Veerle A.I. Huvenne

List of Publications by Year
in descending order

103 papers	6,059 citations	71061 41 h-index	79644 73 g-index
108 all docs	108 docs citations	108 times ranked	5577 citing authors

#	Article	IF	Citations
1	Autonomous Underwater Vehicles (AUVs): Their past, present and future contributions to the advancement of marine geoscience. Marine Geology, 2014, 352, 451-468.	0.9	669
2	Marine Litter Distribution and Density in European Seas, from the Shelves to Deep Basins. PLoS ONE, 2014, 9, e95839.	1.1	495
3	The Discovery of New Deep-Sea Hydrothermal Vent Communities in the Southern Ocean and Implications for Biogeography. PLoS Biology, 2012, 10, e1001234.	2.6	225
4	Morphology and environment of cold-water coral carbonate mounds on the NW European margin. International Journal of Earth Sciences, 2007, 96, 37-56.	0.9	191
5	Ecological Role of Submarine Canyons and Need for Canyon Conservation: A Review. Frontiers in Marine Science, 2017, 4, .	1.2	160
6	A Picture on the Wall: Innovative Mapping Reveals Cold-Water Coral Refuge in Submarine Canyon. PLoS ONE, 2011, 6, e28755.	1.1	150
7	Seafloor Mapping â€“ The Challenge of a Truly Global Ocean Bathymetry. Frontiers in Marine Science, 2019, 6, .	1.2	140
8	Litter in submarine canyons off the west coast of Portugal. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 2489-2496.	0.6	136
9	A multi-method approach for benthic habitat mapping of shallow coastal areas with high-resolution multibeam data. Continental Shelf Research, 2012, 39-40, 14-26.	0.9	134
10	Effectiveness of a deep-sea cold-water coral Marine Protected Area, following eight years of fisheries closure. Biological Conservation, 2016, 200, 60-69.	1.9	126
11	Textural analyses of sidescan sonar imagery from two mound provinces in the Porcupine Seabight. Marine Geology, 2002, 189, 323-341.	0.9	113
12	Geomorphology and sedimentary features in the Central Portuguese submarine canyons, Western Iberian margin. Geomorphology, 2009, 103, 310-329.	1.1	111
13	Using 3D photogrammetry from ROV video to quantify cold-water coral reef structural complexity and investigate its influence on biodiversity and community assemblage. Coral Reefs, 2019, 38, 1007-1021.	0.9	97
14	Abyssal hills â€“ hidden source of increased habitat heterogeneity, benthic megafaunal biomass and diversity in the deep sea. Progress in Oceanography, 2015, 137, 209-218.	1.5	92
15	Mingulay reef complex: an interdisciplinary study of cold-water coral habitat, hydrography and biodiversity. Marine Ecology - Progress Series, 2009, 397, 139-151.	0.9	88
16	Europeâ€™s Grand Canyon: NazarÃ© Submarine Canyon. Oceanography, 2009, 22, 46-57.	0.5	86
17	A 3D seismic study of the morphology and spatial distribution of buried coral banks in the Porcupine Basin, SW of Ireland. Marine Geology, 2003, 198, 5-25.	0.9	85
18	Megafaunal variation in the abyssal landscape of the Clarion Clipperton Zone. Progress in Oceanography, 2019, 170, 119-133.	1.5	84

#	Article	IF	Citations
19	Ecology of a polymetallic nodule occurrence gradient: Implications for deepâ€sea mining. Limnology and Oceanography, 2019, 64, 1883-1894.	1.6	82
20	Biological effects 26 years after simulated deep-sea mining. Scientific Reports, 2019, 9, 8040.	1.6	81
21	New insights into the morphology, fill, and remarkable longevity (>0.2 m.y.) of modern deep-water erosional scours along the northeast Atlantic margin. , 2011, 7, 845-867.		80
22	Microdistribution of Faunal Assemblages at Deep-Sea Hydrothermal Vents in the Southern Ocean. PLoS ONE, 2012, 7, e48348.	1.1	79
23	Acquisition and processing of backscatter data for habitat mapping â€“ Comparison of multibeam and sidescan systems. Applied Acoustics, 2009, 70, 1248-1257.	1.7	77
24	A new method for ecological surveying of the abyss using autonomous underwater vehicle photography. Limnology and Oceanography: Methods, 2014, 12, 795-809.	1.0	76
25	Autonomous marine environmental monitoring: Application in decommissioned oil fields. Science of the Total Environment, 2019, 668, 835-853.	3.9	76
26	Species replacement dominates megabenthos beta diversity in a remote seamount setting. Scientific Reports, 2018, 8, 4152.	1.6	72
27	The Whittard Canyon â€“ A case study of submarine canyon processes. Progress in Oceanography, 2016, 146, 38-57.	1.5	68
28	A refreshing 3D view of an ancient sediment collapse and slope failure. Terra Nova, 2002, 14, 33-40.	0.9	67
29	Efficient burial of carbon in a submarine canyon. Geology, 2010, 38, 831-834.	2.0	65
30	Ice-rafting from the Britishâ€“Irish ice sheet since the earliest Pleistocene (2.6 million years ago): implications for long-term mid-latitudinal ice-sheet growth in the North Atlantic region. Quaternary Science Reviews, 2012, 44, 229-240.	1.4	63
31	The West Melilla cold water coral mounds, Eastern Alboran Sea: Morphological characterization and environmental context. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 99, 316-326.	0.6	63
32	Composition of hydrothermal fluids and mineralogy of associated chimney material on the East Scotia Ridge back-arc spreading centre. Geochimica Et Cosmochimica Acta, 2014, 139, 47-71.	1.6	61
33	Finding the hotspots within a biodiversity hotspot: fineâ€scale biological predictions within a submarine canyon using highâ€resolution acoustic mapping techniques. Marine Ecology, 2015, 36, 1256-1276.	0.4	59
34	Ecological characterisation of a Mediterranean cold-water coral reef: Cabliers Coral Mound Province (Alboran Sea, western Mediterranean). Progress in Oceanography, 2019, 175, 245-262.	1.5	59
35	The Magellan mound province in the Porcupine Basin. International Journal of Earth Sciences, 2007, 96, 85-101.	0.9	55
36	Sediment dynamics of a sandy contourite: the sedimentary context of the Darwin cold-water coral mounds, Northern Rockall Trough. International Journal of Earth Sciences, 2009, 98, 865-884.	0.9	54

#	Article	IF	Citations
37	Negative Priming Effect on Organic Matter Mineralisation in NE Atlantic Slope Sediments. PLoS ONE, 2013, 8, e67722.	1.1	52
38	Tidal downwelling and implications for the carbon biogeochemistry of coldâ€water corals in relation to future ocean acidification and warming. Global Change Biology, 2013, 19, 2708-2719.	4.2	51
39	Improving predictive mapping of deep-water habitats: Considering multiple model outputs and ensemble techniques. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 113, 80-89.	0.6	51
40	New approaches to high-resolution mapping of marine vertical structures. Scientific Reports, 2017, 7, 9005.	1.6	50
41	Objective automated classification technique for marine landscape mapping in submarine canyons. Marine Geology, 2015, 362, 17-32.	0.9	47
42	Improving the predictive capability of benthic species distribution models by incorporating oceanographic data â€“ Towards holistic ecological modelling of a submarine canyon. Progress in Oceanography, 2020, 184, 102338.	1.5	45
43	Cold-water coral carbonate mounds as unique palaeo-archives: the Plio-Pleistocene Challenger Mound record (NE Atlantic). Quaternary Science Reviews, 2013, 73, 14-30.	1.4	43
44	Landscape-scale spatial heterogeneity in phytodetrital cover and megafauna biomass in the abyss links to modest topographic variation. Scientific Reports, 2016, 6, 34080.	1.6	42
45	The 2.6 Ma depositional sequence from the Challenger cold-water coral carbonate mound (IODP Exp.) Tj ETQq1 1 0.784314 rgBT /Ov 260-277.	0.9	39
46	The effect of local hydrodynamics on the spatial extent and morphology of cold-water coral habitats at Tisler Reef, Norway. Coral Reefs, 2018, 37, 253-266.	0.9	39
47	Towards improved monitoring of offshore carbon storage: A real-world field experiment detecting a controlled sub-seafloor CO2 release. International Journal of Greenhouse Gas Control, 2021, 106, 103237.	2.3	39
48	The Moira Mounds, small cold-water coral mounds in the Porcupine Seabight, NE Atlantic: Part Bâ€"Evaluating the impact of sediment dynamics through high-resolution ROV-borne bathymetric mapping. Marine Geology, 2011, 282, 65-78.	0.9	38
49	Using novel acoustic and visual mapping tools to predict the small-scale spatial distribution of live biogenic reef framework in cold-water coral habitats. Coral Reefs, 2017, 36, 255-268.	0.9	38
50	Cold-water coral mounds in an erosive environmental setting: TOBI side-scan sonar data and ROV video footage from the northwest Porcupine Bank, NE Atlantic. Marine Geology, 2009, 264, 218-229.	0.9	37
51	A Multidisciplinary Approach for Generating Globally Consistent Data on Mesophotic, Deep-Pelagic, and Bathyal Biological Communities. Oceanography, 2018, 31, .	0.5	36
52	Environment, ecology, and potential effectiveness of an area protected from deep-sea mining (Clarion) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.5	36
53	The Moira Mounds, small cold-water coral banks in the Porcupine Seabight, NE Atlantic: Part Aâ€"an early stage growth phase for future coral carbonate mounds?. Marine Geology, 2011, 282, 53-64.	0.9	35
54	Megafaunal distribution and biodiversity in a heterogeneous landscape: the iceberg-scoured Rockall Bank, NE Atlantic. Marine Ecology - Progress Series, 2014, 501, 67-88.	0.9	35

#	Article	IF	Citations
55	Getting the bigger picture: Using precision Remotely Operated Vehicle (ROV) videography to acquire high-definition mosaic images of newly discovered hydrothermal vents in the Southern Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2013, 92, 124-135.	0.6	34
56	The biogeochemical impact of glacial meltwater from Southwest Greenland. Progress in Oceanography, 2019, 176, 102126.	1.5	34
57	Environmental setting of deep-water oysters in the Bay of Biscay. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 1561-1572.	0.6	33
58	Sediment community responses to marine vs. terrigenous organic matter in a submarine canyon. Biogeosciences, 2013, 10, 67-80.	1.3	33
59	The Diversity and Ecological Role of Non-scleractinian Corals (Antipatharia and Alcyonacea) on Scleractinian Cold-Water Coral Mounds. Frontiers in Marine Science, 2019, 6, .	1.2	31
60	Assessing the Repeatability of Automated Seafloor Classification Algorithms, with Application in Marine Protected Area Monitoring. Remote Sensing, 2020, 12, 1572.	1.8	31
61	ROVs and AUVs. Springer Geology, 2018, , 93-108.	0.2	31
62	Influence of benthic sediment transport on coldâ€water coral bank morphology and growth: the example of the Darwin Mounds, northâ€east Atlantic. Sedimentology, 2008, 55, 1875-1887.	1.6	30
63	On the ecological relevance of landscape mapping and its application in the spatial planning of very large marine protected areas. Science of the Total Environment, 2018, 626, 384-398.	3.9	29
64	Monitoring mosaic biotopes in a marine conservation zone by autonomous underwater vehicle. Conservation Biology, 2019, 33, 1174-1186.	2.4	28
65	Sedimentology and depositional history of Holocene sandy contourites on the lower slope of the Faroeâ€“Shetland Channel, northwest of the UK. Marine Geology, 2010, 268, 85-96.	0.9	27
66	Partly standing internal tides in a dendritic submarine canyon observed by an ocean glider. Deep-Sea Research Part I: Oceanographic Research Papers, 2017, 126, 73-84.	0.6	27
67	New insights on coral mound development from groundtruthed high-resolution ROV-mounted multibeam imaging. Marine Geology, 2018, 403, 225-237.	0.9	27
68	Sedimentary processes in the middle NazarÃ© Canyon. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 2369-2387.	0.6	26
69	Landscape mapping at sub-Antarctic South Georgia provides a protocol for underpinning large-scale marine protected areas. Scientific Reports, 2016, 6, 33163.	1.6	26
70	Geochemical and Visual Indicators of Hydrothermal Fluid Flow through a Sediment-Hosted Volcanic Ridge in the Central Bransfield Basin (Antarctica). PLoS ONE, 2013, 8, e54686.	1.1	26
71	The Enya mounds: a lost mound-drift competition. International Journal of Earth Sciences, 2009, 98, 849-863.	0.9	25
72	Geomorphological evidence of large vertebrates interacting with the seafloor at abyssal depths in a region designated for deep-sea mining. Royal Society Open Science, 2018, 5, 180286.	1.1	24

#	Article	IF	Citations
73	Reconstruction of the formation history of the Darwin Mounds, N Rockall Trough: How the dynamics of a sandy contourite affected cold-water coral growth. Marine Geology, 2016, 378, 186-195.	0.9	23
74	Canyons pride and prejudice: Exploring the submarine canyon research landscape, a history of geographic and thematic bias. Progress in Oceanography, 2018, 169, 6-19.	1.5	21
75	A method of estimating the form of fine particulates. Geotechnique, 2009, 59, 503-511.	2.2	18
76	Bringing seascape ecology to the deep seabed: A review and framework for its application. Limnology and Oceanography, 2022, 67, 66-88.	1.6	18
77	Cold-water coral banks and submarine landslides: a review. International Journal of Earth Sciences, 2009, 98, 885-899.	0.9	17
78	Mapping Giant Scours in the Deep Ocean. Eos, 2009, 90, 274-275.	0.1	17
79	Quantifying spatial heterogeneity in submarine canyons. Progress in Oceanography, 2018, 169, 181-198.	1.5	17
80	Coldâ€water coral assemblages on vertical walls from the Northeast Atlantic. Diversity and Distributions, 2020, 26, 284-298.	1.9	17
81	Submarine Canyons and Gullies. Springer Geology, 2018, , 251-272.	0.2	17
82	Suitability analysis and revised strategies for marine environmental carbon capture and storage (CCS) monitoring. International Journal of Greenhouse Gas Control, 2021, 112, 103510.	2.3	17
83	The sediment composition and predictive mapping of facies on the Propeller Moundâ€"A cold-water coral mound (Porcupine Seabight, NE Atlantic). Continental Shelf Research, 2010, 30, 1814-1829.	0.9	16
84	The importance of the terrigenous fraction within a cold-water coral mound: A case study. Marine Geology, 2011, 282, 13-25.	0.9	15
85	Fauna of the Kemp Caldera and its upper bathyal hydrothermal vents (South Sandwich Arc,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.1	15
86	Fine-Scale Heterogeneity of a Cold-Water Coral Reef and Its Influence on the Distribution of Associated Taxa. Frontiers in Marine Science, 2021, 8, .	1.2	14
87	Ongoing evolution of submarine canyon rockwalls; examples from the Whittard Canyon, Celtic Margin (NE Atlantic). Progress in Oceanography, 2018, 169, 79-88.	1.5	13
88	Bidirectional bedform fields at the head of a submarine canyon (NE Atlantic). Earth and Planetary Science Letters, 2020, 542, 116321.	1.8	12
89	Novel Method to Map the Morphology of Submarine Landslide Headwall Scarps Using Remotely Operated Vehicles. Advances in Natural and Technological Hazards Research, 2016, , 135-144.	1.1	9
90	Challenging the highstand-dormant paradigm for land-detached submarine canyons. Nature Communications, 2022, 13, .	5.8	9

#	Article	IF	Citations
91	15 Habitat Mapping of Cold-Water Corals in the Mediterranean Sea. Coral Reefs of the World, 2019, , 157-171.	0.3	8
92	Efficient marine environmental characterisation to support monitoring of geological CO2 storage. International Journal of Greenhouse Gas Control, 2021, 109, 103388.	2.3	8
93	Quantifying the Intra-Habitat Variation of Seagrass Beds with Unoccupied Aerial Vehicles (UAVs). Remote Sensing, 2022, 14, 480.	1.8	8
94	On the Timing and Nature of the Multiple Phases of Slope Instability on Eastern Rockall Bank, Northeast Atlantic. Geochemistry, Geophysics, Geosystems, 2019, 20, 594-613.	1.0	6
95	AURORA, a multi-sensor dataset for robotic ocean exploration. International Journal of Robotics Research, 2022, 41, 461-469.	5.8	6
96	Habitat Heterogeneity in the NazarÃ© Deep-Sea Canyon Offshore Portugal. , 2012, , 691-701.		4
97	Linkages between sediment thickness, geomorphology and Mn nodule occurrence: New evidence from AUV geophysical mapping in the Clarion-Clipperton Zone. Deep-Sea Research Part I: Oceanographic Research Papers, 2022, 179, 103645.	0.6	4
98	Tracing Glacial Meltwater From the Greenland Ice Sheet to the Ocean Using Gliders. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017274.	1.0	3
99	High-Resolution Vertical Habitat Mapping of a Deep-Sea Cliff Offshore Greenland. Frontiers in Marine Science, 2021, 8, .	1.2	2
100	Geomorphological drivers of deeper reef habitats around Seychelles. Coral Reefs, 2022, 41, 1001-1016.	0.9	2
101	Broadscale Landscape Mapping Provides Insight into the Commonwealth of Dominica and Surrounding Islands Offshore Environment. Remote Sensing, 2022, 14, 1820.	1.8	1
102	Submarine Canyons. , 2021, , .		0
103	EUROpean Deep Ocean Margins (EuroDOM): A New Training-Through-Research Frontier. Oceanography, 2004, 17, 156-165.	0.5	0