Julia L Blanchard

List of Publications by Year
in descending order

125 papers	11,650 citations	30070 54 h-index	30922 102 g-index
141 all docs	141 docs citations	141 times ranked	14090 citing authors

#	Article	IF	Citations
1	Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. Science, 2017, 355, .	12.6	2,026
2	CONSUMERâ€"RESOURCE BODY-SIZE RELATIONSHIPS IN NATURAL FOOD WEBS. Ecology, 2006, 87, 2411-2417.	3.2	568
3	Impacts of climate change on marine ecosystem production in societies dependent on fisheries. Nature Climate Change, 2014, 4, 211-216.	18.8	434
4	Global ensemble projections reveal trophic amplification of ocean biomass declines with climate change. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12907-12912.	7.1	357
5	Can marine fisheries and aquaculture meet fish demand from a growing human population in a changing climate?. Global Environmental Change, 2012, 22, 795-806.	7.8	322
6	Potential consequences of climate change for primary production and fish production in large marine ecosystems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 2979-2989.	4.0	321
7	A bioenergetic framework for the temperature dependence of trophic interactions. Ecology Letters, 2014, 17, 902-914.	6.4	268
8	Vulnerability of Coral Reef Fisheries to a Loss of Structural Complexity. Current Biology, 2014, 24, 1000-1005.	3.9	255
9	Fish abundance with no fishing: predictions based on macroecological theory. Journal of Animal Ecology, 2004, 73, 632-642.	2.8	246
10	Fuel use and greenhouse gas emissions of world fisheries. Nature Climate Change, 2018, 8, 333-337.	18.8	223
11	Continental Shelf-Wide Response of a Fish Assemblage to Rapid Warming of the Sea. Current Biology, 2011, 21, 1565-1570.	3.9	208
12	Global-scale predictions of community and ecosystem properties from simple ecological theory. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1375-1383.	2.6	200
13	How does abundance scale with body size in coupled sizeâ€structured food webs?. Journal of Animal Ecology, 2009, 78, 270-280.	2.8	198
14	Food production shocks across land and sea. Nature Sustainability, 2019, 2, 130-137.	23.7	187
15	Satellite remote sensing of ecosystem functions: opportunities, challenges and way forward. Remote Sensing in Ecology and Conservation, 2018, 4, 71-93.	4.3	176
16	From Bacteria to Whales: Using Functional Size Spectra to Model Marine Ecosystems. Trends in Ecology and Evolution, 2017, 32, 174-186.	8.7	170
17	Do climate and fishing influence size-based indicators of Celtic Sea fish community structure?. ICES Journal of Marine Science, 2005, 62, 405-411.	2.5	168
18	Linked sustainability challenges and trade-offs among fisheries, aquaculture and agriculture. Nature Ecology and Evolution, 2017, 1, 1240-1249.	7.8	161

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19	Using indicators for evaluating, comparing, and communicating the ecological status of exploited marine ecosystems. 2. Setting the scene. ICES Journal of Marine Science, 2010, 67, 692-716.	2.5	156
20	Managing consequences of climateâ€driven species redistribution requires integration of ecology, conservation and social science. Biological Reviews, 2018, 93, 284-305.	10.4	154
21	Twentyâ€firstâ€century climate change impacts on marine animal biomass and ecosystem structure across ocean basins. Global Change Biology, 2019, 25, 459-472.	9.5	151
22	Global adoption of novel aquaculture feeds could substantially reduce forage fish demand by 2030. Nature Food, 2020, 1, 301-308.	14.0	148
23	Planetary boundaries for a blue planet. Nature Ecology and Evolution, 2017, 1, 1625-1634.	7.8	139
24	Evaluating targets and tradeâ€offs among fisheries and conservation objectives using a multispecies size spectrum model. Journal of Applied Ecology, 2014, 51, 612-622.	4.0	130
25	Developing Alternative Indices of Reproductive Potential for Use in Fisheries Management: Case Studies for Stocks Spanning an Information Gradient. Journal of Northwest Atlantic Fishery Science, 2003, 33, 161-190.	1.4	117
26	A protocol for the intercomparison of marine fishery and ecosystem models: Fish-MIP v1.0. Geoscientific Model Development, 2018, 11, 1421-1442.	3.6	116
27	Evolution of global marine fishing fleets and the response of fished resources. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12238-12243.	7.1	115
28	Ecological Networks in a Changing Climate. Advances in Ecological Research, 2010, , 71-138.	2.7	110
29	Predicting the consequences of species loss using sizeâ€structured biodiversity approaches. Biological Reviews, 2017, 92, 684-697.	10.4	108
30	BODY SIZES OF CONSUMERS AND THEIR RESOURCES. Ecology, 2005, 86, 2545-2545.	3.2	105
31	Fish body sizes change with temperature but not all species shrink with warming. Nature Ecology and Evolution, 2020, 4, 809-814.	7.8	103
32	Trend analysis of indicators: a comparison of recent changes in the status of marine ecosystems around the world. ICES Journal of Marine Science, 2010, 67, 732-744.	2.5	102
33	Fisheries productivity under progressive coral reef degradation. Journal of Applied Ecology, 2018, 55, 1041-1049.	4.0	101
34	Sizeâ€spectra dynamics from stochastic predation and growth of individuals. Ecology, 2009, 90, 802-811.	3.2	98
35	Aggregation and removal of weak-links in food-web models: system stability and recovery from disturbance. Ecological Modelling, 2005, 184, 229-248.	2.5	97
36	Next-generation ensemble projections reveal higher climate risks for marine ecosystems. Nature Climate Change, 2021, 11, 973-981.	18.8	96

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37	Future fish distributions constrained by depth in warming seas. Nature Climate Change, 2015, 5, 569-573.	18.8	94
38	DistributionÂ–abundance relationships for North Sea Atlantic cod (Gadus morhua): observation versus theory. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 2001-2009.	1.4	92
39	<i>mizer</i>: an R package for multispecies, traitâ€based and community size spectrum ecological modelling. Methods in Ecology and Evolution, 2014, 5, 1121-1125.	5.2	85
40	Individual-Based Food Webs. Advances in Ecological Research, 2010, , 211-266.	2.7	84
41	Testing and recommending methods for fitting size spectra to data. Methods in Ecology and Evolution, 2017, 8, 57-67.	5.2	84
42	Coupled energy pathways and the resilience of size-structured food webs. Theoretical Ecology, 2011, 4, 289-300.	1.0	81
43	Making modelling count - increasing the contribution of shelf-seas community and ecosystem models to policy development and management. Marine Policy, 2015, 61, 291-302.	3.2	81
44	To Achieve a Sustainable Blue Future, Progress Assessments Must Include Interdependencies between the Sustainable Development Goals. One Earth, 2020, 2, 161-173.	6.8	77
45	Making Robust Policy Decisions Using Global Biodiversity Indicators. PLoS ONE, 2012, 7, e41128.	2.5	75
46	Energy Flow Through Marine Ecosystems: Confronting Transfer Efficiency. Trends in Ecology and Evolution, 2021, 36, 76-86.	8.7	70
47	Across ecosystem comparisons of size structure: methods, approaches and prospects. Oikos, 2011, 120, 550-563.	2.7	69
48	A general framework for combining ecosystem models. Fish and Fisheries, 2018, 19, 1031-1042.	5.3	66
49	Putting all foods on the same table: Achieving sustainable food systems requires full accounting. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18152-18156.	7.1	66
50	Assessing National Biodiversity Trends for Rocky and Coral Reefs through the Integration of Citizen Science and Scientific Monitoring Programs. BioScience, 2017, 67, 134-146.	4.9	64
51	Effects of condition on fecundity and total egg production of eastern Scotian Shelf haddock (Melanogrammus aeglefinus). Canadian Journal of Fisheries and Aquatic Sciences, 2003, 60, 321-332.	1.4	61
52	Ecosystem size structure response to 21st century climate projection: large fish abundance decreases in the central <scp>N</scp>orth <scp>P</scp>acific and increases in the <scp>C</scp>alifornia <scp>C</scp>urrent. Global Change Biology, 2013, 19, 724-733.	9.5	60
53	Refocusing multiple stressor research around the targets and scales of ecological impacts. Nature Ecology and Evolution, 2021, 5, 1478-1489.	7.8	59
54	The specificity of marine ecological indicators to fishing in the face of environmental change: A multi-model evaluation. Ecological Indicators, 2018, 89, 317-326.	6.3	58

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55	Body size shifts and early warning signals precede the historic collapse of whale stocks. Nature Ecology and Evolution, 2017, 1, 188.	7.8	56
56	Global in scope and regionally rich: an IndiSeas workshop helps shape the future of marine ecosystem indicators. Reviews in Fish Biology and Fisheries, 2012, 22, 835-845.	4.9	55
57	Fishing mortality versus natural predation on diurnally migrating sandeels Ammodytes marinus. Marine Ecology - Progress Series, 2008, 369, 213-227.	1.9	55
58	Early warning signals of recovery in complex systems. Nature Communications, 2019, 10, 1681.	12.8	52
59	CONSEQUENCES OF ALTERNATIVE FUNCTIONAL RESPONSE FORMULATIONS IN MODELS EXPLORING WHALE-FISHERY INTERACTIONS. Marine Mammal Science, 2003, 19, 661-681.	1.8	49
60	Ecosystemâ€based management of coral reefs under climate change. Ecology and Evolution, 2018, 8, 6354-6368.	1.9	49
61	Power of monitoring surveys to detect abundance trends in depleted populations: the effects of density-dependent habitat use, patchiness, and climate change. ICES Journal of Marine Science, 2008, 65, 111-120.	2.5	44
62	A functional size-spectrum model of the global marine ecosystem that resolves zooplankton composition. Ecological Modelling, 2020, 435, 109265.	2.5	44
63	Disentangling diverse responses to climate change among global marine ecosystem models. Progress in Oceanography, 2021, 198, 102659.	3.2	42
64	Zooplankton Are Not Fish: Improving Zooplankton Realism in Size-Spectrum Models Mediates Energy Transfer in Food Webs. Frontiers in Marine Science, 2016, 3, .	2.5	39
65	Considering landâ€“sea interactions and tradeâ€offs for food and biodiversity. Global Change Biology, 2018, 24, 580-596.	9.5	39
66	A rewired food web. Nature, 2015, 527, 173-174.	27.8	37
67	Functional, size and taxonomic diversity of fish along a depth gradient in the deep sea. PeerJ, 2016, 4, e2387.	2.0	37
68	High refuge availability on coral reefs increases the vulnerability of reefâ€associated predators to overexploitation. Ecology, 2018, 99, 450-463.	3.2	36
69	Ensemble Projections of Future Climate Change Impacts on the Eastern Bering Sea Food Web Using a Multispecies Size Spectrum Model. Frontiers in Marine Science, 2020, 7, .	2.5	36
70	Ecosystem-based fisheries management requires broader performance indicators for the human dimension. Marine Policy, 2019, 108, 103639.	3.2	35
71	Relative Impacts of Simultaneous Stressors on a Pelagic Marine Ecosystem. Frontiers in Marine Science, 2019, 6, .	2.5	32
72	Time to rethink trophic levels in aquaculture policy. Reviews in Aquaculture, 2021, 13, 1583-1593.	9.0	31

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73	Quantifying heterogeneous responses of fish community size structure using novel combined statistical techniques. Global Change Biology, 2016, 22, 1755-1768.	9.5	30
74	Using stable isotope data to advance marine food web modelling. Reviews in Fish Biology and Fisheries, 2019, 29, 277-296.	4.9	30
75	A traitâ€based metric sheds new light on the nature of the body sizeâ€"depth relationship in the deep sea. Journal of Animal Ecology, 2016, 85, 427-436.	2.8	27
76	The effects of seasonal processes on size spectrum dynamics. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 598-610.	1.4	27
77	Where the Ecological Gaps Remain, a Modelers' Perspective. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	27
78	Direct and indirect effects of climate and fishing on changes in coastal ecosystem services: a historical perspective from the North Sea. Regional Environmental Change, 2016, 16, 341-351.	2.9	26
79	Speciesâ€specific ontogenetic diet shifts attenuate trophic cascades and lengthen food chains in exploited ecosystems. Oikos, 2019, 128, 1051-1064.	2.7	26
80	Two takes on the ecosystem impacts of climate change and fishing: Comparing a size-based and a species-based ecosystem model in the central North Pacific. Progress in Oceanography, 2015, 138, 533-545.	3.2	25
81	Assumptions behind size-based ecosystem models are realistic. ICES Journal of Marine Science, 2016, 73, 1651-1655.	2.5	25
82	Parameter uncertainty of a dynamic multispecies size spectrum model. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 589-597.	1.4	25
83	Predicted Effects of Behavioural Movement and Passive Transport on Individual Growth and Community Size Structure in Marine Ecosystems. Advances in Ecological Research, 2011, , 41-66.	2.7	24
84	Trade and foreign fishing mediate global marine nutrient supply. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	24
85	Dynamic prediction of effort reallocation in mixed fisheries. Fisheries Research, 2012, 125-126, 243-253.	1.7	23
86	Alternative energy pathways in Southern Ocean food webs: Insights from a balanced model of Prydz Bay, Antarctica. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 174, 104613.	1.4	23
87	Integrated modelling to support decision-making for marine socialâ€"ecological systems in Australia. ICES Journal of Marine Science, 2017, 74, 2298-2308.	2.5	22
88	A crossâ€scale framework to support a mechanistic understanding and modelling of marine climateâ€driven species redistribution, from individuals to communities. Ecography, 2020, 43, 1764-1778.	4.5	22
89	Accounting for the bin structure of data removes bias when fitting size spectra. Marine Ecology - Progress Series, 2020, 636, 19-33.	1.9	22
90	Fisheries Assessment and Management: A Synthesis of Common Approaches with Special Reference to Deepwater and Data-Poor Stocks. Reviews in Fisheries Science, 2012, 20, 136-153.	2.1	20

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91	Defining global artisanal fisheries. Marine Policy, 2019, 108, 103634.	3.2	20
92	Differing marine animal biomass shifts under 21st century climate change between Canadaâ€™s three oceans. Facets, 2020, 5, 105-122.	2.4	20
93	Fishing for Space: Fine-Scale Multi-Sector Maritime Activities Influence Fisher Location Choice. PLoS ONE, 2015, 10, e0116335.	2.5	19
94	Managing fisheries for maximum nutrient yield. Fish and Fisheries, 2022, 23, 800-811.	5.3	19
95	Shifts in plankton size spectra modulate growth and coexistence of anchovy and sardine in upwelling systems. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 611-621.	1.4	18
96	Globally consistent reef size spectra integrating fishes and invertebrates. Ecology Letters, 2021, 24, 572-579.	6.4	18
97	Decades of dietary data demonstrate regional food web structures in the Southern Ocean. Ecology and Evolution, 2021, 11, 227-241.	1.9	17
98	Potential impacts of climate change on agriculture and fisheries production in 72 tropical coastal communities. Nature Communications, 2022, 13, .	12.8	17
99	Body condition of predatory fishes linked to the availability of sandeels. Marine Biology, 2013, 160, 299-308.	1.5	16
100	Integrating Life Cycle and Impact Assessments to Map Food's Cumulative Environmental Footprint. One Earth, 2020, 3, 65-78.	6.8	16
101	Body size and ecosystem dynamics: an introduction. Oikos, 2011, 120, 481-482.	2.7	15
102	Contrasting Futures for Australiaâ€™s Fisheries Stocks Under IPCC RCP8.5 Emissions â€" A Multi-Ecosystem Model Approach. Frontiers in Marine Science, 2020, 7, .	2.5	15
103	Using an integral projection model to assess the effect of temperature on the growth of gilthead seabream Sparus aurata. PLoS ONE, 2018, 13, e0196092.	2.5	14
104	Food security challenged by declining efficiencies of artisanal fishing fleets: A global country-level analysis. Global Food Security, 2022, 32, 100598.	8.1	14
105	Energetically relevant predatorâ€"prey body mass ratios and their relationship with predator body size. Ecology and Evolution, 2019, 9, 201-211.	1.9	12
106	Functional traits explain trophic allometries of cephalopods. Journal of Animal Ecology, 2020, 89, 2692-2703.	2.8	12
107	Quantifying uncertainty and dynamical changes in multiâ€species fishing mortality rates, catches and biomass by combining stateâ€space and sizeâ€based multiâ€species models. Fish and Fisheries, 2021, 22, 667.	5.3	12
108	Lost in space? Searching for directions in the spatial modelling of individuals, populations and species ranges. Biology Letters, 2010, 6, 575-578.	2.3	11

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109	The population increase of common guillemots <i>Uria aalge</i> on Skomer Island is explained by intrinsic demographic properties. Journal of Avian Biology, 2013, 44, 055-061.	1.2	11
110	Improving understanding of the functional diversity of fisheries by exploring the influence of global catch reconstruction. Scientific Reports, 2017, 7, 10746.	3.3	11
111	Increasing the uptake of ecological model results in policy decisions to improve biodiversity outcomes. Environmental Modelling and Software, 2022, 149, 105318.	4.5	11
112	Scaling marine fish movement behavior from individuals to populations. Ecology and Evolution, 2018, 8, 7031-7043.	1.9	10
113	Predicting global tuna vulnerabilities with spatial, economic, biological and climatic considerations. Scientific Reports, 2018, 8, 10572.	3.3	10
114	Testing CPUE-derived spatial occupancy as an indicator for stock abundance: application to deep-sea stocks. Aquatic Living Resources, 2013, 26, 319-332.	1.2	9
115	80 Years of Multispecies Fisheries Modelling: Significant Advances and Continuing Challenges. , 0, , 325-357.		8
116	Uniting Discoveries of Abundance-Size Distributions from Soils and Seas. Trends in Ecology and Evolution, 2019, 34, 2-5.	8.7	8
117	Size-based indicators show depth-dependent change over time in the deep sea. ICES Journal of Marine Science, 2018, 75, 113-121.	2.5	7
118	Interacting forces of predation and fishing affect speciesâ€™ maturation size. Ecology and Evolution, 2020, 10, 14033-14051.	1.9	7
119	Community size structure varies with predatorâ€“prey size relationships and temperature across Australian reefs. Ecology and Evolution, 2022, 12, e8789.	1.9	6
120	Changes in the size-structure of a multispecies pelagic fishery off Northern Chile. Fisheries Research, 2015, 161, 261-268.	1.7	5
121	Reef communities show predictable undulations in linear abundance size spectra from copepods to sharks. Ecology Letters, 2021, 24, 2146-2154.	6.4	5
122	Exploring tradeâ€offs in mixed fisheries by integrating fleet dynamics into multispecies sizeâ€spectrum models. Journal of Applied Ecology, 0, , .	4.0	4
123	The effects of trawling and primary production on size-structured food webs in seabed ecosystems. Canadian Journal of Fisheries and Aquatic Sciences, 2020, 77, 1659-1665.	1.4	1
124	Reply to â€˜Whaling catch data are not reliable for analyses of body size shiftsâ€™. Nature Ecology and Evolution, 2018, 2, 757-758.	7.8	0
125	Marine Systems, Food Security, and Future Earth. , 0, , 296-310.		0