

J Murray Roberts

List of Publications by Year in descending order

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Version: 2024-02-01

112
papers

6,311
citations

94433

37
h-index

82547

72
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120
all docs

120
docs citations

120
times ranked

3798
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Reefs of the Deep: The Biology and Geology of Cold-Water Coral Ecosystems. <i>Science</i> , 2006, 312, 543-547. | 12.6 | 844 |
| 2 | Major impacts of climate change on deep-sea benthic ecosystems. <i>Elementa</i> , 2017, 5, . | 3.2 | 252 |
| 3 | Downwelling and deep-water bottom currents as food supply mechanisms to the cold-water coral <i>Lophelia pertusa</i> (Scleractinia) at the Mingulay Reef Complex. <i>Limnology and Oceanography</i> , 2009, 54, 620-629. | 3.1 | 249 |
| 4 | Predicting suitable habitat for the cold-water coral <i>Lophelia pertusa</i> (Scleractinia). <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2008, 55, 1048-1062. | 1.4 | 246 |
| 5 | Biodiversity and ecological composition of macrobenthos on cold-water coral mounds and adjacent off-mound habitat in the bathyal Porcupine Seabight, NE Atlantic. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2007, 54, 654-672. | 1.4 | 241 |
| 6 | Metabolic tolerance of the cold-water coral <i>Lophelia pertusa</i> (Scleractinia) to temperature and dissolved oxygen change. <i>Journal of Experimental Marine Biology and Ecology</i> , 2007, 349, 205-214. | 1.5 | 207 |
| 7 | Preserving deep-sea natural heritage: Emerging issues in offshore conservation and management. <i>Biological Conservation</i> , 2007, 138, 299-312. | 4.1 | 205 |
| 8 | The occurrence of the cold-water coral <i>Lophelia pertusa</i> (Scleractinia) on oil and gas platforms in the North Sea: Colony growth, recruitment and environmental controls on distribution. <i>Marine Pollution Bulletin</i> , 2006, 52, 549-559. | 5.0 | 148 |
| 9 | Acoustic mapping using a multibeam echosounder reveals cold-water coral reefs and surrounding habitats. <i>Coral Reefs</i> , 2005, 24, 654-669. | 2.2 | 131 |
| 10 | Corals in deep-water: will the unseen hand of ocean acidification destroy cold-water ecosystems?. <i>Coral Reefs</i> , 2007, 26, 445-448. | 2.2 | 130 |
| 11 | Role of cold-water <i>Lophelia pertusa</i> coral reefs as fish habitat in the NE Atlantic. , 2005, , 771-805. | | 111 |
| 12 | Climate-induced changes in the suitable habitat of cold-water corals and commercially important deep-sea fishes in the North Atlantic. <i>Global Change Biology</i> , 2020, 26, 2181-2202. | 9.5 | 109 |
| 13 | Hidden impacts of ocean acidification to live and dead coral framework. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20150990. | 2.6 | 102 |
| 14 | Cold-water corals in a changing ocean. <i>Current Opinion in Environmental Sustainability</i> , 2014, 7, 118-126. | 6.3 | 92 |
| 15 | The cold-water coral <i>Lophelia pertusa</i> (Scleractinia) and enigmatic seabed mounds along the north-east Atlantic margin: are they related?. <i>Marine Pollution Bulletin</i> , 2003, 46, 7-20. | 5.0 | 90 |
| 16 | Northeastern Atlantic cold-water coral reefs and climate. <i>Geology</i> , 2011, 39, 743-746. | 4.4 | 88 |
| 17 | Mingulay reef complex: an interdisciplinary study of cold-water coral habitat, hydrography and biodiversity. <i>Marine Ecology - Progress Series</i> , 2009, 397, 139-151. | 1.9 | 88 |
| 18 | Lipid biomarkers reveal geographical differences in food supply to the cold-water coral <i>Lophelia pertusa</i> (Scleractinia). <i>Marine Ecology - Progress Series</i> , 2009, 397, 113-124. | 1.9 | 87 |

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|----|--|-----|-----------|
| 19 | Short-term metabolic and growth responses of the cold-water coral <i>Lophelia pertusa</i> to ocean acidification. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2014, 99, 27-35. | 1.4 | 84 |
| 20 | Lipids and nitrogen isotopes of two deep-water corals from the North-East Atlantic: initial results and implications for their nutrition. , 2005, , 715-729. | | 81 |
| 21 | Cold-water coral reef frameworks, megafaunal communities and evidence for coral carbonate mounds on the Hatton Bank, north east Atlantic. <i>Facies</i> , 2008, 54, 297-316. | 1.4 | 79 |
| 22 | Global Observational Needs and Resources for Marine Biodiversity. <i>Frontiers in Marine Science</i> , 2019, 6, . | 2.5 | 77 |
| 23 | Cold-water coral reef habitats benefit recreationally valuable sharks. <i>Biological Conservation</i> , 2013, 161, 67-70. | 4.1 | 73 |
| 24 | The effect of flow speed and food size on the capture efficiency and feeding behaviour of the cold-water coral <i>Lophelia pertusa</i> . <i>Journal of Experimental Marine Biology and Ecology</i> , 2016, 481, 34-40. | 1.5 | 70 |
| 25 | Mainstreaming marine biodiversity into the SDGs: The role of other effective area-based conservation measures (SDG 14.5). <i>Marine Policy</i> , 2018, 93, 251-261. | 3.2 | 67 |
| 26 | Title is missing!. <i>Hydrobiologia</i> , 2000, 441, 173-183. | 2.0 | 65 |
| 27 | Sensitivity of marine protected area network connectivity to atmospheric variability. <i>Royal Society Open Science</i> , 2016, 3, 160494. | 2.4 | 64 |
| 28 | Monitoring environmental variability around cold-water coral reefs: the use of a benthic photolander and the potential of seafloor observatories. , 2005, , 483-502. | | 61 |
| 29 | Physiological response of the cold-water coral <i>Desmophyllum dianthus</i> to thermal stress and ocean acidification. <i>PeerJ</i> , 2016, 4, e1606. | 2.0 | 59 |
| 30 | Ocean sprawl facilitates dispersal and connectivity of protected species. <i>Scientific Reports</i> , 2018, 8, 11346. | 3.3 | 57 |
| 31 | Tidal downwelling and implications for the carbon biogeochemistry of cold-water corals in relation to future ocean acidification and warming. <i>Global Change Biology</i> , 2013, 19, 2708-2719. | 9.5 | 51 |
| 32 | Improving predictive mapping of deep-water habitats: Considering multiple model outputs and ensemble techniques. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2016, 113, 80-89. | 1.4 | 51 |
| 33 | Global ocean conveyor lowers extinction risk in the deep sea. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2014, 88, 8-16. | 1.4 | 50 |
| 34 | Do bottom-intensified diurnal tidal currents shape the alignment of carbonate mounds in the NE Atlantic?. <i>Geo-Marine Letters</i> , 2007, 27, 391-397. | 1.1 | 49 |
| 35 | Beta diversity of cold-water coral reef communities off western Scotland. <i>Coral Reefs</i> , 2010, 29, 427-436. | 2.2 | 49 |
| 36 | Growth of north-east Atlantic cold-water coral reefs and mounds during the Holocene: A high resolution U-series and ¹⁴ C chronology. <i>Earth and Planetary Science Letters</i> , 2013, 375, 176-187. | 4.4 | 45 |

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|----|--|-----|-----------|
| 37 | Reef-aggregating behaviour by symbiotic eunicid polychaetes from cold-water corals: do worms assemble reefs?. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2005, 85, 813-819. | 0.8 | 44 |
| 38 | Multi-scale interactions between local hydrography, seabed topography, and community assembly on cold-water coral reefs. <i>Biogeosciences</i> , 2013, 10, 2737-2746. | 3.3 | 44 |
| 39 | Fine-scale nutrient and carbonate system dynamics around cold-water coral reefs in the northeast Atlantic. <i>Scientific Reports</i> , 2014, 4, 3671. | 3.3 | 44 |
| 40 | Characterization and Mapping of a Deep-Sea Sponge Ground on the Tropic Seamount (Northeast) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2019, 6, . | 2.5 | 43 |
| 41 | Benthic O ₂ uptake of two cold-water coral communities estimated with the non-invasive eddy correlation technique. <i>Marine Ecology - Progress Series</i> , 2015, 525, 97-104. | 1.9 | 43 |
| 42 | The effect of local hydrodynamics on the spatial extent and morphology of cold-water coral habitats at Tisler Reef, Norway. <i>Coral Reefs</i> , 2018, 37, 253-266. | 2.2 | 39 |
| 43 | Using novel acoustic and visual mapping tools to predict the small-scale spatial distribution of live biogenic reef framework in cold-water coral habitats. <i>Coral Reefs</i> , 2017, 36, 255-268. | 2.2 | 38 |
| 44 | Data challenges and opportunities for environmental management of North Sea oil and gas decommissioning in an era of blue growth. <i>Marine Policy</i> , 2018, 97, 130-138. | 3.2 | 38 |
| 45 | Behavioural differences in microhabitat use by damselfishes (Pomacentridae): implications for reef fish biodiversity. <i>Journal of Experimental Marine Biology and Ecology</i> , 1996, 202, 85-95. | 1.5 | 37 |
| 46 | The Occurrence of the Coral &Lophelia pertusa& and Other Conspicuous Epifauna around an Oil Platform in the North Sea. <i>Underwater Technology</i> , 2002, 25, 83-92. | 0.3 | 37 |
| 47 | Historic scale and persistence of drill cuttings impacts on North Sea benthos. <i>Marine Environmental Research</i> , 2017, 129, 219-228. | 2.5 | 37 |
| 48 | Larval behaviour, dispersal and population connectivity in the deep sea. <i>Scientific Reports</i> , 2020, 10, 10675. | 3.3 | 37 |
| 49 | Primary site and initial products of ammonium assimilation in the symbiotic sea anemone <i>Anemonia viridis</i> . <i>Marine Biology</i> , 1999, 135, 223-236. | 1.5 | 36 |
| 50 | Baseline Assessment of Marine Litter and Microplastic Ingestion by Cold-Water Coral Reef Benthos at the East Mingulay Marine Protected Area (Sea of the Hebrides, Western Scotland). <i>Frontiers in Marine Science</i> , 2019, 6, . | 2.5 | 36 |
| 51 | Crumbling Reefs and Cold-Water Coral Habitat Loss in a Future Ocean: Evidence of 'Coral porosis' as an Indicator of Habitat Integrity. <i>Frontiers in Marine Science</i> , 2020, 7, . | 2.5 | 36 |
| 52 | Biodiversity of Spongosorites coralliophaga (Stephens, 1915) on coral rubble at two contrasting cold-water coral reef settings. <i>Coral Reefs</i> , 2016, 35, 193-208. | 2.2 | 34 |
| 53 | Global Biodiversity in Cold-Water Coral Reef Ecosystems. , 2017, , 235-256. | | 34 |
| 54 | Self-recognition in corals facilitates deep-sea habitat engineering. <i>Scientific Reports</i> , 2014, 4, 6782. | 3.3 | 33 |

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|----|---|-----|-----------|
| 55 | Fish communities associated with cold-water corals vary with depth and substratum type. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 114, 43-54. | 1.4 | 32 |
| 56 | The Diversity and Ecological Role of Non-scleractinian Corals (Antipatharia and Alcyonacea) on Scleractinian Cold-Water Coral Mounds. Frontiers in Marine Science, 2019, 6, . | 2.5 | 31 |
| 57 | Changes in fossil assemblage in sediment cores from Mingulay Reef Complex (NE Atlantic): Implications for coral reef build-up. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 99, 286-296. | 1.4 | 30 |
| 58 | 18O/16O and 13C/12C in an ahermatypic deep-water coral <i>Lophelia pertusa</i> from the North Atlantic: a case of disequilibrium isotope fractionation. Rapid Communications in Mass Spectrometry, 2000, 14, 1332-1336. | 1.5 | 28 |
| 59 | Ecohydrodynamics of Cold-Water Coral Reefs: A Case Study of the Mingulay Reef Complex (Western Tj ETQq1 1 0,784314 rgBT /Ove | 2.5 | 28 |
| 60 | Growth and branching patterns of <i>Lophelia pertusa</i> (Scleractinia) from the North Sea. Journal of the Marine Biological Association of the United Kingdom, 2011, 91, 831-835. | 0.8 | 27 |
| 61 | Assessing the living and dead proportions of cold-water coral colonies: implications for deep-water Marine Protected Area monitoring in a changing ocean. PeerJ, 2017, 5, e3705. | 2.0 | 27 |
| 62 | Environmental variability and biodiversity of megabenthos on the Hebrides Terrace Seamount (Northeast Atlantic). Scientific Reports, 2014, 4, 5589. | 3.3 | 26 |
| 63 | Distribution of Deep-Sea Sponge Aggregations in an Area of Multisectoral Activities and Changing Oceanic Conditions. Frontiers in Marine Science, 2019, 6, . | 2.5 | 26 |
| 64 | Assessing the environmental status of selected North Atlantic deep-sea ecosystems. Ecological Indicators, 2020, 119, 106624. | 6.3 | 23 |
| 65 | Global Biodiversity in Cold-Water Coral Reef Ecosystems. , 2016, , 1-21. | | 23 |
| 66 | Recommendations for best practice in deep-sea habitat classification: Bullimore et al. as a case study. ICES Journal of Marine Science, 2014, 71, 895-898. | 2.5 | 22 |
| 67 | Video-assisted grabbing: a minimally destructive method of sampling azooxanthellate coral banks. Journal of the Marine Biological Association of the United Kingdom, 2000, 80, 365-366. | 0.8 | 21 |
| 68 | Cold-Water Coral Reefs. , 2019, , 675-687. | | 21 |
| 69 | An Efficient Multi-Objective Optimization Method for Use in the Design of Marine Protected Area Networks. Frontiers in Marine Science, 2019, 6, . | 2.5 | 20 |
| 70 | A new laboratory method for monitoring deep-water coral polyp behaviour. Hydrobiologia, 2002, 471, 143-148. | 2.0 | 19 |
| 71 | Potential Impacts of Offshore Oil and Gas Activities on Deep-Sea Sponges and the Habitats They Form. Advances in Marine Biology, 2018, 79, 33-60. | 1.4 | 19 |
| 72 | Seamount egg-laying grounds of the deep-water skate <i>Bathyraja richardsoni</i> . Journal of Fish Biology, 2016, 89, 1473-1481. | 1.6 | 17 |

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|----|---|-----|-----------|
| 73 | Using the Goldilocks Principle to model coral ecosystem engineering. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211260. | 2.6 | 17 |
| 74 | Ammonium metabolism in the symbiotic sea anemone <i>Anemonia viridis</i> . Hydrobiologia, 2001, 461, 25-35. | 2.0 | 16 |
| 75 | Mapping cold-water coral biomass: an approach to derive ecosystem functions. Coral Reefs, 2021, 40, 215-231. | 2.2 | 16 |
| 76 | Exceptional 20th Century Ocean Circulation in the Northeast Atlantic. Geophysical Research Letters, 2020, 47, e2020GL087577. | 4.0 | 15 |
| 77 | Symbiotic anemones can grow when starved: nitrogen budget for <i>Anemonia viridis</i> in ammonium-supplemented seawater. Marine Biology, 1999, 133, 29-35. | 1.5 | 14 |
| 78 | Cold-Water Corals in an Era of Rapid Global Change: Are These the Deep Ocean's Most Vulnerable Ecosystems?. , 2016, , 593-606. | | 14 |
| 79 | Deep-sea coral $\delta^{13}C$: A tool to reconstruct the difference between seawater pH and $\delta^{11}B$ -derived calcifying fluid pH. Geophysical Research Letters, 2016, 43, 299-308. | 4.0 | 14 |
| 80 | Multiple feeding strategies observed in the cold-water coral <i>Lophelia pertusa</i> . Journal of the Marine Biological Association of the United Kingdom, 2019, 99, 1281-1283. | 0.8 | 12 |
| 81 | Systematic Conservation Planning at an Ocean Basin Scale: Identifying a Viable Network of Deep-Sea Protected Areas in the North Atlantic and the Mediterranean. Frontiers in Marine Science, 2021, 8, . | 2.5 | 12 |
| 82 | Effects of high temperature and CO ₂ on intracellular DMSP in the cold-water coral <i>Lophelia pertusa</i> . Marine Biology, 2014, 161, 1499-1506. | 1.5 | 11 |
| 83 | Towards a common approach to the assessment of the environmental status of deep-sea ecosystems in areas beyond national jurisdiction. Marine Policy, 2020, 121, 104182. | 3.2 | 11 |
| 84 | North Atlantic ecosystem sensitivity to Holocene shifts in Meridional Overturning Circulation. Geophysical Research Letters, 2016, 43, 291-298. | 4.0 | 10 |
| 85 | 38 Cold-Water Coral in Aquaria: Advances and Challenges. A Focus on the Mediterranean. Coral Reefs of the World, 2019, , 435-471. | 0.7 | 10 |
| 86 | Protocooperation among small polyps allows the coral <i>Astroides calycularis</i> to prey on large jellyfish. Ecology, 2018, 99, 2400-2401. | 3.2 | 9 |
| 87 | Exploring ecosystem-based management in the North Atlantic. Journal of Fish Biology, 2022, 101, 342-350. | 1.6 | 9 |
| 88 | Scotland as a case study for how benefits of marine ecosystem services may contribute to the commercial fishing industry. Marine Policy, 2018, 93, 271-283. | 3.2 | 8 |
| 89 | Recognising Stakeholder Conflict and Encouraging Consensus of Science-Based Management Approaches for Marine Biodiversity Beyond National Jurisdiction (BBNJ). Frontiers in Marine Science, 2020, 7, . | 2.5 | 8 |
| 90 | Rockall and Hatton: Resolving a Super Wicked Marine Governance Problem in the High Seas of the Northeast Atlantic Ocean. Frontiers in Marine Science, 2019, 6, . | 2.5 | 7 |

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|-----|--|------|-----------|
| 91 | North Atlantic Basin-Scale Multi-Criteria Assessment Database to Inform Effective Management and Protection of Vulnerable Marine Ecosystems. <i>Frontiers in Marine Science</i> , 2021, 8, . | 2.5 | 7 |
| 92 | Hidden structural heterogeneity enhances marine hotspotsâ€™ biodiversity. <i>Coral Reefs</i> , 2021, 40, 1615-1630. | 2.2 | 7 |
| 93 | Biomass Mapping for an Improved Understanding of the Contribution of Cold-Water Coral Carbonate Mounds to C and N Cycling. <i>Frontiers in Marine Science</i> , 2021, 8, . | 2.5 | 7 |
| 94 | Full effects of oil rigs on corals are not yet known. <i>Nature</i> , 2000, 403, 242-242. | 27.8 | 6 |
| 95 | Soaking up the oil: Biological impacts of dispersants and crude oil on the sponge <i>Halichondria panicea</i> . <i>Chemosphere</i> , 2020, 257, 127109. | 8.2 | 6 |
| 96 | Multiscale mechanical consequences of ocean acidification for cold-water corals. <i>Scientific Reports</i> , 2022, 12, 8052. | 3.3 | 6 |
| 97 | Cold-water corals. , 0, , 20-66. | | 5 |
| 98 | Sensitivity of a coldâ€™water coral reef to interannual variability in regional oceanography. <i>Diversity and Distributions</i> , 2021, 27, 1719-1731. | 4.1 | 5 |
| 99 | Distribution of Megabenthic Communities Under Contrasting Settings in Deep-Sea Cold Seeps Near Northwest Atlantic Canyons. <i>Frontiers in Marine Science</i> , 2021, 8, . | 2.5 | 5 |
| 100 | One on Top of the Other: Exploring the Habitat Cascades Phenomenon in Iconic Biogenic Marine Habitats. <i>Diversity</i> , 2022, 14, 290. | 1.7 | 5 |
| 101 | Human impacts on deep-sea sponge grounds: Applying environmental omics to monitoring. <i>Advances in Marine Biology</i> , 2021, 89, 53-78. | 1.4 | 3 |
| 102 | First record of <i>Bedotella armata</i> (Cnidaria: Hydrozoa) from the Porcupine Seabight: do north-east Atlantic carbonate mound fauna have Mediterranean ancestors?. <i>Marine Biodiversity Records</i> , 2008, 1, . | 1.2 | 2 |
| 103 | Environmental controls and anthropogenic impacts on deep-sea sponge grounds in the Faroe-Shetland Channel, NE Atlantic: the importance of considering spatial scale to distinguish drivers of change. <i>ICES Journal of Marine Science</i> , 2019, , . | 2.5 | 2 |
| 104 | Environmental controls and anthropogenic impacts on deep-sea sponge grounds in the Faroe-Shetland Channel, NE Atlantic: the importance of considering spatial scale to distinguish drivers of change. <i>ICES Journal of Marine Science</i> , 2020, 77, 2009-2009. | 2.5 | 2 |
| 105 | Tourist Preferences for Seamount Conservation in the Galapagos Marine Reserve. <i>Frontiers in Marine Science</i> , 2021, 7, . | 2.5 | 2 |
| 106 | Impacts and conservation. , 0, , 237-262. | | 1 |
| 107 | Habitats and ecology. , 0, , 142-174. | | 1 |
| 108 | Marine Sponges in a Snowstorm â€“ Extreme Sensitivity of a Sponge Holobiont to Marine Oil Snow and Chemically Dispersed Oil Pollution. <i>Frontiers in Microbiology</i> , 0, 13, . | 3.5 | 1 |

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|-----|---|----|-----------|
| 109 | History and research approaches. , 0, , 1-19. | | 0 |
| 110 | Palaeontology. , 0, , 175-209. | | 0 |
| 111 | Reefs and mounds. , 0, , 108-141. | | 0 |
| 112 | Corals as archives. , 0, , 210-236. | | 0 |