

# Sebastien Brosse

## List of Publications by Year in descending order

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Version: 2024-02-01

111  
papers

6,538  
citations

66343

42  
h-index

71685

76  
g-index

117  
all docs

117  
docs citations

117  
times ranked

6847  
citing authors

#	ARTICLE	IF	CITATIONS
1	How many dimensions are needed to accurately assess functional diversity? A pragmatic approach for assessing the quality of functional spaces. <i>Global Ecology and Biogeography</i> , 2015, 24, 728-740.	5.8	338
2	Fish Invasions in the World's River Systems: When Natural Processes Are Blurred by Human Activities. <i>PLoS Biology</i> , 2008, 6, e28.	5.6	324
3	Decomposing functional $\hat{\beta}$ -diversity reveals that low functional $\hat{\beta}$ -diversity is driven by low functional turnover in European fish assemblages. <i>Global Ecology and Biogeography</i> , 2013, 22, 671-681.	5.8	318
4	Functional ecology of fish: current approaches and future challenges. <i>Aquatic Sciences</i> , 2017, 79, 783-801.	1.5	270
5	Human impacts on global freshwater fish biodiversity. <i>Science</i> , 2021, 371, 835-838.	12.6	262
6	Partitioning global patterns of freshwater fish beta diversity reveals contrasting signatures of past climate changes. <i>Ecology Letters</i> , 2011, 14, 325-334.	6.4	260
7	Conservation Strategies for Endemic Fish Species Threatened by the Three Gorges Dam. <i>Conservation Biology</i> , 2003, 17, 1748-1758.	4.7	197
8	Homogenization patterns of the world's freshwater fish faunas. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 18003-18008.	7.1	197
9	A global database on freshwater fish species occurrence in drainage basins. <i>Scientific Data</i> , 2017, 4, 170141.	5.3	145
10	Unlocking biodiversity and conservation studies in high-diversity environments using environmental DNA (eDNA): A test with Guianese freshwater fishes. <i>Molecular Ecology Resources</i> , 2019, 19, 27-46.	4.8	135
11	Functional homogenization exceeds taxonomic homogenization among European fish assemblages. <i>Global Ecology and Biogeography</i> , 2014, 23, 1450-1460.	5.8	127
12	Scientific uncertainty and the assessment of risks posed by non-native freshwater fishes. <i>Fish and Fisheries</i> , 2009, 10, 88-97.	5.3	121
13	Global imprint of historical connectivity on freshwater fish biodiversity. <i>Ecology Letters</i> , 2014, 17, 1130-1140.	6.4	121
14	Erosion of global functional diversity across the tree of life. <i>Science Advances</i> , 2021, 7, .	10.3	114
15	The use of artificial neural networks to assess fish abundance and spatial occupancy in the littoral zone of a mesotrophic lake. <i>Ecological Modelling</i> , 1999, 120, 299-311.	2.5	112
16	Global and Regional Patterns in Riverine Fish Species Richness: A Review. <i>International Journal of Ecology</i> , 2011, 2011, 1-12.	0.8	106
17	Global diversity patterns and cross-taxa convergence in freshwater systems. <i>Journal of Animal Ecology</i> , 2013, 82, 365-376.	2.8	105
18	Contrasting patterns and mechanisms of spatial turnover for native and exotic freshwater fish in Europe. <i>Journal of Biogeography</i> , 2009, 36, 1899-1912.	3.0	101

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19	Utilisation of non-supervised neural networks and principal component analysis to study fish assemblages. <i>Ecological Modelling</i> , 2001, 146, 159-166.	2.5	98
20	Competitive interactions between native and exotic salmonids: a combined field and laboratory demonstration. <i>Ecology of Freshwater Fish</i> , 2007, 16, 133-143.	1.4	97
21	Rapid evaluation of threats to biodiversity: human footprint score and large vertebrate species responses in French Guiana. <i>Biodiversity and Conservation</i> , 2010, 19, 1567-1584.	2.6	96
22	Optimizing environmental DNA sampling effort for fish inventories in tropical streams and rivers. <i>Scientific Reports</i> , 2019, 9, 3085.	3.3	93
23	Hydrological disturbance benefits a native fish at the expense of an exotic fish. <i>Journal of Applied Ecology</i> , 2006, 43, 930-939.	4.0	91
24	A scenario for impacts of water availability loss due to climate change on riverine fish extinction rates. <i>Journal of Applied Ecology</i> , 2013, 50, 1105-1115.	4.0	90
25	Assessment of large-vertebrate species richness and relative abundance in Neotropical forest using line-transect censuses: what is the minimal effort required?. <i>Biodiversity and Conservation</i> , 2008, 17, 2627-2644.	2.6	89
26	Non-native species disrupt the worldwide patterns of freshwater fish body size: implications for Bergmann's rule. <i>Ecology Letters</i> , 2010, 13, 421-431.	6.4	88
27	Anthropogenic stressors and riverine fish extinctions. <i>Ecological Indicators</i> , 2017, 79, 37-46.	6.3	80
28	Patterns and processes of global riverine fish endemism. <i>Global Ecology and Biogeography</i> , 2012, 21, 977-987.	5.8	75
29	Non-native species led to marked shifts in functional diversity of the world freshwater fish faunas. <i>Ecology Letters</i> , 2018, 21, 1649-1659.	6.4	74
30	Fish-SPRICH: a database of freshwater fish species richness throughout the World. <i>Hydrobiologia</i> , 2013, 700, 343-349.	2.0	73
31	Seventy-five years of biodiversity decline of fish assemblages in Chinese isolated plateau lakes: widespread introductions and extirpations of narrow endemics lead to regional loss of dissimilarity. <i>Diversity and Distributions</i> , 2017, 23, 171-184.	4.1	73
32	Concordance among stream assemblages and spatial autocorrelation along a fragmented gradient. <i>Diversity and Distributions</i> , 2008, 14, 592-603.	4.1	72
33	Drainage network position and historical connectivity explain global patterns in freshwater fishes' range size. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13434-13439.	7.1	69
34	Worldwide freshwater fish homogenization is driven by a few widespread non-native species. <i>Biological Invasions</i> , 2016, 18, 1295-1304.	2.4	63
35	Title is missing!. <i>Biodiversity and Conservation</i> , 2003, 12, 2057-2075.	2.6	56
36	Small-scale gold mining erodes fish assemblage structure in small neotropical streams. <i>Biodiversity and Conservation</i> , 2011, 20, 1013-1026.	2.6	55

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37	Geographic isolation and climate govern the functional diversity of native fish communities in European drainage basins. <i>Global Ecology and Biogeography</i> , 2012, 21, 1083-1095.	5.8	55
38	A comprehensive examination of the network position hypothesis across multiple river metacommunities. <i>Ecography</i> , 2019, 42, 284-294.	4.5	54
39	The combined effects of climate change and river fragmentation on the distribution of Andean Amazon fishes. <i>Global Change Biology</i> , 2020, 26, 5509-5523.	9.5	50
40	Broad-scale determinants of non-native fish species richness are context-dependent. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 2385-2394.	2.6	49
41	Identifying climatic niche shifts using coarse-grained occurrence data: a test with non-native freshwater fish. <i>Global Ecology and Biogeography</i> , 2011, 20, 407-414.	5.8	49
42	Effects of damming on population sustainability of Chinese sturgeon, <i>Acipenser sinensis</i> : evaluation of optimal conservation measures. <i>Environmental Biology of Fishes</i> , 2009, 86, 325-336.	1.0	48
43	FISHMORPH: A global database on morphological traits of freshwater fishes. <i>Global Ecology and Biogeography</i> , 2021, 30, 2330-2336.	5.8	45
44	Historical assemblage distinctiveness and the introduction of widespread non-native species explain worldwide changes in freshwater fish taxonomic dissimilarity. <i>Global Ecology and Biogeography</i> , 2014, 23, 574-584.	5.8	44
45	Fish assemblage patterns in the littoral zone of a European reservoir. <i>Freshwater Biology</i> , 2007, 52, 448-458.	2.4	43
46	Regional vs local drivers of phylogenetic and species diversity in stream fish communities. <i>Freshwater Biology</i> , 2014, 59, 450-462.	2.4	43
47	Modelling roach ( <i>Rutilus rutilus</i> ) microhabitat using linear and nonlinear techniques. <i>Freshwater Biology</i> , 2000, 44, 441-452.	2.4	41
48	Nested patterns of spatial diversity revealed for fish assemblages in a west European river. <i>Ecology of Freshwater Fish</i> , 2005, 14, 233-242.	1.4	41
49	Macroinvertebrate richness patterns in North African streams. <i>Journal of Biogeography</i> , 2003, 30, 1821-1833.	3.0	40
50	Behaviour of roach ( <i>Rutilus rutilus</i> L.) altered by <i>Ligula intestinalis</i> (Cestoda: Pseudophyllidea): a field demonstration. <i>Freshwater Biology</i> , 2001, 46, 1219-1227.	2.4	39
51	Taxonomic and functional diversity patterns reveal different processes shaping European and Amazonian stream fish assemblages. <i>Journal of Biogeography</i> , 2016, 43, 1832-1843.	3.0	38
52	Comparing the performance of 12S mitochondrial primers for fish environmental DNA across ecosystems. <i>Environmental DNA</i> , 2021, 3, 1113-1127.	5.8	38
53	Extinction of threatened vertebrates will lead to idiosyncratic changes in functional diversity across the world. <i>Nature Communications</i> , 2021, 12, 5162.	12.8	38
54	Abundance, diversity, and structure of freshwater invertebrates and fish communities: An artificial neural network approach. <i>New Zealand Journal of Marine and Freshwater Research</i> , 2001, 35, 135-145.	2.0	37

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55	Chinese Sturgeon ( <i>Acipenser sinensis</i> ) in the Yangtze River: a hydroacoustic assessment of fish location and abundance on the last spawning ground. <i>Journal of Applied Ichthyology</i> , 2006, 22, 140-144.	0.7	37
56	Influence of small-scale gold mining on French Guiana streams: Are diatom assemblages valid disturbance sensors?. <i>Ecological Indicators</i> , 2012, 14, 100-106.	6.3	37
57	Effect of reduced impact logging and small-scale mining disturbances on Neotropical stream fish assemblages. <i>Aquatic Sciences</i> , 2016, 78, 315-325.	1.5	36
58	Morphological diversity of freshwater fishes differs between realms, but morphologically extreme species are widespread. <i>Global Ecology and Biogeography</i> , 2019, 28, 211-221.	5.8	36
59	Predicting fish distribution in a mesotrophic lake by hydroacoustic survey and artificial neural networks. <i>Limnology and Oceanography</i> , 1999, 44, 1293-1303.	3.1	35
60	Influence of habitat structure and fish density on Atlantic salmon <i>Salmo salar</i> L. territorial behaviour. <i>Journal of Fish Biology</i> , 2006, 68, 951-957.	1.6	32
61	From current distinctiveness to future homogenization of the world's freshwater fish faunas. <i>Diversity and Distributions</i> , 2015, 21, 223-235.	4.1	32
62	Electrofishing efficiency in low conductivity neotropical streams: towards a non-destructive fish sampling method. <i>Fisheries Management and Ecology</i> , 2014, 21, 234-243.	2.0	31
63	Advances and prospects of environmental DNA in neotropical rainforests. <i>Advances in Ecological Research</i> , 2020, , 331-373.	2.7	27
64	Relationships between Environmental Characteristics and the Density of Age-0 Eurasian Perch <i>Perca fluviatilis</i> in the Littoral Zone of a Lake: A Nonlinear Approach. <i>Transactions of the American Fisheries Society</i> , 2002, 131, 1033-1043.	1.4	26
65	A global database of nitrogen and phosphorus excretion rates of aquatic animals. <i>Ecology</i> , 2017, 98, 1475-1475.	3.2	26
66	Local rise of phylogenetic diversity due to invasions and extirpations leads to a regional phylogenetic homogenization of fish fauna from Chinese isolated plateau lakes. <i>Ecological Indicators</i> , 2019, 101, 388-398.	6.3	26
67	Spatio-temporal patterns of fish assemblages in coastal West African rivers: a self-organizing map approach. <i>Aquatic Living Resources</i> , 2006, 19, 361-370.	1.2	25
68	Disentangling spatial and environmental determinants of fish species richness and assemblage structure in Neotropical rainforest streams. <i>Freshwater Biology</i> , 2017, 62, 1707-1720.	2.4	25
69	Spatial mismatch in morphological, ecological and phylogenetic diversity, in historical and contemporary European freshwater fish faunas. <i>Ecography</i> , 2018, 41, 1665-1674.	4.5	23
70	Microsatellites assessment of Chinese sturgeon ( <i>Acipenser sinensis</i> Gray) genetic variability. <i>Journal of Applied Ichthyology</i> , 2005, 21, 7-13.	0.7	22
71	Measuring changes in taxonomic dissimilarity following species introductions and extirpations. <i>Ecological Indicators</i> , 2012, 18, 552-558.	6.3	22
72	Measuring ecosystem degradation through half a century of fish species introductions and extirpations in a large isolated lake. <i>Ecological Indicators</i> , 2015, 58, 104-112.	6.3	22

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73	Intra- and interspecific differences in nutrient recycling by European freshwater fish. <i>Freshwater Biology</i> , 2012, 57, 2330-2341.	2.4	21
74	Influence of some topographical variables on the spatial distribution of lake fish during summer stratification. <i>Fundamental and Applied Limnology</i> , 1999, 145, 359-371.	0.7	21
75	Is scuba sampling a relevant method to study fish microhabitat in lakes? Examples and comparisons for three European species. <i>Ecology of Freshwater Fish</i> , 2001, 10, 138-146.	1.4	20
76	Characterizing the spatial signal of environmental DNA in river systems using a community ecology approach. <i>Molecular Ecology Resources</i> , 2022, 22, 1274-1283.	4.8	20
77	Spatial range shape drives the grain size effects in species distribution models. <i>Ecography</i> , 2013, 36, 778-787.	4.5	17
78	Influence of Local Habitat and Climatic Factors on the Distribution of Fish Species in the Tonle Sap Lake. <i>Water (Switzerland)</i> , 2020, 12, 786.	2.7	17
79	Morphological sorting of introduced freshwater fish species within and between donor realms. <i>Global Ecology and Biogeography</i> , 2020, 29, 803-813.	5.8	17
80	Detecting fish assemblages with environmental DNA: Does protocol matter? Testing eDNA metabarcoding method robustness. <i>Environmental DNA</i> , 2021, 3, 619-630.	5.8	14
81	Dealing with Noisy Absences to Optimize Species Distribution Models: An Iterative Ensemble Modelling Approach. <i>PLoS ONE</i> , 2012, 7, e49508.	2.5	14
82	Aquatic eDNA for monitoring French Guiana biodiversity. <i>Biodiversity Data Journal</i> , 2019, 7, e37518.	0.8	14
83	Contemporary environment and historical legacy explain functional diversity of freshwater fishes in the world rivers. <i>Global Ecology and Biogeography</i> , 2022, 31, 700-713.	5.8	14
84	Encounter rate between local populations shapes host selection in complex parasite life cycle. <i>Biological Journal of the Linnean Society</i> , 2006, 89, 99-106.	1.6	13
85	Fish spatial distribution in the littoral zone of Lake Pareloup (France) during summer. <i>Fundamental and Applied Limnology</i> , 2001, 153, 129-144.	0.7	13
86	Role of fish communities in particulate organic matter fluxes between salt marshes and coastal marine waters in the Mont Saint-Michel Bay. , 1998, , 121-133.		13
87	Low level of anthropization linked to harsh vertebrate biodiversity declines in Amazonia. <i>Nature Communications</i> , 2022, 13, .	12.8	13
88	Determinants of life-history traits in a fish ectoparasite: a hierarchical analysis. <i>Parasitology</i> , 2011, 138, 848-857.	1.5	12
89	Temporal Dynamics of Fish Assemblages as a Reflection of Policy Shift from Fishing Concession to Co-Management in One of the World's Largest Tropical Flood Pulse Fisheries. <i>Water (Switzerland)</i> , 2020, 12, 2974.	2.7	11
90	Amazonian mammal monitoring using aquatic environmental DNA. <i>Molecular Ecology Resources</i> , 2021, 21, 1875-1888.	4.8	11

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91	Determinants of fish assemblage structure in Mount ItoupÃ© mountain streams (French Guiana). <i>Annales De Limnologie</i> , 2013, 49, 43-49.	0.6	10
92	The iterative ensemble modelling approach increases the accuracy of fish distribution models. <i>Ecography</i> , 2015, 38, 213-220.	4.5	10
93	A diagnosis-based approach to assess specific risks of river degradation in a multiple pressure context: Insights from fish communities. <i>Science of the Total Environment</i> , 2020, 734, 139467.	8.0	10
94	Species composition and temporal pattern of fish passing through the navigation locks in the middle reach of Yangtze River: implications for fish conservation. <i>Journal of Applied Ichthyology</i> , 2013, 29, 1441-1444.	0.7	9
95	Global patterns and predictors of trophic position, body size and jaw size in fishes. <i>Global Ecology and Biogeography</i> , 2021, 30, 414-428.	5.8	9
96	Aquatic Insect Assemblage Patterns in Four West-African Coastal Rivers. <i>Journal of Biological Sciences</i> , 2007, 7, 1130-1138.	0.3	9
97	Unraveling the dietary diversity of Neotropical top predators using scat DNA metabarcoding: A case study on the elusive Giant Otter. <i>Environmental DNA</i> , 2021, 3, 889-900.	5.8	8
98	The influence of the invasive black bullhead ( <i>Ameiurus melas</i> ) on the predatory efficiency of pike ( <i>Esox lucius</i> ). <i>Journal of Fish Biology</i> , 2008, 73, 196-205.	1.6	7
99	NEOTROPICAL FRESHWATER FISHES: A dataset of occurrence and abundance of freshwater fishes in the Neotropics. <i>Ecology</i> , 2023, 104, e3713.	3.2	7
100	Changes in roach ( <i>Rutilus rutilus</i> L.) population structure induced on draining a large reservoir. <i>Comptes Rendus De L'AcadÃ©mie Des Sciences SÃ©rie 3, Sciences De La Vie</i> , 1999, 322, 331-338.	0.8	4
101	Fishes of the Mitaraka Mountains (French Guiana). <i>Zoosystema</i> , 2019, 40, 131.	0.6	4
102	Threatened fishes of the world: <i>Acipenser dabryanus</i> DumÃ©ril, 1869. <i>Environmental Biology of Fishes</i> , 2009, 85, 117-118.	1.0	3
103	Length-weight relationships of 58 fish species in French Guiana streams. <i>Journal of Applied Ichthyology</i> , 2015, 31, 567-570.	0.7	3
104	Aquarium trade and fish farms as a source of non-native freshwater fish introductions in French Guiana. <i>Annales De Limnologie</i> , 2021, 57, 4.	0.6	3
105	Threatened fishes of the World: <i>Acipenser sinensis</i> Gray, 1834 (Acipenseriformes: Acipenseridae). <i>Environmental Biology of Fishes</i> , 2009, 84, 183-184.	1.0	2
106	Threatened fishes of the world: <i>Psephurus gladius</i> (Martens, 1862) (Acipenseriformes: polyodontidae). <i>Environmental Biology of Fishes</i> , 2009, 84, 421-422.	1.0	2
107	Applying convolutional neural networks to speed up environmental DNA annotation in a highly diverse ecosystem. <i>Scientific Reports</i> , 2022, 12, .	3.3	2
108	Ontogenetic microhabitat shifts of 0+ rudd ( <i>Scardinius erythrophthalmus</i> L.) in the littoral zone of a mesotrophic lake. <i>Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology</i> , 2000, 27, 2063-2065.	0.1	0

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109	Linear and non-linear methods to predict the microhabitat of 0+ roach (<i>Rutilus rutilus</i> L.) in the littoral zone of a large reservoir. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2000, 27, 811-814.	0.1	0
110	Elaboration of a biotic index of pollution using macroinvertebrates for the monitoring of Lake Nokoué in Benin. International Journal of Biological and Chemical Sciences, 2016, 9, 2987.	0.2	0
111	Do Morphological Traits Predict Ecological Guilds of the Mekong Fish Fauna?. Sustainability, 2021, 13, 8401.	3.2	0