The International Bathymetric Chart of the Arctic Ocean Version 4.0. <i>Scientific Data</i> , 2020 , 7, 176	8.2	37
123	Scientific Challenges and Present Capabilities in Underwater Robotic Vehicle Design and Navigation for Oceanographic Exploration Under-Ice. <i>Remote Sensing</i> , 2020 , 12, 2588	5	14
122	Ryder Glacier in northwest Greenland is shielded from warm Atlantic water by a bathymetric sill. <i>Communications Earth & Environment</i> , 2020 , 1,	6.1	10
121	Seafloor Mapping – The Challenge of a Truly Global Ocean Bathymetry. <i>Frontiers in Marine Science</i> , 2019 , 6,	4.5	64

120	Holocene break-up and reestablishment of the Petermann Ice Tongue, Northwest Greenland. <i>Quaternary Science Reviews</i> , 2019 , 218, 322-342	3.9	15
119	A wideband acoustic method for direct assessment of bubble-mediated methane flux. <i>Continental Shelf Research</i> , 2019 , 173, 104-115	2.4	15
118	A framework to quantify uncertainties of seafloor backscatter from swath mapping echosounders. <i>Marine Geophysical Researches</i> , 2018 , 39, 151-168	2.3	12
117	A Bathymetry- and Reflectivity-Based Approach for Seafloor Segmentation. <i>Geosciences (Switzerland)</i> , 2018 , 8, 14	2.7	17
116	The Nippon Foundation-IFMGEBCO Seabed 2030 Project: The Quest to See the World's Oceans Completely Mapped by 2030. <i>Geosciences (Switzerland)</i> , 2018 , 8, 63	2.7	148
115	Acoustic mapping of mixed layer depth 2018 ,		2
114	Acoustic mapping of mixed layer depth. <i>Ocean Science</i> , 2018 , 14, 503-514	4	7
113	Bathymetry and oceanic flow structure at two deep passages crossing the Lomonosov Ridge. <i>Ocean Science</i> , 2018 , 14, 1-13	4	12
112	An Automatic Procedure for the Quantitative Characterization of Submarine Bedforms. <i>Geosciences (Switzerland)</i> , 2018 , 8, 28	2.7	16
111	The Holocene retreat dynamics and stability of Petermann Glacier in northwest Greenland. <i>Nature Communications</i> , 2018 , 9, 2104	17.4	27
110	The De Long Trough: a newly discovered glacial trough on the East Siberian continental margin. <i>Climate of the Past</i> , 2017 , 13, 1269-1284	3.9	13
109	Post-glacial flooding of the Bering Land Bridge dated to 11 cal ka BP based on new geophysical and sediment records. <i>Climate of the Past</i> , 2017 , 13, 991-1005	3.9	60
108	BedMachine v3: Complete Bed Topography and Ocean Bathymetry Mapping of Greenland From Multibeam Echo Sounding Combined With Mass Conservation. <i>Geophysical Research Letters</i> , 2017 , 44, 11051-11061	4.9	343
107	Acoustic Mapping of Thermohaline Staircases in the Arctic Ocean. <i>Scientific Reports</i> , 2017 , 7, 15192	4.9	15
106	Glacial landforms in a hard bedrock terrain, Melville Bay, northwestern Greenland. <i>Geological Society Memoir</i> , 2016 , 46, 201-202	0.4	1
105	Cascades and plunge pools on the continental slope of the Gulf of Alaska. <i>Geological Society Memoir</i> , 2016 , 46, 389-390	0.4	0
104	Evidence for an ice shelf covering the central Arctic Ocean during the penultimate glaciation. <i>Nature Communications</i> , 2016 , 7, 10365	17.4	102
103	Mapping submarine glacial landforms using acoustic methods. <i>Geological Society Memoir</i> , 2016 , 46, 17-40.	0.4	21

102	Chatham Fan and adjacent upper Baranof Fan channels and levee, US Gulf of Alaska margin. <i>Geological Society Memoir</i> , 2016 , 46, 387-388	0.4	2
101	An ultrahigh-latitude submarine channel: Northern Chukchi Rise. <i>Geological Society Memoir</i> , 2016 , 46, 391-392	0.4	1
100	High resolution mapping of offshore and onshore glaciogenic features in metamorphic bedrock terrain, Melville Bay, northwestern Greenland. <i>Geomorphology</i> , 2015 , 250, 29-40	4.3	14
99	Inventory and comparative evaluation of seabed mapping, classification and modeling activities in the Northwest Atlantic, USA to support regional ocean planning. <i>Journal of Sea Research</i> , 2015 , 100, 133-140	1.9	4
98	First bedrock samples dredged from submarine outcrops in the Chukchi Borderland, Arctic Ocean 2015 , 11, 76-92		38
97	Arctic Ocean glacial history. <i>Quaternary Science Reviews</i> , 2014 , 92, 40-67	3.9	149
96	Evaluation of arctic multibeam sonar data quality using nadir crossover error analysis and compilation of a full-resolution data product. <i>Computers and Geosciences</i> , 2014 , 66, 228-236	4.5	4
95	Application of landscape mosaics for the assessment of subtidal macroalgae communities using the CFR index. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2014 , 106, 207-215	2.3	7
94	Acoustic estimates of methane gas flux from the seabed in a 6000 km ² region in the Northern Gulf of Mexico. <i>Geochemistry, Geophysics, Geosystems</i> , 2014 , 15, 1911-1925	3.6	60
93	Design of Nereid-UI: A remotely operated underwater vehicle for oceanographic access under ice 2014 ,		7
92	A detailed seabed signature from Hurricane Sandy revealed in bedforms and scour. <i>Geochemistry, Geophysics, Geosystems</i> , 2013 , 14, 4334-4340	3.6	21
91	Acoustic Sensing of Gas Seeps in the Deep Ocean with Split-beam Echosounders 2012 ,		4
90	Lightly tethered unmanned underwater vehicle for under-ice exploration 2012 ,		4
89	Sediment mixing in the tropical Pacific and radiolarian stratigraphy. <i>Geochemistry, Geophysics, Geosystems</i> , 2012 , 13, n/a-n/a	3.6	4
88	The International Bathymetric Chart of the Arctic Ocean (IBCAO) Version 3.0. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	716
87	Geological interpretation of a low-backscatter anomaly found on the New Jersey continental margin. <i>Marine Geology</i> , 2012 , 326-328, 46-54	3.3	9
86	Construction of seafloor thematic maps from multibeam acoustic backscatter angular response data. <i>Computers and Geosciences</i> , 2012 , 41, 181-187	4.5	32
85	Scientific basis for safely shutting in the Macondo Well after the April 20, 2010 Deepwater Horizon blowout. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 20268-73	11.5	26

84	Estimating oil concentration and flow rate with calibrated vessel-mounted acoustic echo sounders. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 20240-5	11.5	29
83	Nereid UI: A Light-Tethered Remotely Operated Vehicle for Under-Ice Telepresence 2012 ,		2
82	Sediment identification using free fall penetrometer acceleration-time histories. <i>Marine Geophysical Researches</i> , 2011 , 32, 397-411	2.3	17
81	An Arctic Ocean ice shelf during MIS 6 constrained by new geophysical and geological data. <i>Quaternary Science Reviews</i> , 2010 , 29, 3505-3517	3.9	91
80	Angular range analysis of acoustic themes from Stanton Banks Ireland: A link between visual interpretation and multibeam echosounder angular signatures. <i>Applied Acoustics</i> , 2009 , 70, 1298-1304	3.1	114
79	Measurements of acoustic backscatter and density of captive Atlantic cod with synchronized 300-kHz multibeam and 120-kHz split-beam echosounders. <i>ICES Journal of Marine Science</i> , 2009 , 66, 1303-1309 ⁸	2.7	1309 ⁸
78	An improved bathymetric portrayal of the Arctic Ocean: Implications for ocean modeling and geological, geophysical and oceanographic analyses. <i>Geophysical Research Letters</i> , 2008 , 35, n/a-n/a	4.9	359
77	Evolution of a benthic imaging system from a towed camera to an automated habitat characterization system 2008 ,		8
76	The early Miocene onset of a ventilated circulation regime in the Arctic Ocean. <i>Nature</i> , 2007 , 447, 986-990.4	5.4	175
75	Remote estimation of surficial seafloor properties through the application Angular Range Analysis to multibeam sonar data. <i>Marine Geophysical Researches</i> , 2007 , 28, 119-126	2.3	124
74	Dissolution of biogenic ooze over basement edifices in the equatorial Pacific with implications for hydrothermal ventilation of the oceanic crust. <i>Geology</i> , 2007 , 35, 679	5	25
73	Investigation of seabed fishing impacts on benthic structure using multi-beam sonar, sidescan sonar, and video. <i>ICES Journal of Marine Science</i> , 2007 , 64, 1053-1065	2.7	15
72	Geophysical insights into the Transition fault debate: Propagating strike slip in response to stalling Yakutat block subduction in the Gulf of Alaska. <i>Geology</i> , 2007 , 35, 763	5	65
71	Acoustic Positioning and Tracking in Portsmouth Harbor, New Hampshire 2007 ,		1
70	Drowned shelf-edge deltas, barrier islands and related features along the outer continental shelf north of the head of De Soto Canyon, NE Gulf of Mexico. <i>Geomorphology</i> , 2007 , 89, 370-390	4.3	43
69	High-Resolution Mapping of Mines and Ripples at the Martha's Vineyard Coastal Observatory. <i>IEEE Journal of Oceanic Engineering</i> , 2007 , 32, 133-149	3.3	24
68	Mine Burial Experiments at the Martha's Vineyard Coastal Observatory. <i>IEEE Journal of Oceanic Engineering</i> , 2007 , 32, 150-166	3.3	16
67	Deep-sea Geo-referenced Video Mosaics 2006 ,		9

66	Stratigraphic Model Predictions of Geoacoustic Properties. <i>IEEE Journal of Oceanic Engineering</i> , 2006 , 31, 266-283	3.3	6
65	Mapping supports potential submission to U.N. Law of the Sea. <i>Eos</i> , 2006 , 87, 157	1.5	28
64	Frontiers in Seafloor Mapping and Visualization. <i>Marine Geophysical Researches</i> , 2006 , 27, 7-17	2.3	65
63	Shelf-edge deltas and drowned barrier island complexes on the northwest Florida outer continental shelf. <i>Geomorphology</i> , 2005 , 64, 133-166	4.3	37
62	Detailed investigation of sorted bedforms, or ripple scoured depressions, within the Martha's Vineyard Coastal Observatory, Massachusetts. <i>Continental Shelf Research</i> , 2005 , 25, 461-484	2.4	74
61	Protocols for calibrating multibeam sonar. <i>Journal of the Acoustical Society of America</i> , 2005 , 117, 2013-2022	2.2	80
60	Multibeam bathymetric and sediment profiler evidence for ice grounding on the Chukchi Borderland, Arctic Ocean. <i>Quaternary Research</i> , 2005 , 63, 150-160	1.9	45
59	An integrated approach to flood hazard assessment on alluvial fans using numerical modeling, field mapping, and remote sensing. <i>Bulletin of the Geological Society of America</i> , 2005 , 117, 1167	3.9	48
58	Seabed characterization on the New Jersey middle and outer shelf: correlatability and spatial variability of seafloor sediment properties. <i>Marine Geology</i> , 2004 , 209, 147-172	3.3	126
57	Surface, Subsurface, and Deep Imaging: Acquisition, Processing, and Interpretation of Seismic and Acoustic Data. <i>Energy Exploration and Exploitation</i> , 2003 , 21, 303-307	2.1	
56	Paleoseismology of the Palu Lake Hazar segment of the East Anatolian Fault Zone, Turkey. <i>Tectonophysics</i> , 2003 , 374, 163-197	3.1	62
55	Geomorphology, acoustic backscatter, and processes in Santa Monica Bay from multibeam mapping. <i>Marine Environmental Research</i> , 2003 , 56, 15-46	3.3	39
54	Acoustic transducer calibration system 2003 ,		2
53	The high-frequency backscattering angular response of gassy sediments: model/data comparison from the Eel River Margin, California. <i>Journal of the Acoustical Society of America</i> , 2002 , 111, 2621-31	2.2	42
52	3D visualization for pelagic fisheries research and assessment. <i>ICES Journal of Marine Science</i> , 2002 , 59, 216-225	2.7	50
51	Commercial fishing vessels, automatic acoustic logging systems and 3D data visualization. <i>ICES Journal of Marine Science</i> , 2002 , 59, 179-189	2.7	22
50	Morphology, volcanism, and mass wasting in Crater Lake, Oregon. <i>Bulletin of the Geological Society of America</i> , 2002 , 114, 675-692	3.9	55
49	Organic carbon deposition on the North Carolina continental slope off Cape Hatteras (USA). <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2002 , 49, 4687-4709	2.3	31

48	In-Situ Determination of the Variability of Seafloor Acoustic Properties: An Example from the Onr Geoclutter Area 2002 , 115-122		9
47	Enhanced Acoustic Backscatter Due to High Abundance of Sand Dollars, <i>Dendraster excentricus</i> . <i>Marine Georesources and Geotechnology</i> , 2001 , 19, 135-145	2.2	4
46	Enhanced Acoustic Backscatter Due to High Abundance of Sand Dollars, <i>Dendraster excentricus</i> . <i>Marine Georesources and Geotechnology</i> , 2001 , 19, 135-145	2.2	2
45	Derivation of $\delta^{18}O$ from sediment core log data: Implications for millennial-scale climate change in the Labrador Sea. <i>Paleoceanography</i> , 2001 , 16, 503-514		7
44	Multibeam sonar backscatter lineaments and anthropogenic organic components in lacustrine silty clay, evidence of shipping in western Lake Ontario. <i>International Journal of Coal Geology</i> , 2000 , 43, 307-324	5.5	10
43	Microtopographic evolution of mineral surfaces as a tool to identify and date young fault scarps in bedrock. <i>Journal of Geodynamics</i> , 2000 , 29, 393-406	2.2	
42	Acoustic backscatter of the 1995 flood deposit on the Eel shelf. <i>Marine Geology</i> , 1999 , 154, 197-210	3.3	48
41	Detailed investigation of continental shelf morphology using a high-resolution swath sonar survey: the Eel margin, northern California. <i>Marine Geology</i> , 1999 , 154, 255-269	3.3	69
40	High-resolution swath sonar investigation of sand ridge, dune and ribbon morphology in the offshore environment of the New Jersey margin. <i>Marine Geology</i> , 1999 , 161, 307-337	3.3	85
39	Data structures for fast searching of SEG-Y seismic data. <i>Computers and Geosciences</i> , 1999 , 25, 179-190	4.5	6
38	Active tectonics of the Loreto area, Baja California Sur, Mexico. <i>Geomorphology</i> , 1999 , 27, 243-255	4.3	20
37	Modelling of PliocenePleistocene abyssal mudwaves using synthetic seismograms. <i>Marine Geology</i> , 1998 , 149, 3-16	3.3	3
36	Core-log-seismic integration as a framework for determining the basin-wide significance of regional reflectors in the eastern equatorial Pacific. <i>Geophysical Research Letters</i> , 1997 , 24, 321-324	4.9	12
35	Three-dimensional visualization of orbital forcing and climatic response: Interactively exploring the pacemaker of the ice ages. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996 , 85, 505-512		5
34	Shallow-water imaging multibeam sonars: A new tool for investigating seafloor processes in the coastal zone and on the continental shelf. <i>Marine Geophysical Researches</i> , 1996 , 18, 607-629	2.3	157
33	Three-dimensional visualization of orbital forcing and climatic response: interactively exploring the pacemaker of the ice ages. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996 , 85, 505		1
32	Swath Mapping on the Continental Shelf and Slope: The Eel River Basin, Northern California. <i>Oceanography</i> , 1996 , 9, 178-182	2.3	13
31	Yin and Yang of mucosal immunology. <i>Transplantation Proceedings</i> , 1996 , 28, 2435-7	1.1	1

30	Stratigraphy and paleolimnologic record of lower Holocene sediments in northern Lake Huron and Georgian Bay. <i>Canadian Journal of Earth Sciences</i> , 1994 , 31, 1586-1605	1.5	49
29	Effect of storm clustering on water balance estimates and its implications for climate impact assessment. <i>Climatic Change</i> , 1994 , 27, 321-342	4.5	
28	Lakes of the Huron basin: their record of runoff from the Laurentide ice sheet. <i>Quaternary Science Reviews</i> , 1994 , 13, 891-922	3.9	76
27	Seismic stratigraphy of Lake Huron & Georgian Bay and postglacial lake level history. <i>Canadian Journal of Earth Sciences</i> , 1994 , 31, 1606-1617	1.5	38
26	Great Lakes paleohydrology: Complex interplay of glacial meltwater, lake levels, and sill depths. <i>Geology</i> , 1994 , 22, 1059	5	45
25	Acoustic properties of fine-grained sediments from Emerald Basin: Toward an inversion for physical properties using the Biot-Stoll model. <i>Journal of the Acoustical Society of America</i> , 1993 , 93, 3193-3200	2.2	12
24	WBANDZ: A C program to calibrate the hydrologic model and calculate monthly water balance and Palmer's Z-index. <i>Computers and Geosciences</i> , 1993 , 19, 1267-1283	4.5	1
23	Calculation of acoustic parameters by a filter-correlation method. <i>Journal of the Acoustical Society of America</i> , 1993 , 93, 1145-1154	2.2	18
22	Marine sediment classification using the chirp sonar. <i>Journal of the Acoustical Society of America</i> , 1992 , 91, 107-115	2.2	78
21	Fractal characteristics of desert storm sequences and implications for geomorphic studies. <i>Geomorphology</i> , 1992 , 5, 167-183	4.3	8
20	Downhole Logging as a Paleooceanographic Tool on Ocean Drilling Program Leg 138: Interface Between High-Resolution Stratigraphy and Regional Syntheses. <i>Paleoceanography</i> , 1992 , 7, 691-700		5
19	Extraction of high-resolution carbonate data for palaeoclimate reconstruction. <i>Nature</i> , 1991 , 352, 148-150.	5.4	53
18	Large-scale current-induced erosion and deposition in the path of the 1929 Grand Banks turbidity current. <i>Sedimentology</i> , 1990 , 37, 613-629	3.3	93
17	Giant flute-like scour and other erosional features formed by the 1929 Grand Banks turbidity current. <i>Sedimentology</i> , 1990 , 37, 631-645	3.3	52
16	Elevated circulating levels of tumor necrosis factor in severe chronic heart failure. <i>New England Journal of Medicine</i> , 1990 , 323, 236-41	59.2	2074
15	Contributions from the oceanic record to the study of global change on three time scales Report of working group 1, interlaken workshop for past global changes. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 1990 , 82, 5-37	2.9	2
14	Chirp subbottom profiler for quantitative sediment analysis. <i>Geophysics</i> , 1989 , 54, 445-450	3.1	83
13	The morphology and tectonics of the Mark area from Sea Beam and Sea MARC I observations (Mid-Atlantic Ridge 23°N). <i>Marine Geophysical Researches</i> , 1988 , 10, 59-90	2.3	137

12	Dense biological communities at 3850 m on the Laurentian Fan and their relationship to the deposits of the 1929 Grand Banks earthquake. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1988 , 35, 1235-1246		63
11	Cenozoic paleoceanography 1986: An introduction. <i>Paleoceanography</i> , 1987 , 2, 613-623		4
10	Teaching the Use of Geological Equipment with a Microcomputer. <i>Journal of Geoscience Education</i> , 1987 , 35, 266-270		2
9	Comments and Replies on Use of packrat middens to determine rates of cliff retreat in the eastern Grand Canyon, Arizona <i>Geology</i> , 1983 , 11, 314	5	
8	Use of packrat middens to determine rates of cliff retreat in the eastern Grand Canyon, Arizona. <i>Geology</i> , 1982 , 10, 597	5	16
7	Erosional troughs in deep-sea carbonates and their relationship to basement structure. <i>Marine Geology</i> , 1981 , 39, 59-80	3.3	19
6	Exceptionally strong near-bottom flows on the continental rise of nova scotia. <i>Science</i> , 1981 , 213, 887-833.3		92
5	Deep-sea carbonates: Physical property relationships and the origin of high-frequency acoustic reflectors. <i>Marine Geology</i> , 1980 , 38, 165-183	3.3	30
4	Furrowed mud waves on the western Bermuda Rise. <i>Bulletin of the Geological Society of America</i> , 1980 , 91, 731	3.9	34
3	Hydraulic piston coring of late Neogene and Quaternary sections in the Caribbean and equatorial Pacific: Preliminary results of Deep Sea Drilling Project Leg 68. <i>Bulletin of the Geological Society of America</i> , 1980 , 91, 433	3.9	12
2	The origin of fine scale acoustic stratigraphy in deep-sea carbonates. <i>Journal of Geophysical Research</i> , 1979 , 84, 6177		32
1	Deep-sea image processing		5