Ludek Berec

List of Publications by Year
in descending order

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74 papers	4,020 citations	218677 26 h-index	155660 55 g-index
115 all docs	115 docs citations	115 times ranked	3481 citing authors

#	Article	IF	Citations
1	Importance of vaccine action and availability and epidemic severity for delaying the second vaccine dose. Scientific Reports, 2022, 12, 7638.	3.3	2
2	Delays, Masks, the Elderly, and Schools: First Covid-19 Wave in the Czech Republic. Bulletin of Mathematical Biology, 2022, 84, .	1.9	5
3	Response to Beran et al. Journal of Infectious Diseases, 2022, 226, 944-945.	4.0	1
4	Protection provided by vaccination, booster doses and previous infection against covid-19 infection, hospitalisation or death over time in Czechia. PLoS ONE, 2022, 17, e0270801.	2.5	18
5	Evolution of infection avoidance in populations affected by sexually transmitted infections. Theoretical Ecology, 2021, 14, 233-246.	1.0	0
6	Predation has small, short-term, and in certain conditions random effects on the evolution of aging. Bmc Ecology and Evolution, 2021, 21, 87.	1.6	0
7	Fecundity-Longevity Trade-Off, Vertical Transmission, and Evolution of Virulence in Sterilizing Pathogens. American Naturalist, 2020, 195, 95-106.	2.1	7
8	Impacts of Infections and Predation on Dynamics of Sexually Reproducing Populations. , 2020, , 43-70.		0
9	Allee effects under climate change. Oikos, 2019, 128, 972-983.	2.7	11
10	Allee Effects. , 2019, , 6-13.		2
11	Host-pathogen dynamics under sterilizing pathogens and fecundity-longevity trade-off in hosts. Journal of Theoretical Biology, 2018, 450, 76-85.	1.7	4
12	Mate search and mate-finding Allee effect: on modeling mating in sex-structured population models. Theoretical Ecology, 2018, 11, 225-244.	1.0	7
13	Evolution of mate-finding Allee effect in prey. Journal of Theoretical Biology, 2018, 441, 9-18.	1.7	11
14	Densityâ€dependent selection on mate search and evolution of Allee effects. Journal of Animal Ecology, 2018, 87, 24-35.	2.8	30
15	Review: Allee effects in social species. Journal of Animal Ecology, 2018, 87, 47-58.	2.8	68
16	Editorial: Allee effects in ecology and evolution. Journal of Animal Ecology, 2018, 87, 7-10.	2.8	31
17	Evolution favours aging in populations with assortative mating and in sexually dimorphic populations. Scientific Reports, 2018, 8, 16072.	3.3	6
18	Impacts of infection avoidance for populations affected by sexually transmitted infections. Journal of Theoretical Biology, 2018, 455, 64-74.	1.7	5

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19	Sexually transmitted infections and mate-finding Allee effects. Theoretical Population Biology, 2017, 114, 59-69.	1.1	9
20	Global stability of the coexistence equilibrium for a general class of models of facultative mutualism. Journal of Biological Dynamics, 2017, 11, 339-364.	1.7	10
21	Landsat Imagery Spectral Trajectoriesâ€"Important Variables for Spatially Predicting the Risks of Bark Beetle Disturbance. Remote Sensing, 2016, 8, 687.	4.0	35
22	Maleâ€killing bacteria as agents of insect pest control. Journal of Applied Ecology, 2016, 53, 1270-1279.	4.0	20
23	Eradication of Invading Insect Populations: From Concepts to Applications. Annual Review of Entomology, 2016, 61, 335-352.	11.8	144
24	Evolution of early male-killing in horizontally transmitted parasites. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20152068.	2.6	4
25	Role of trade-off between sexual and vertical routes for evolution of pathogen transmission. Theoretical Ecology, 2015, 8, 23-36.	1.0	8
26	Predator interference and stability of predatorâ€"prey dynamics. Journal of Mathematical Biology, 2015, 71, 301-323.	1.9	26
27	Designing efficient surveys: spatial arrangement of sample points for detection of invasive species. Biological Invasions, 2015, 17, 445-459.	2.4	43
28	Is more better? Higher sterilization of infected hosts need not result in reduced pest population size. Journal of Mathematical Biology, 2015, 70, 1381-1409.	1.9	0
29	Worthy of Their Name: How Floods Drive Outbreaks of Two Major Floodwater Mosquitoes (Diptera:) Tj ETQq1 1 0.784314 rgBT /Over	1.8	10
30	Why have parasites promoting mating success been observed so rarely?. Journal of Theoretical Biology, 2014, 342, 47-61.	1.7	7
31	Population dynamics of Ips typographus in the Bohemian Forest (Czech Republic): Validation of the phenology model PHENIPS and impacts of climate change. Forest Ecology and Management, 2013, 292, 1-9.	3.2	36
32	Fatal or Harmless: Extreme Bistability Induced by Sterilizing, Sexually Transmitted Pathogens. Bulletin of Mathematical Biology, 2013, 75, 258-273.	1.9	14
33	Neglecting uncertainty behind Allee effect estimation may generate false predictions of population extinction risk. Oikos, 2013, 122, 845-856.	2.7	3
34	Bioeconomic synergy between tactics for insect eradication in the presence of Allee effects. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2807-2815.	2.6	45
35	Impacts of predation on dynamics of age-structured prey: Allee effects and multi-stability. Theoretical Ecology, 2012, 5, 533-544.	1.0	11
36	Double impact of sterilizing pathogens: added value of increased life expectancy on pest control effectiveness. Journal of Mathematical Biology, 2012, 64, 1281-1311.	1.9	11

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37	The impact of sexually abstaining groups on persistence of sexually transmitted infections in populations with ephemeral pair bonds. Journal of Theoretical Biology, 2012, 292, 1-10.	1.7	3
38	Optimal surveillance and eradication of invasive species in heterogeneous landscapes. Ecology Letters, 2012, 15, 803-812.	6.4	145
39	A model of gillnet catch in relation to the catchable biomass, saturation, soak time and sampling period. Fisheries Research, 2011, 107, 201-209.	1.7	41
40	Exploiting Allee effects for managing biological invasions. Ecology Letters, 2011, 14, 615-624.	6.4	218
41	Modelling the Population Dynamics of Root Hemiparasitic Plants Along a Productivity Gradient. Folia Geobotanica, 2010, 45, 425-442.	0.9	19
42	Impacts of Foraging Facilitation Among Predators onÂPredator-prey Dynamics. Bulletin of Mathematical Biology, 2010, 72, 94-121.	1.9	108
43	Caught between two Allee effects: Trade-off between reproduction and predation risk. Journal of Theoretical Biology, 2010, 264, 787-798.	1.7	21
44	A two-sex demographic model with single-dependent divorce rate. Journal of Theoretical Biology, 2010, 265, 647-656.	1.7	5
45	Adaptive foraging does not always lead to more complex food webs. Journal of Theoretical Biology, 2010, 266, 211-218.	1.7	16
46	POPULATION DYNAMICS ON COMPLEX FOOD WEBS. , 2010, , .		1
47	Dangerously few liaisons: a review of mateâ€finding Allee effects. Population Ecology, 2009, 51, 355-372.	1.2	252
48	Modelling mateâ€finding Allee effects and populations dynamics, with applications in pest control. Population Ecology, 2009, 51, 445-458.	1.2	54
49	Are non-sexual models appropriate for predicting the impact of virus-vectored immunocontraception?. Journal of Theoretical Biology, 2008, 250, 281-290.	1.7	6
50	MODELS OF ALLEE EFFECTS AND THEIR IMPLICATIONS FOR POPULATION AND COMMUNITY DYNAMICS. Biophysical Reviews and Letters, 2008, 03, 157-181.	0.8	7
51	Does Sex-Selective Predation Stabilize or Destabilize Predator-Prey Dynamics?. PLoS ONE, 2008, 3, e2687.	2.5	48
52	MODELS OF ALLEE EFFECTS AND THEIR IMPLICATIONS FOR POPULATION AND COMMUNITY DYNAMICS. , 2008, , .		1
53	Multiple Allee effects and population management. Trends in Ecology and Evolution, 2007, 22, 185-191.	8.7	497
54	How predator functional responses and Allee effects in prey affect the paradox of enrichment and population collapses. Theoretical Population Biology, 2007, 72, 136-147.	1.1	124

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55	Modeling population dynamics of two cockroach species: Effects of the circadian clock, interspecific competition and pest control. Journal of Theoretical Biology, 2007, 249, 473-486.	1.7	3
56	Double Allee Effects and Extinction in the Island Fox. Conservation Biology, 2007, 21, 1082-1091.	4.7	113
57	Differences in the pattern of evolution in six physically linked genes of Drosophila melanogaster. Gene, 2006, 381, 24-33.	2.2	3
58	Sex determination inBonellia viridis(Echiura: Bonelliidae): population dynamics and evolution. Oikos, 2005, 108, 473-484.	2.7	64
59	Implications of mate search, mate choice and divorce rate for population dynamics of sexually reproducing species. Oikos, 2004, 104, 122-132.	2.7	35
60	Are great tits (Parus major) really optimal foragers?. Canadian Journal of Zoology, 2003, 81, 780-788.	1.0	12
61	Techniques of spatially explicit individual-based models: construction, simulation, and mean-field analysis. Ecological Modelling, 2002, 150, 55-81.	2.5	141
62	Improved calibration of a eutrophication model by use of the size variation due to succession. Ecological Modelling, 2002, 153, 269-277.	2.5	54
63	Single-species Models of the Allee Effect: Extinction Boundaries, Sex Ratios and Mate Encounters. Journal of Theoretical Biology, 2002, 218, 375-394.	1.7	322
64	Linking the Allee Effect, Sexual Reproduction, and Temperatureâ€Dependent Sex Determination Via Spatial Dynamics. American Naturalist, 2001, 157, 217-230.	2.1	97
65	Optimization of exergy and implications of body sizes of phytoplankton and zooplankton in an aquatic ecosystem model. Ecological Modelling, 2001, 140, 219-234.	2.5	62
66	EVALUATION OF SYSTEM PERFORMANCE THROUGH OPTIMIZING ASCENDENCY IN AN AQUATIC ECOSYSTEM MODEL. Journal of Biological Systems, 2001, 09, 269-290.	1.4	7
67	Mixed Encounters, Limited Perception and Optimal Foraging. Bulletin of Mathematical Biology, 2000, 62, 849-868.	1.9	15
68	A Mechanistic Model for Partial Preferences. Theoretical Population Biology, 2000, 58, 279-289.	1.1	34
69	A toolbox for model-based fault detection and isolation. , 1999, , .		2
70	A multi-model method to fault detection and diagnosis: Bayesian solution. An introductory treatise. International Journal of Adaptive Control and Signal Processing, 1998, 12, 81-92.	4.1	20
71	A multiâ€model method to fault detection and diagnosis: Bayesian solution. An introductory treatise. International Journal of Adaptive Control and Signal Processing, 1998, 12, 81-92.	4.1	1
72	Control period selection: Verification on coupled tanks. , 1997, , .		2

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73	Identification of Reality in Bayesian Context. , 1997, , 181-193.		10
74	Reply to Llibre et al. Journal of Infectious Diseases, 0, , .	4.0	0