Claire B Paris

List of Publications by Year
in descending order

138 papers	9,452 citations	43973 48 h-index	40881 93 g-index
139 all docs	139 docs citations	139 times ranked	7434 citing authors

#	Article	IF	Citations
1	Scaling of Connectivity in Marine Populations. Science, 2006, 311, 522-527.	6.0	1,147
2	Connectivity of Marine Populations: Open or Closed?. Science, 2000, 287, 857-859.	6.0	975
3	Trophic cascade facilitates coral recruitment in a marine reserve. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8362-8367.	3.3	328
4	Lagrangian ocean analysis: Fundamentals and practices. Ocean Modelling, 2018, 121, 49-75.	1.0	313
5	Connectivity and resilience of coral reef metapopulations in marine protected areas: matching empirical efforts to predictive needs. Coral Reefs, 2009, 28, 327-337.	0.9	290
6	Direct evidence of a biophysical retention mechanism for coral reef fish larvae. Limnology and Oceanography, 2004, 49, 1964-1979.	1.6	282
7	Connectivity Modeling System: A probabilistic modeling tool for the multi-scale tracking of biotic and abiotic variability in the ocean. Environmental Modelling and Software, 2013, 42, 47-54.	1.9	270
8	Surfing, spinning, or diving from reef to reef: effects on population connectivity. Marine Ecology - Progress Series, 2007, 347, 285-300.	0.9	254
9	Climate change and coral reef connectivity. Coral Reefs, 2009, 28, 379-395.	0.9	242
10	Coupled Biological and Physical Models: Present Capabilities and Necessary Developments for Future Studies of Population Connectivity. Oceanography, 2007, 20, 54-69.	0.5	201
11	A bio-oceanographic filter to larval dispersal in a reef-building coral. Limnology and Oceanography, 2006, 51, 1969-1981.	1.6	182
12	Evolution of the Macondo Well Blowout: Simulating the Effects of the Circulation and Synthetic Dispersants on the Subsea Oil Transport. Environmental Science & Technology, 2012, 46, 13293-13302.	4.6	168
13	Organic Aerosol Formation Downwind from the Deepwater Horizon Oil Spill. Science, 2011, 331, 1295-1299.	6.0	162
14	Connectivity of Caribbean coral populations: complementary insights from empirical and modelled gene flow. Molecular Ecology, 2012, 21, 1143-1157.	2.0	162
15	Reserve design for uncertain responses of coral reefs to climate change. Ecology Letters, 2011, 14, 132-140.	3.0	145
16	Modelling dispersal and connectivity of broadcast spawning corals at the global scale. Global Ecology and Biogeography, 2014, 23, 1-11.	2.7	139
17	Celestial patterns in marine soundscapes. Marine Ecology - Progress Series, 2014, 508, 17-32.	0.9	128
18	Surface Evolution of the Deepwater Horizon Oil Spill Patch: Combined Effects of Circulation and Wind-Induced Drift. Environmental Science & Technology, 2012, 46, 7267-7273.	4.6	125

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19	Larval Connectivity and the International Management of Fisheries. PLoS ONE, 2013, 8, e64970.	1.1	124
20	Connectivity and the development of population genetic structure in Indo-West Pacific coral reef communities. Global Ecology and Biogeography, 2011, 20, 695-706.	2.7	114
21	Behavior constrains the dispersal of long-lived spiny lobster larvae. Marine Ecology - Progress Series, 2011, 422, 223-237.	0.9	114
22	Detecting larval export from marine reserves. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18266-18271.	3.3	113
23	Thinking and managing outside the box: coalescing connectivity networks to build region-wide resilience in coral reef ecosystems. Coral Reefs, 2009, 28, 367-378.	0.9	110
24	Reproductive resilience: a paradigm shift in understanding spawnerâ€recruit systems in exploited marine fish. Fish and Fisheries, 2017, 18, 285-312.	2.7	104
25	Orientation behavior in fish larvae: A missing piece to Hjort's critical period hypothesis. Journal of Theoretical Biology, 2012, 304, 188-196.	0.8	103
26	Reef Odor: A Wake Up Call for Navigation in Reef Fish Larvae. PLoS ONE, 2013, 8, e72808.	1.1	91
27	Intercomparison of oil spill prediction models for accidental blowout scenarios with and without subsea chemical dispersant injection. Marine Pollution Bulletin, 2015, 96, 110-126.	2.3	90
28	Mitochondrial control region sequence analyses indicate dispersal from the US East Coast as the source of the invasive Indo-Pacific lionfish Pterois volitans in the Bahamas. Marine Biology, 2009, 156, 1213-1221.	0.7	84
29	Fertile fathoms: Deep reproductive refugia for threatened shallow corals. Scientific Reports, 2015, 5, 12407.	1.6	84
30	Impacts of the Deepwater Horizon oil spill evaluated using an end-to-end ecosystem model. PLoS ONE, 2018, 13, e0190840.	1.1	82
31	Soundscapes from a Tropical Eastern Pacific reef and a Caribbean Sea reef. Coral Reefs, 2013, 32, 553-557.	0.9	81
32	Invisible oil beyond the <i>Deepwater Horizon</i> satellite footprint. Science Advances, 2020, 6, eaaw8863.	4.7	81
33	Modeling vertical coral connectivity and mesophotic refugia. Coral Reefs, 2016, 35, 23-37.	0.9	80
34	Consistency and inconsistency in multispecies population network dynamics of coral reef ecosystems. Marine Ecology - Progress Series, 2014, 499, 1-18.	0.9	78
35	Biophysical connectivity explains population genetic structure in a highly dispersive marine species. Coral Reefs, 2017, 36, 233-244.	0.9	68
36	Ocean currents generate large footprints in marine palaeoclimate proxies. Nature Communications, 2015, 6, 6521.	5.8	66

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37	Modelling larval fish navigation: the way forward. ICES Journal of Marine Science, 2014, 71, 918-924.	1.2	64
38	Ocean circulation and terrestrial runoff dynamics in the Mesoamerican region from spectral optimization of SeaWiFS data and a high resolution simulation. Coral Reefs, 2008, 27, 503-519.	0.9	62
39	The Role of Long Distance Dispersal Versus Local Retention in Replenishing Marine Populations. Gulf and Caribbean Research, 0, 14, .	0.7	62
40	Glass eels (<i>Anguilla anguilla</i>) have a magnetic compass linked to the tidal cycle. Science Advances, 2017, 3, e1602007.	4.7	61
41	Observed and modeled larval settlement of a reef fish to the Florida Keys. Marine Ecology - Progress Series, 2012, 453, 201-212.	0.9	61
42	Does fish larval dispersal differ between high and low latitudes?. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130327.	1.2	60
43	Biophysical processes leading to the ingress of temperate fish larvae into estuarine nursery areas: A review. Estuarine, Coastal and Shelf Science, 2016, 183, 187-202.	0.9	60
44	Hurricane-Driven Patterns of Clonality in an Ecosystem Engineer: The Caribbean Coral Montastraea annularis. PLoS ONE, 2013, 8, e53283.	1.1	59
45	The perfect storm: Match-mismatch of bio-physical events drives larval reef fish connectivity between Pulley Ridge mesophotic reef and the Florida Keys. Continental Shelf Research, 2016, 125, 136-146.	0.9	58
46	Quantitative species-level ecology of reef fish larvae via metabarcoding. Nature Ecology and Evolution, 2018, 2, 306-316.	3.4	56
47	High-pressure visual experimental studies of oil-in-water dispersion droplet size. Chemical Engineering Science, 2015, 127, 392-400.	1.9	55
48	Depth-Independent Reproduction in the Reef Coral Porites astreoides from Shallow to Mesophotic Zones. PLoS ONE, 2016, 11, e0146068.	1.1	52
49	El NiÃ±o and coral larval dispersal across the eastern Pacific marine barrier. Nature Communications, 2016, 7, 12571.	5.8	50
50	Multivariate objective analysis of the coastal circulation of Barbados, West Indies: implication for larval transport. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 1363-1386.	0.6	47
51	Environmental forcing and larval fish assemblage dynamics in the Lima River estuary (northwest) Tj ETQq1 1 0.784314 rgBT /Overlock	0.8	46
52	Larval Fish Swimming Behavior Alters Dispersal Patterns From Marine Protected Areas in the North-Western Mediterranean Sea. Frontiers in Marine Science, 2018, 5, .	1.2	46
53	Adaptive Significance of the Formation of Multi-Species Fish Spawning Aggregations near Submerged Capes. PLoS ONE, 2011, 6, e22067.	1.1	45
54	Numerical simulations of larval transport into a ripâ€channeled surf zone. Limnology and Oceanography, 2014, 59, 1434-1447.	1.6	44

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55	The influence of spawning periodicity on population connectivity. Coral Reefs, 2015, 34, 753-757.	0.9	44
56	Vertical distribution and ontogenetic "migration" in coral reef fish larvae. Limnology and Oceanography, 2010, 55, 909-919.	1.6	42
57	Complex migration and the development of genetic structure in subdivided populations: an example from Caribbean coral reef ecosystems. Ecography, 2010, 33, 597-606.	2.1	41
58	River-reef connectivity in the Meso-American Region. Coral Reefs, 2008, 27, 773-781.	0.9	38
59	Simulating the effects of droplet size, high-pressure biodegradation, and variable flow rate on the subsea evolution of deep plumes from the Macondo blowout. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 129, 301-310.	0.6	37
60	Shining a light on fish at night: an overview of fish and fisheries in the dark of night, and in deep and polar seas. Bulletin of Marine Science, 2017, 93, 253-284.	0.4	36
61	Detection and quantification of marine larvae orientation in the pelagic environment. Limnology and Oceanography: Methods, 2009, 7, 664-672.	1.0	35
62	How Much Do Marine Connectivity Fluctuations Matter?. American Naturalist, 2014, 184, 523-530.	1.0	35
63	With a Little Help from My Friends: Group Orientation by Larvae of a Coral Reef Fish. PLoS ONE, 2015, 10, e0144060.	1.1	34
64	Uniting paradigms of connectivity in marine ecology. Ecology, 2016, 97, 2447-2457.	1.5	33
65	Location Isnâ€™t Everything: Timing of Spawning Aggregations Optimizes Larval Replenishment. PLoS ONE, 2015, 10, e0130694.	1.1	30
66	Polarized Light Sensitivity and Orientation in Coral Reef Fish Post-Larvae. PLoS ONE, 2014, 9, e88468.	1.1	29
67	Modelling the spread and connectivity of waterborne marine pathogens: the case of PaV1 in the Caribbean. ICES Journal of Marine Science, 2015, 72, i139-i146.	1.2	27
68	Decadal analysis of larval connectivity from Cuban snapper (Lutjanidae) spawning aggregations based on biophysical modeling. Marine Ecology - Progress Series, 2016, 550, 175-190.	0.9	27
69	First evidence of fish larvae producing sounds. Biology Letters, 2014, 10, 20140643.	1.0	26
70	Swimming speeds of Mediterranean settlementâ€stage fish larvae nuance Hjort's aberrant drift hypothesis. Limnology and Oceanography, 2018, 63, 509-523.	1.6	24
71	Sun-Compass Orientation in Mediterranean Fish Larvae. PLoS ONE, 2015, 10, e0135213.	1.1	24
72	Sensory biology and navigation behavior of reef fish larvae. , 0, , 3-15.		23

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73	Glass eels (Anguilla anguilla) imprint the magnetic direction of tidal currents from their juvenile estuaries. Communications Biology, 2019, 2, 366.	2.0	23
74	Evidence of blue marlin, Makaira nigricans, spawning in the vicinity of Exuma Sound, Bahamas. Marine and Freshwater Research, 2003, 54, 299.	0.7	23
75	Dimethyl Sulfide is a Chemical Attractant for Reef Fish Larvae. Scientific Reports, 2017, 7, 2498.	1.6	22
76	Orientation of fish larvae in situ is consistent among locations, years and methods, but varies with time of day. Marine Ecology - Progress Series, 2014, 505, 193-208.	0.9	22
77	Description of surface transport in the region of the Belizean Barrier Reef based on observations and alternative high-resolution models. Ocean Modelling, 2016, 106, 74-89.	1.0	20
78	BP Gulf Science Data Reveals Ineffectual Subsea Dispersant Injection for the Macondo Blowout. Frontiers in Marine Science, 2018, 5, .	1.2	20
79	In situ orientation of fish larvae can vary among regions. Marine Ecology - Progress Series, 2015, 537, 191-203.	0.9	20
80	Connectivity of Pulley Ridge With Remote Locations as Inferred From Satelliteâ€Tracked Drifter Trajectories. Journal of Geophysical Research: Oceans, 2018, 123, 5742-5750.	1.0	19
81	In situ swimming and orientation behavior of spiny lobster (Panulirus argus) postlarvae. Marine Ecology - Progress Series, 2014, 504, 207-219.	0.9	19
82	Mesoscale flow variability and its impact on connectivity for the island of Hawaiʻi. Geophysical Research Letters, 2013, 40, 332-337.	1.5	18
83	Critical Information Gaps Impeding Understanding of the Role of Larval Connectivity Among Coral Reef Islands in an Era of Global Change. Frontiers in Marine Science, 2018, 5, .	1.2	18
84	Atlantic Haddock (Melanogrammus aeglefinus) Larvae Have a Magnetic Compass that Guides Their Orientation. IScience, 2019, 19, 1173-1178.	1.9	18
85	Vertical distribution and ontogenetic "migration" in coral reef fish larvae. Limnology and Oceanography, 2010, 55, 909-919.	1.6	18
86	Occurrence of invasive lionfish (Pterois volitans) larvae in the northern Gulf of Mexico: characterization of dispersal pathways and spawning areas. Biological Invasions, 2017, 19, 1971-1979.	1.2	17
87	Dispersal capacity and genetic relatedness in Acropora cervicornis on the Florida Reef Tract. Coral Reefs, 2018, 37, 585-596.	0.9	17
88	Pulley Ridge, Gulf of Mexico, USA. Coral Reefs of the World, 2019, , 57-69.	0.3	17
89	Ecological spillover from a marine protected area replenishes an overâ€exploited population across an island chain. Conservation Science and Practice, 2019, 1, e17.	0.9	17
90	A Synthesis of Deep Benthic Faunal Impacts and Resilience Following the Deepwater Horizon Oil Spill. Frontiers in Marine Science, 2020, 7, .	1.2	17

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91	Ten years of modeling the Deepwater Horizon oil spill. Environmental Modelling and Software, 2021, 142, 105070.	1.9	17
92	Larval fish dispersal along an estuarineâ€“ocean gradient. Canadian Journal of Fisheries and Aquatic Sciences, 2017, 74, 1462-1473.	0.7	16
93	Advancing the link between ocean connectivity, ecological function and management challenges. ICES Journal of Marine Science, 2017, 74, 1702-1707.	1.2	16
94	Auto-correlated directional swimming can enhance settlement success and connectivity in fish larvae. Journal of Theoretical Biology, 2018, 439, 76-85.	0.8	16
95	Transport, Fate and Impacts of the Deep Plume of Petroleum Hydrocarbons Formed During the Macondo Blowout. Frontiers in Marine Science, 2020, 7, .	1.2	16
96	A Coupled Lagrangian-Earth System Model for Predicting Oil Photooxidation. Frontiers in Marine Science, 2021, 8, .	1.2	14
97	Response to Comment on â€œEvolution of the Macondo Well Blowout: Simulating the Effects of the Circulation and Synthetic Dispersants on the Subsea Oil Transportâ€• Environmental Science & Technology, 2013, 47, 11906-11907.	4.6	13
98	The relationship between the moon cycle and the orientation of glass eels (<i>Anguilla anguilla</i>) at sea. Royal Society Open Science, 2019, 6, 190812.	1.1	13
99	Impacts of a local music festival on fish stress hormone levels and the adjacent underwater soundscape. Environmental Pollution, 2020, 265, 114925.	3.7	13
100	The effect of the Deepwater Horizon oil spill on two ecosystem services in the Northern Gulf of Mexico. Environmental Modelling and Software, 2020, 133, 104793.	1.9	12
101	How Do Oil, Gas, and Water Interact Near a Subsea Blowout?. Oceanography, 2016, 29, 64-75.	0.5	11
102	Effects of Exposure to Low Concentrations of Oil on the Expression of Cytochrome P4501a and Routine Swimming Speed of Atlantic Haddock (<i>Melanogrammus aeglefinus</i>) Larvae In Situ. Environmental Science & Technology, 2020, 54, 13879-13887.	4.6	11
103	Far-Field Modeling of aÂDeep-Sea Blowout: Sensitivity Studies of Initial Conditions, Biodegradation, Sedimentation, and Subsurface Dispersant Injection on Surface Slicks and Oil Plume Concentrations. , 2020, , 170-192.		10
104	Effects of Petroleum By-Products and Dispersants on Ecosystems. Oceanography, 2021, 34, 152-163.	0.5	10
105	Towards integrated modeling of the long-term impacts of oil spills. Marine Policy, 2021, 131, 104554.	1.5	10
106	Transport Processes in the Gulf of Mexico Along the River-Estuary-Shelf-Ocean Continuum: a Review of Research from the Gulf of Mexico Research Initiative. Estuaries and Coasts, 2022, 45, 621-657.	1.0	10
107	Remote Predictions of Mahi-Mahi (Coryphaena hippurus) Spawning in the Open Ocean Using Summarized Accelerometry Data. Frontiers in Marine Science, 2021, 8, .	1.2	9
108	An integrative investigation of sensory organ development and orientation behavior throughout the larval phase of a coral reef fish. Scientific Reports, 2021, 11, 12377.	1.6	9

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109	Biophysical Simulations Support Schooling Behavior of Fish Larvae Throughout Ontogeny. Frontiers in Marine Science, 2018, 5, .	1.2	8
110	Connectivity of theÂGulf of Mexico Continental Shelf Fish Populations and Implications of Simulated Oil Spills. , 2020, , 369-389.		8
111	Physical Transport Processes that Affect the Distribution of Oil in the Gulf of Mexico: Observations and Modeling. Oceanography, 2021, 34, 58-75.	0.5	8
112	Biophysical connectivity of snapper spawning aggregations and marine protected area management alternatives in Cuba. Fisheries Oceanography, 2019, 28, 33-42.	0.9	7
113	EXPERIMENTAL INVESTIGATION, SCALE-UP AND MODELING OF DROPLET SIZE DISTRIBUTIONS IN TURBULENT MULTIPHASE JETS. Multiphase Science and Technology, 2020, 32, 113-136.	0.2	7
114	Predicting coral metapopulation decline in a changing thermal environment. Coral Reefs, 2022, 41, 961-972.	0.9	7
115	Mechanisms of Cross-Shore Transport and Spatial Variability of Phytoplankton on a Rip-Channeled Beach. Frontiers in Marine Science, 2018, 5, .	1.2	6
116	Comparison of theÂSpatial Extent, Impacts to Shorelines, and Ecosystem and Four-Dimensional Characteristics of Simulated Oil Spills. , 2020, , 340-354.		6
117	Behavior of Rising Droplets and Bubbles: Impact on the Physics of Deep-Sea Blowouts and Oil Fate. , 2020, , 65-82.		6
118	Numerical simulations of onshore transport of larvae and detritus to a steep pocket beach. Marine Ecology - Progress Series, 2017, 582, 33-43.	0.9	6
119	Whether European eel leptocephali use the Earthâ€™s magnetic field to guide their migration remains an open question. Current Biology, 2017, 27, R998-R1000.	1.8	5
120	Predicting the impact of future oil-spill closures on fishery-dependent communitiesâ€"a spatially explicit approach. ICES Journal of Marine Science, 2019, , .	1.2	5
121	Dynamic Coupling of Near-Field and Far-Field Models. , 2020, , 139-154.		5
122	The choice of droplet size probability distribution function for oil spill modeling is not trivial. Marine Pollution Bulletin, 2021, 163, 111920.	2.3	5
123	Hydrodynamic and biological constraints on group cohesion in plankton. Journal of Theoretical Biology, 2019, 482, 109987.	0.8	4
124	Resolving the dilemma of dispersant use for deep oil spill response. Environmental Research Letters, 2019, 14, 091002.	2.2	4
125	The spatial context of â€œwinningâ€•in MPA network design: Location matters. Conservation Letters, 2018, 11, e12455.	2.8	3
126	Simulating Deep Oil Spills Beyond the Gulf of Mexico. , 2020, , 315-336.		3

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127	Summary of Contemporary Research on theÂUse of Chemical Dispersants for Deep-Sea Oil Spills. , 2020, , 494-512.		3
128	Ontogeny of Orientation during the Early Life History of the Pelagic Teleost Mahi-Mahi, Coryphaena hippurus Linnaeus, 1758. Oceans, 2020, 1, 237-250.	0.6	3
129	Comparative Environmental Sensitivity of Offshore Gulf of Mexico Waters Potentially Impacted by Ultra-Deep Oil Well Blowouts. , 2020, , 443-466.		2
130	Exploitation Drives Changes in the Population Connectivity of Queen Conch (Aliger gigas). Frontiers in Marine Science, 0, 9, .	1.2	2
131	Lagrangian Biological Models. , 2001, , 1438-1443.		1
132	Reef fish larvae visually discriminate coral diversity during settlement. Bulletin of Marine Science, 2019, 95, 449-458.	0.4	1
133	Introduction to theÂVolume. , 2020, , 4-10.		1
134	Summary of Progress on Major Research Issues: Deep-Sea Oil Spills. , 2020, , 584-594.		1
135	Introduction to theÂVolume. , 2020, , 4-15.		1
136	Evaluating the Effectiveness of Fishery Closures for Deep Oil Spills Using a Four-Dimensional Model. , 2020, , 390-402.		1
137	Lagrangian Biological Models. , 2001, , 389-393.		0
138	Determination of Oil Spill Chemical Concentrations in Nearshore Matrices. International Oil Spill Conference Proceedings, 2021, 2021, .	0.1	0