Bernard Cazelles

List of Publications by Year
in descending order

106	5,290	76196	95083
papers	citations	40 h-index	68 g-index

120	120	120	6847
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wavelet analysis of ecological time series. Oecologia, 2008, 156, 287-304.	0.9	552
2	Linking climate change to lemming cycles. Nature, 2008, 456, 93-97.	13.7	377
3	Time-dependent spectral analysis of epidemiological time-series with wavelets. Journal of the Royal Society Interface, 2007, 4, 625-636.	1.5	257
4	Nonstationary Influence of El NiÃ±o on the Synchronous Dengue Epidemics in Thailand. PLoS Medicine, 2005, 2, e106.	3.9	239
5	Avian influenza H5N1 viral and bird migration networks in Asia. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 172-177.	3.3	169
6	Shifting patterns: malaria dynamics and rainfall variability in an African highland. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 123-132.	1.2	140
7	Modelling population dynamics of seabirds: importance of the effects of climate fluctuations on breeding proportions. Oikos, 2005, 108, 511-522.	1.2	103
8	Analysing multiple time series and extending significance testing in wavelet analysis. Marine Ecology - Progress Series, 2008, 359, 11-23.	0.9	93
9	Influence of spatial heterogeneity on an emerging infectious disease: the case of dengue epidemics. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 1171-1177.	1.2	92
10	Evidence of a shift in the cyclicity of Antarctic seabird dynamics linked to climate. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 887-895.	1.2	92
11	Climatic oscillations and tuna catch rates in the Indian Ocean: a wavelet approach to time series analysis. Fisheries Oceanography, 2007, 16, 95-104.	0.9	92
12	Estimation of CHD risk in a French working population using a modified Framingham model. Journal of Clinical Epidemiology, 1994, 47, 1353-1364.	2.4	91
13	Periodic climate cooling enhanced natural disasters and wars in China during AD 10â€“1900. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3745-3753.	1.2	89
14	Dengue Dynamics in Binh Thuan Province, Southern Vietnam: Periodicity, Synchronicity and Climate Variability. PLoS Neglected Tropical Diseases, 2010, 4, e747.	1.3	88
15	Increasing airline travel may facilitate co-circulation of multiple dengue virus serotypes in Asia. PLoS Neglected Tropical Diseases, 2017, 11, e0005694.	1.3	86
16	Reconstruction of a 1,910-y-long locust series reveals consistent associations with climate fluctuations in China. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14521-14526.	3.3	85
17	Wavelet analysis in ecology and epidemiology: impact of statistical tests. Journal of the Royal Society Interface, 2014, 11, 20130585.	1.5	84
18	Spatiotemporal Dynamics of Dengue Epidemics, Southern Vietnam. Emerging Infectious Diseases, 2013, 19, 945-953.	2.0	83

#	Article	IF	Citations
19	Detection of imperfect population synchrony in an uncertain world. Journal of Animal Ecology, 2003, 72, 953-968.	1.3	74
20	Long-Term Species, Sexual and Individual Variations in Foraging Strategies of Fur Seals Revealed by Stable Isotopes in Whiskers. PLoS ONE, 2012, 7, e32916.	1.1	74
21	Complex interplays among population dynamics, environmental forcing, and exploitation in fisheries. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5420-5425.	3.3	72
22	Urbanization prolongs hantavirus epidemics in cities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4707-4712.	3.3	72
23	The influence of geographic and climate factors on the timing of dengue epidemics in PerÃº, 1994-2008. BMC Infectious Diseases, 2011, 11, 164.	1.3	70
24	Measuring the effects of COVID-19-related disruption on dengue transmission in southeast Asia and Latin America: a statistical modelling study. Lancet Infectious Diseases, The, 2022, 22, 657-667.	4.6	68
25	Interannual cycles of Hantaan virus outbreaks at the humanâ€“animal interface in Central China are controlled by temperature and rainfall. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8041-8046.	3.3	67
26	How environmental conditions impact mosquito ecology and Japanese encephalitis: An eco-epidemiological approach. Environment International, 2015, 79, 17-24.	4.8	63
27	Large-Scale Comparative Analysis of Pertussis Population Dynamics: Periodicity, Synchrony, and Impact of Vaccination. American Journal of Epidemiology, 2005, 161, 1159-1167.	1.6	57
28	Porcupine Feeding Scars and Climatic Data Show Ecosystem Effects of the Solar Cycle. American Naturalist, 2004, 164, 283-297.	1.0	56
29	Changes in Rodent Abundance and Weather Conditions Potentially Drive Hemorrhagic Fever with Renal Syndrome Outbreaks in Xiâ€™an, China, 2005â€“2012. PLoS Neglected Tropical Diseases, 2015, 9, e0003530.	1.3	53
30	Regional-scale climate-variability synchrony of cholera epidemics in West Africa. BMC Infectious Diseases, 2007, 7, 20.	1.3	52
31	Periodic temperature-associated drought/flood drives locust plagues in China. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 823-831.	1.2	51
32	Can Human Movements Explain Heterogeneous Propagation of Dengue Fever in Cambodia?. PLoS Neglected Tropical Diseases, 2012, 6, e1957.	1.3	51
33	Using the Kalman filter and dynamic models to assess the changing HIV/AIDS epidemic. Mathematical Biosciences, 1997, 140, 131-154.	0.9	47
34	Symbolic dynamics for identifying similarity between rhythms of ecological time series. Ecology Letters, 2004, 7, 755-763.	3.0	47
35	Infectious Diseases, Climate Influences, and Nonstationarity. PLoS Medicine, 2006, 3, e328.	3.9	47
36	Animal Reservoir, Natural and Socioeconomic Variations and the Transmission of Hemorrhagic Fever with Renal Syndrome in Chenzhou, China, 2006â€“2010. PLoS Neglected Tropical Diseases, 2014, 8, e2615.	1.3	47

#	Article	IF	Citations
37	UNIVERSAL POWER LAWS GOVERN INTERMITTENT RARITY IN COMMUNITIES OF INTERACTING SPECIES. Ecology, 1999, 80, 1505-1521.	1.5	44
38	Atmospheric Moisture Variability and Transmission of Hemorrhagic Fever with Renal Syndrome in Changsha City, Mainland China, 1991â€“2010. PLoS Neglected Tropical Diseases, 2013, 7, e2260.	1.3	44
39	Quantifying the added value of climate information in a spatio-temporal dengue model. Stochastic Environmental Research and Risk Assessment, 2016, 30, 2067-2078.	1.9	44
40	How predictable is chaos?. Nature, 1992, 355, 25-26.	13.7	43
41	Explaining rapid reinfections in multiple-wave influenza outbreaks: Tristan da Cunha 1971 epidemic as a case study. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3635-3643.	1.2	43
42	Anti-phase regularization of coupled chaotic maps modelling bursting neurons. Europhysics Letters, 2001, 56, 504-509.	0.7	42
43	Anthropogenically driven environmental changes shift the ecological dynamics of hemorrhagic fever with renal syndrome. PLoS Pathogens, 2017, 13, e1006198.	2.1	41
44	Aedes mosquitoes acquire and transmit Zika virus by breeding in contaminated aquatic environments. Nature Communications, 2019, 10, 1324.	5.8	41
45	Detecting population heterogeneity in effects of North Atlantic Oscillations on seabird body condition: get into the rhythm. Oikos, 2010, 119, 1526-1536.	1.2	38
46	Accounting for non-stationarity in epidemiology by embedding time-varying parameters in stochastic models. PLoS Computational Biology, 2018, 14, e1006211.	1.5	38
47	Spatiotemporal variation of the association between climate dynamics and HFRS outbreaks in Eastern China during 2005-2016 and its geographic determinants. PLoS Neglected Tropical Diseases, 2018, 12, e0006554.	1.3	38
48	The Moran Effect and Phase Synchronization in Complex Spatial Community Dynamics. American Naturalist, 2001, 157, 670-676.	1.0	37
49	Interannual Variability of Human Plague Occurrence in the Western United States Explained by Tropical and North Pacific Ocean Climate Variability. American Journal of Tropical Medicine and Hygiene, 2010, 83, 624-632.	0.6	35
50	Hemorrhagic fever with renal syndrome in China: Mechanisms on two distinct annual peaks and control measures. International Journal of Biomathematics, 2018, 11, 1850030.	1.5	35
51	Transmission dynamics of re-emerging rabies in domestic dogs of rural China. PLoS Pathogens, 2018, 14, e1007392.	2.1	35
52	Detecting dynamic spatial correlation patterns with generalized wavelet coherence and non-stationary surrogate data. Scientific Reports, 2019, 9, 7389.	1.6	34
53	Identification of Chinese plague foci from long-term epidemiological data. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8196-8201.	3.3	33
54	Teleconnection between phytoplankton dynamics in north temperate lakes and global climatic oscillation by time-frequency analysis. Water Research, 2019, 154, 267-276.	5.3	33

#	Article	IF	Citations
55	Structure in the variability of the basic reproductive number (R0) for Zika epidemics in the Pacific islands. ELife, 2016, 5, .	2.8	33
56	Unexpected coherence and conservation. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 2595-2602.	1.2	30
57	Cholera Threat to Humans in Ghana Is Influenced by Both Global and Regional Climatic Variability. EcoHealth, 2007, 3, 223-231.	0.9	30
58	Surface water areas significantly impacted 2014 dengue outbreaks in Guangzhou, China. Environmental Research, 2016, 150, 299-305.	3.7	29
59	Early-life sexual segregation: ontogeny of isotopic niche differentiation in the Antarctic fur seal. Scientific Reports, 2016, 6, 33211.	1.6	28
60	Predictability and chaos in bird vigilant behaviour. Animal Behaviour, 1996, 52, 457-472.	0.8	27
61	Effects of regime shifts on the population dynamics of the grey-sided vole in Hokkaido, Japan. Climate Research, 2006, 32, 109-118.	0.4	27
62	Coastal biophysical processes and the biogeography of rocky intertidal species along the southâ€eastern Pacific. Journal of Biogeography, 2019, 46, 420-431.	1.4	25
63	Adaptive control of chaotic systems in a noisy environment. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 196, 326-330.	0.9	23
64	Does homologous reinfection drive multiple-wave influenza outbreaks? Accounting for immunodynamics in epidemiological models. Epidemics, 2013, 5, 187-196.	1.5	22
65	Dynamics with riddled basins of attraction in models of interacting populations. Chaos, Solitons and Fractals, 2001, 12, 301-311.	2.5	21
66	Time series analysis of tuna and swordfish catches and climate variability in the Indian Ocean (1968-2003). Aquatic Living Resources, 2008, 21, 277-285.	0.5	21
67	Reproduction management affects breeding ecology and reproduction costs in feral urban Pigeons (Columba livia). Canadian Journal of Zoology, 2010, 88, 781-787.	0.4	20
68	Complex Synchronization Phenomena in Ecological Systems. AIP Conference Proceedings, 2002, , .	0.3	19
69	Self-purification in a lotic ecosystem: a model of dissolved organic carbon and benthic microorganisms dynamics. Ecological Modelling, 1991, 58, 91-117.	1.2	18
70	An ecological and digital epidemiology analysis on the role of human behavior on the 2014 Chikungunya outbreak in Martinique. Scientific Reports, 2017, 7, 5967.	1.6	18
71	Dynamics of the COVID-19 epidemic in Ireland under mitigation. BMC Infectious Diseases, 2021, 21, 735.	1.3	18
72	Influenza A Gradual and Epochal Evolution: Insights from Simple Models. PLoS ONE, 2009, 4, e7426.	1.1	18

#	Article	IF	Citations
73	Extraction of nonlinear dynamics from short and noisy time series. Chaos, Solitons and Fractals, 2001, 12, 2051-2069.	2.5	17
74	French economic cycles: a wavelet analysis of French retrospective GNP series. Cliometrica, 2009, 3, 275-300.	1.3	15
75	Environmental multiâ€scale effects on zooplankton interâ€specific synchrony. Limnology and Oceanography, 2017, 62, 1355-1365.	1.6	15
76	Intrinsic and extrinsic drivers of transmission dynamics of hemorrhagic fever with renal syndrome caused by Seoul hantavirus. PLoS Neglected Tropical Diseases, 2019, 13, e0007757.	1.3	15
77	The relationship between rising temperatures and malaria incidence in Hainan, China, from 1984 to 2010: a longitudinal cohort study. Lancet Planetary Health, The, 2022, 6, e350-e358.	5.1	15
78	Comparison of stochastic and deterministic frameworks in dengue modelling. Mathematical Biosciences, 2019, 310, 1-12.	0.9	14
79	Parallel trends in the transmission of SARS-CoV-2 and retail/recreation and public transport mobility during non-lockdown periods. International Journal of Infectious Diseases, 2021, 104, 693-695.	1.5	14
80	Temporal Variability of MODIS Phenological Indices in the Temperate Rainforest of Northern Patagonia. Remote Sensing, 2018, 10, 956.	1.8	13
81	Predictability, chaos and coordination in bird vigilant behaviour. Animal Behaviour, 1999, 57, 497-500.	0.8	11
82	A mechanistic and data-driven reconstruction of the time-varying reproduction number: Application to the COVID-19 epidemic. PLoS Computational Biology, 2021, 17, e1009211.	1.5	11
83	Pathogens trigger top-down climate forcing on ecosystem dynamics. Oecologia, 2016, 181, 519-532.	0.9	10
84	Dengue modeling in rural Cambodia: Statistical performance versus epidemiological relevance. Epidemics, 2019, 26, 43-57.	1.5	10
85	Long-term persistence of monotypic dengue transmission in small size isolated populations, French Polynesia, 1978-2014. PLoS Neglected Tropical Diseases, 2020, 14, e0008110.	1.3	9
86	Blowout bifurcation with non-normal parameters in population dynamics. Physical Review E, 2001, 64, 032901.	0.8	8
87	The niche reduction approach: an opportunity for optimal control of infectious diseases in low-income countries?. BMC Public Health, 2014, 14, 753.	1.2	8
88	Interpretation of interannual variability in long-term aquatic ecological surveys. Canadian Journal of Fisheries and Aquatic Sciences, 2020, 77, 894-903.	0.7	8
89	Adaptive synchronization of globally coupled chaotic oscillators using control in noisy environments. Physica D: Nonlinear Phenomena, 1997, 103, 452-465.	1.3	7
90	Coupled Biospheric Synchrony of the Coastal Temperate Ecosystem in Northern Patagonia: A Remote Sensing Analysis. Remote Sensing, 2019, 11, 2092.	1.8	7

#	Article	IF	Citations
91	Ecological Dynamics: Integrating Empirical, Statistical, and Analytical Methods. Trends in Ecology and Evolution, 2020, 35, 1090-1099.	4.2	7
92	Patterns of variations in large pelagic fish: A comparative approach between the Indian and the Atlantic Oceans. Progress in Oceanography, 2010, 86, 276-282.	1.5	6
93	UNIVERSAL POWER LAWS GOVERN INTERMITTENT RARITY IN COMMUNITIES OF INTERACTING SPECIES. , 1999, 80, 1505.		6
94	Malaria elimination on Hainan Island despite climate change. Communications Medicine, 2022, 2, .	1.9	5
95	Coherence of dengue incidence and climate in the wet and dry zones of Sri Lanka. Science of the Total Environment, 2020, 724, 138269.	3.9	4
96	Stochastic Epidemic Models inference and diagnosis with Poisson Random Measure Data Augmentation. Mathematical Biosciences, 2021, 335, 108583.	0.9	4
97	Climatic Regulation of Vegetation Phenology in Protected Areas along Western South America. Remote Sensing, 2021, 13, 2590.	1.8	4
98	Synchronization of a Network of Chaotic Neurons Using Adaptive Control in Noisy Environment. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 1821-1830.	0.7	3
99	Comment on â€œDynamical mechanism for coexistence of dispersing species without trade-offs in spatially extended ecological systemsâ€• Physical Review E, 2002, 66, 013901.	0.8	3
100	NOISE-INDUCED SYNCHRONIZATION IN MULTITROPHIC CHAOTIC ECOLOGICAL SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1779-1788.	0.7	3
101	Major urban centers have weak influence on the timing of dengue epidemics in Southeast Asia. International Journal of Infectious Diseases, 2014, 21, 217.	1.5	3
102	Spatiotemporal variation of the association between sea surface temperature and chlorophyll in global ocean during 2002â€“2019 based on a novel WCA-BME approach. International Journal of Applied Earth Observation and Geoinformation, 2021, 105, 102620.	1.4	2
103	Changes in biologically controlled carbon fluxes in a small stream following continuous supply of excess organic load. Hydrobiologia, 1990, 192, 123-141.	1.0	1
104	Adaptive control of chaotic systems in a noisy environment. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 196, 326-330.	0.9	1
105	Resynchronisation of globally coupled chaotic oscillators using adaptive control. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 210, 95-100.	0.9	0
106	Spatial and temporal dynamics of dengue in southern Vietnam. International Journal of Infectious Diseases, 2012, 16, e13-e14.	1.5	0