Stephan B Munch

List of Publications by Year
in descending order

44 papers	3,520 citations	304743 22 h-index	265206 42 g-index
44 all docs	44 docs citations	44 times ranked	4130 citing authors

#	Article	IF	Citations
1	Detecting Causality in Complex Ecosystems. Science, 2012, 338, 496-500.	12.6	1,545
2	Thermal legacies: transgenerational effects of temperature on growth in a vertebrate. Ecology Letters, 2012, 15, 159-163.	6.4	278
3	Tracking and forecasting ecosystem interactions in real time. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152258.	2.6	185
4	Predicting climate effects on Pacific sardine. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6430-6435.	7.1	164
5	Predicting life history parameters for all fishes worldwide. Ecological Applications, 2017, 27, 2262-2276.	3.8	136
6	Model-free forecasting outperforms the correct mechanistic model for simulated and experimental data. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5253-5257.	7.1	122
7	RAPID GROWTH RESULTS IN INCREASED SUSCEPTIBILITY TO PREDATION IN MENIDIA MENIDIA. Evolution; International Journal of Organic Evolution, 2003, 57, 2119-2127.	2.3	121
8	Non-genetic inheritance and changing environments. Non-Genetic Inheritance, 2013, 1, .	0.8	113
9	EXTREME SELECTION ON SIZE IN THE EARLY LIVES OF FISH. Evolution; International Journal of Organic Evolution, 2010, 64, no-no.	2.3	86
10	The intrinsic predictability of ecological time series and its potential to guide forecasting. Ecological Monographs, 2019, 89, e01359.	5.4	74
11	Local adaptation in transgenerational responses to predators. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152271.	2.6	65
12	Determining Individual Variation in Growth and Its Implication for Life-History and Population Processes Using the Empirical Bayes Method. PLoS Computational Biology, 2014, 10, e1003828.	3.2	61
13	Nonlinear dynamics and noise in fisheries recruitment: A global meta-analysis. Fish and Fisheries, 2018, 19, 964-973.	5.3	54
14	Bayesian nonparametric analysis of stock–recruitment relationships. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 1808-1821.	1.4	51
15	A Bayesian approach to identifying and compensating for model misspecification in population models. Ecology, 2014, 95, 329-341.	3.2	44
16	Chaos is not rare in natural ecosystems. Nature Ecology and Evolution, 2022, 6, 1105-1111.	7.8	39
17	Trophic control changes with season and nutrient loading in lakes. Ecology Letters, 2020, 23, 1287-1297.	6.4	33
18	Frequently asked questions about nonlinear dynamics and empirical dynamic modelling. ICES Journal of Marine Science, 2020, 77, 1463-1479.	2.5	32

#	Article	IF	Citations
19	Circumventing structural uncertainty: A Bayesian perspective on nonlinear forecasting for ecology. Ecological Complexity, 2017, 32, 134-143.	2.9	30
20	Avoiding tipping points in fisheries management through Gaussian process dynamic programming. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20141631.	2.6	29
21	Thermal reaction norms for growth vary among cohorts of Pacific cod (Gadus macrocephalus). Marine Biology, 2012, 159, 2173-2183.	1.5	28
22	Trait variation in extreme thermal environments under constant and fluctuating temperatures. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180177.	4.0	27
23	Why do larger mothers produce larger offspring? A test of classic theory. Ecology, 2016, 97, 3452-3459.	3.2	18
24	Does Reproductive Investment Decrease Telomere Length in Menidia menidia?. PLoS ONE, 2015, 10, e0125674.	2.5	18
25	Tradeâ€offs between accuracy and interpretability in von <scp>B</scp>ertalanffy randomâ€effects models of growth. Ecological Applications, 2016, 26, 1535-1552.	3.8	17
26	Estimating partial regulation in spatiotemporal models of community dynamics. Ecology, 2017, 98, 1277-1289.	3.2	16
27	RAPID GROWTH RESULTS IN INCREASED SUSCEPTIBILITY TO PREDATION IN MENIDIA MENIDIA. Evolution; International Journal of Organic Evolution, 2003, 57, 2119.	2.3	14
28	Ecosystem based multi-species management using Empirical Dynamic Programming. Ecological Modelling, 2021, 441, 109423.	2.5	14
29	Hidden similarities in the dynamics of a weakly synchronous marine metapopulation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 479-485.	7.1	12
30	Forecasting in the face of ecological complexity: Number and strength of species interactions determine forecast skill in ecological communities. Ecology Letters, 2022, 25, 1974-1985.	6.4	12
31	Environmental variability and fishing effects on the Pacific sardine fisheries in the Gulf of California. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 623-630.	1.4	10
32	A semiparametric Bayesian approach to estimating maximum reproductive rates at low population sizes. , 2013, 23, 699-709.		9
33	A semiparametric Bayesian method for detecting Allee effects. Ecology, 2013, 94, 1196-1204.	3.2	9
34	Leveraging spatial information to forecast nonlinear ecological dynamics. Methods in Ecology and Evolution, 2021, 12, 266-279.	5.2	8
35	Maternal diet and age alter direct and indirect relationships between lifeâ€history traits across multiple generations. Functional Ecology, 2019, 33, 491-502.	3.6	7
36	Recurrent neural networks for partially observed dynamical systems. Physical Review E, 2022, 105, 044205.	2.1	7

#	Article	IF	Citations
37	A latitudinal gradient in thermal transgenerational plasticity and a test of theory. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210797.	2.6	6
38	Structured priors for sparse probability vectors with application to model selection in Markov chains. Statistics and Computing, 2019, 29, 1077-1093.	1.5	5
39	Circularity in fisheries data weakens real world prediction. Scientific Reports, 2020, 10, 6977.	3.3	5
40	Applying empirical dynamic modeling to distinguish abiotic and biotic drivers of population fluctuations in sympatric fishes. Limnology and Oceanography, 2022, 67, .	3.1	5
41	Combining functional data with hierarchical Gaussian process models. Environmental and Ecological Statistics, 2017, 24, 175-199.	3.5	4
42	An empirical dynamic modeling framework for missing or irregular samples. Ecological Modelling, 2022, 468, 109948.	2.5	4
43	Comments on identifying causal relationships in nonlinear dynamical systems via empirical mode decomposition. Nature Communications, 2022, 13, .	12.8	2
44	Interaction network structure and spatial patterns influence invasiveness and invasibility in a stochastic model of plant communities. Oikos, 2021, 130, 2040-2052.	2.7	1