Malay Banerjee

List of Publications by Year
in descending order

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107 papers	2,701 citations	201674 27 h-index	223800 46 g-index
115 all docs	115 docs citations	115 times ranked	1295 citing authors

#	Article	IF	Citations
1	Spatiotemporal pattern formation in a preyâ€“predator model with generalist predator. Mathematical Modelling of Natural Phenomena, 2022, 17, 6.	2.4	5
2	Effect of Slowâ€“Fast Time Scale on Transient Dynamics in a Realistic Prey-Predator System. Mathematics, 2022, 10, 699.	2.2	6
3	Slowâ€“fast analysis of a modified Leslieâ€“Gower model with Holling type I functional response. Nonlinear Dynamics, 2022, 108, 4531-4555.	5.2	6
4	Bifurcation analysis of the predatorâ€“prey model with the Allee effect in the predator. Journal of Mathematical Biology, 2022, 84, 7.	1.9	12
5	Canards, relaxation oscillations, and pattern formation in a slow-fast ratio-dependent predator-prey system. Applied Mathematical Modelling, 2022, 109, 519-535.	4.2	9
6	Hunting cooperation among slowly diffusing specialist predators can induce stationary Turing patterns. Physica A: Statistical Mechanics and Its Applications, 2022, 599, 127417.	2.6	10
7	Epidemic model with strain-dependent transmission rate. Communications in Nonlinear Science and Numerical Simulation, 2022, 114, 106641.	3.3	3
8	An Epidemic Model with Time-Distributed Recovery and Death Rates. Bulletin of Mathematical Biology, 2022, 84, .	1.9	8
9	Spatiotemporal pattern formation in 2D prey-predator system with nonlocal intraspecific competition. Communications in Nonlinear Science and Numerical Simulation, 2021, 93, 105478.	3.3	12
10	Allee effect in preyâ€™s growth reduces the dynamical complexity in prey-predator model with generalist predator. Applied Mathematical Modelling, 2021, 91, 768-790.	4.2	28
11	Nonlocal Reactionâ€“Diffusion Models of Heterogeneous Wealth Distribution. Mathematics, 2021, 9, 351.	2.2	6
12	Memory effect on Bazykinâ€™s prey-predator model: Stability and bifurcation analysis. Chaos, Solitons and Fractals, 2021, 143, 110531.	5.1	29
13	Pattern Formation in a Three-Species Cyclic Competition Model. Bulletin of Mathematical Biology, 2021, 83, 52.	1.9	6
14	Turing instability in an economicâ€“demographic dynamical system may lead to pattern formation on a geographical scale. Journal of the Royal Society Interface, 2021, 18, 20210034.	3.4	15
15	Vaccination in a two-group epidemic model. Applied Mathematics Letters, 2021, 119, 107197.	2.7	12
16	Oscillations and Pattern Formation in a Slowâ€“Fast Preyâ€“Predator System. Bulletin of Mathematical Biology, 2021, 83, 110.	1.9	10
17	Epidemic progression and vaccination in a heterogeneous population. Application to the Covid-19 epidemic. Ecological Complexity, 2021, 47, 100940.	2.9	6
18	Relaxation oscillation and canard explosion in a slowâ€“fast predatorâ€“prey model with Beddingtonâ€“DeAngelis functional response. Nonlinear Dynamics, 2021, 103, 1195-1217.	5.2	15

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19	Feedforward Control of Plant Nitrate Transporter NRT1.1 Biphasic Adaptive Activity. Biophysical Journal, 2020, 118, 898-908.	0.5	10
20	Effects of boundary conditions on pattern formation in a nonlocal preyâ€“predator model. Applied Mathematical Modelling, 2020, 79, 809-823.	4.2	11
21	Spatial behavioural responses to the spread of an infectious disease can suppress Turing and Turingâ€“Hopf patterning of the disease. Physica A: Statistical Mechanics and Its Applications, 2020, 545, 123773.	2.6	15
22	Comparison of hidden and explicit resources in ecoepidemic models of predatorâ€“prey type. Computational and Applied Mathematics, 2020, 39, 1.	2.2	5
23	Modelling the Effect of Incubation and Latent Periods on the Dynamics of Vector-Borne Plant Viral Diseases. Bulletin of Mathematical Biology, 2020, 82, 94.	1.9	18
24	Rich Bifurcation Structure of Preyâ€“Predator Model Induced by the Allee Effect in the Growth of Generalist Predator. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050084.	1.7	20
25	A safe harbor can protect an endangered species from its predators. Ricerche Di Matematica, 2020, 69, 413-436.	1.0	4
26	On a quarantine model of coronavirus infection and data analysis. Mathematical Modelling of Natural Phenomena, 2020, 15, 24.	2.4	68
27	Dynamics of a Diffusive Two-Prey-One-Predator Model with Nonlocal Intra-Specific Competition for Both the Prey Species. Mathematics, 2020, 8, 101.	2.2	17
28	Coronavirus â€“ Scientific insights and societal aspects. Mathematical Modelling of Natural Phenomena, 2020, 15, E2.	2.4	15
29	Analytical and numerical detection of traveling wave and wave-train solutions in a preyâ€“predator model with weak Allee effect. Nonlinear Dynamics, 2020, 100, 2989-3006.	5.2	4
30	Immuno-epidemiological model of two-stage epidemic growth. Mathematical Modelling of Natural Phenomena, 2020, 15, 27.	2.4	23
31	Spatio-temporal Bazykinâ€™s model with space-time nonlocality. Mathematical Biosciences and Engineering, 2020, 17, 4801-4824.	1.9	3
32	Allee Effect in Prey versus Hunting Cooperation on Predator â€” Enhancement of Stable Coexistence. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1950081.	1.7	32
33	Predator overcomes the Allee effect due to indirect preyâ€“taxis. Ecological Complexity, 2019, 39, 100772.	2.9	21
34	Effect of kernels on spatio-temporal patterns of a non-local prey-predator model. Mathematical Biosciences, 2019, 310, 96-107.	1.9	14
35	Spatio-Temporal Pattern Formation in Hollingâ€“Tanner Type Model with Nonlocal Consumption of Resources. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1930002.	1.7	4
36	A Backward Technique for Demographic Noise in Biological Ordinary Differential Equation Models. Mathematics, 2019, 7, 1204.	2.2	2

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37	Detection of turing patterns in a three species food chain model via amplitude equation. Communications in Nonlinear Science and Numerical Simulation, 2019, 69, 219-236.	3.3	28
38	Stability of Hopf-bifurcating limit cycles in a diffusion-driven prey-predator system with Allee effect and time delay. Mathematical Biosciences and Engineering, 2019, 16, 2411-2446.	1.9	14
39	Analysis of a Preyâ€“Predator Model with Non-local Interaction in the Prey Population. Bulletin of Mathematical Biology, 2018, 80, 906-925.	1.9	26
40	Comparing predatorâ€“prey models with hidden and explicit resources. Annali Dell'Universita Di Ferrara, 2018, 64, 259-283.	1.3	2
41	Effects of density dependent cross-diffusion on the chaotic patterns in a ratio-dependent prey-predator model. Ecological Complexity, 2018, 36, 276-289.	2.9	12
42	The Origin of Species by Means of Mathematical Modelling. Acta Biotheoretica, 2018, 66, 333-344.	1.5	3
43	Complex dynamics of a three species prey-predator model with intraguild predation. Ecological Complexity, 2018, 34, 9-22.	2.9	27
44	Complex Dynamics of a hostâ€“parasite model with both horizontal and vertical transmissions in a spatial heterogeneous environment. Nonlinear Analysis: Real World Applications, 2018, 40, 444-465.	1.7	51
45	Social behavior-induced multistability in minimal competitive ecosystems. Journal of Theoretical Biology, 2018, 439, 24-38.	1.7	31
46	Study of cross-diffusion induced Turing patterns in a ratio-dependent prey-predator model via amplitude equations. Applied Mathematical Modelling, 2018, 55, 383-399.	4.2	45
47	Stationary, non-stationary and invasive patterns for a prey-predator system with additive Allee effect in prey growth. Ecological Complexity, 2018, 36, 206-217.	2.9	20
48	Effects of contaminants and trophic cascade regulation on food chain stability: Application to cadmium soil pollution on small mammals â€“ Raptor systems. Ecological Modelling, 2018, 382, 33-42.	2.5	26
49	Delayed feedback induced complex dynamics in an Escherichia coli and Tetrahymena system. Nonlinear Dynamics, 2018, 94, 1447-1466.	5.2	3
50	Stabilizing effect of intra-specific competition on prey-predator dynamics with intraguild predation. Mathematical Modelling of Natural Phenomena, 2018, 13, 29.	2.4	6
51	Prey-Predator Model with a Nonlocal Bistable Dynamics of Prey. Mathematics, 2018, 6, 41.	2.2	12
52	Global dynamics of a prey-predator model with Allee effect and additional food for the predators. International Journal of Dynamics and Control, 2017, 5, 903-916.	2.5	13
53	Approximated Spiral and Target Patterns in Bazykinâ€™s Preyâ€“Predator Model: Multiscale Perturbation Analysis. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750038.	1.7	10
54	Spatio-temporal pattern formation in Rosenzweigâ€“MacArthur model: Effect of nonlocal interactions. Ecological Complexity, 2017, 30, 2-10.	2.9	52

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55	Dynamical behaviour of a generalist predator-prey model with free boundary. Boundary Value Problems, 2017, 2017, .	0.7	4
56	Maturation delay for the predators can enhance stable coexistence for a class of preyâ€“predator models. Journal of Theoretical Biology, 2017, 412, 154-171.	1.7	52
57	Hopf and steady state bifurcation analysis in a ratio-dependent predatorâ€“prey model. Communications in Nonlinear Science and Numerical Simulation, 2017, 44, 52-73.	3.3	30
58	Extended SEIQR type model for COVID-19 epidemic and data analysis. Mathematical Biosciences and Engineering, 2017, 17, 7562-7604.	1.9	18
59	Delay driven spatiotemporal chaos in single species population dynamics models. Theoretical Population Biology, 2016, 110, 51-62.	1.1	20
60	Long-term transients and complex dynamics of a stage-structured population with time delay and the Allee effect. Journal of Theoretical Biology, 2016, 396, 116-124.	1.7	44
61	Stochastic dynamics of feline immunodeficiency virus within cat populations. Journal of the Franklin Institute, 2016, 353, 4191-4212.	3.4	17
62	Global regulation of individual decisionÂmaking. Mathematical Methods in the Applied Sciences, 2016, 39, 4428-4436.	2.3	5
63	Time delay can enhance spatio-temporal chaos in a preyâ€“predator model. Ecological Complexity, 2016, 27, 17-28.	2.9	9
64	Pattern Formation in a Prey-Predator Model with Nonlocal Interaction Terms. Springer Proceedings in Mathematics and Statistics, 2016, , 27-39.	0.2	1
65	A stochastic epidemic model incorporating media coverage. Communications in Mathematical Sciences, 2016, 14, 893-910.	1.0	96
66	Spatiotemporal pattern formation in a prey-predator model under environmental driving forces. Journal of Physics: Conference Series, 2015, 638, 012004.	0.4	2
67	Turing and Non-Turing Patterns in Two-Dimensional Prey-Predator Models. Understanding Complex Systems, 2015, , 257-280.	0.6	10
68	Rich Global Dynamics in a Preyâ€“Predator Model with Allee Effect and Density Dependent Death Rate of Predator. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1530007.	1.7	27
69	A stochastic SIRS epidemic model with infectious force under intervention strategies. Journal of Differential Equations, 2015, 259, 7463-7502.	2.2	255
70	Comments on â€œL. N. Guin, M. Haque, P. K. Mandal, The spatial patterns through diffusion-driven instability in a predatorâ€“prey model, Appl. Math. Model. 36 (2012) 1825â€“1841.â€• Applied Mathematical Modelling, 2015, 39, 297-299.	4.2	2
71	Existence and non-existence of spatial patterns in a ratio-dependent predatorâ€“prey model. Ecological Complexity, 2015, 21, 199-214.	2.9	45
72	Global dynamics of an additional food provided predatorâ€“prey system with constant harvest in predators. Applied Mathematics and Computation, 2015, 250, 193-211.	2.2	38

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73	Size-dependent diffusion promotes the emergence of spatiotemporal patterns. Physical Review E, 2014, 90, 012904.	2.1	6
74	Stage-structured ratio-dependent predatorâ€“prey models revisited: When should the maturation lag result in systemsâ€™ destabilization?. Ecological Complexity, 2014, 19, 23-34.	2.9	15
75	Period doubling cascades of preyâ€“predator model with nonlinear harvesting and control of over exploitation through taxation. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2382-2405.	3.3	23
76	Stochastic modeling of phytoplankton allelopathy. Applied Mathematical Modelling, 2014, 38, 1583-1596.	4.2	24
77	Influence of discrete delay on pattern formation in a ratio-dependent preyâ€“predator model. Chaos, Solitons and Fractals, 2014, 67, 73-81.	5.1	19
78	Comments on â€œJ. Dhar, R.S. Baghel, A.K. Sharma, Role of instant nutrient replenishment on plankton dynamics with diffusion in a closed system: A pattern formation, Appl. Math. Comput. 218 (2012) 8925â€“8936â€• Applied Mathematics and Computation, 2014, 232, 771-774.	2.2	0
79	A comparative study of deterministic and stochastic dynamics for a non-autonomous allelopathic phytoplankton model. Applied Mathematics and Computation, 2014, 238, 300-318.	2.2	15
80	Spatiotemporal complexity in a predator--prey model with weak Allee effects. Mathematical Biosciences and Engineering, 2014, 11, 1247-1274.	1.9	28
81	Deterministic and Stochastic Dynamics of a Competitive Phytoplankton Model with Allelopathy. Differential Equations and Dynamical Systems, 2013, 21, 341-372.	1.0	7
82	Dynamics of additional food provided predatorâ€“prey system with mutually interfering predators. Mathematical Biosciences, 2013, 246, 176-190.	1.9	43
83	Stochastic persistence and stability analysis of a modified Hollingâ€“Tanner model. Mathematical Methods in the Applied Sciences, 2013, 36, 1263-1280.	2.3	14
84	The dynamics of two-species allelopathic competition with optimal harvesting. Journal of Biological Dynamics, 2012, 6, 674-694.	1.7	11
85	Analytical Computation of Electric Field for Onset of Electroporation. Journal of Computational and Theoretical Nanoscience, 2012, 9, 137-143.	0.4	11
86	Turing instabilities and spatio-temporal chaos in ratio-dependent Hollingâ€“Tanner model. Mathematical Biosciences, 2012, 236, 64-76.	1.9	85
87	Bifurcation analysis of a ratio-dependent preyâ€“predator model with the Allee effect. Ecological Complexity, 2012, 11, 12-27.	2.9	169
88	Bifurcation Analysis and Control of Leslieâ€“Gower Predatorâ€“Prey Model with Michaelisâ€“Menten Type Prey-Harvesting. Differential Equations and Dynamical Systems, 2012, 20, 339-366.	1.0	43
89	DYNAMICAL MODEL OF IN-HOST HIV INFECTION: WITH DRUG THERAPY AND MULTI VIRAL STRAINS. Journal of Biological Systems, 2012, 20, 303-325.	1.4	9
90	A delayed predatorâ€“prey model with strong Allee effect in prey population growth. Nonlinear Dynamics, 2012, 68, 23-42.	5.2	44

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91	Noise induced oscillations in time delayed semiconductor laser system. Optics Communications, 2012, 285, 2402-2409.	2.1	4
92	Top-down control in a patchy environment: Revisiting the stabilizing role of food-dependent predator dispersal. Theoretical Population Biology, 2012, 81, 9-19.	1.1	8
93	Stochastic persistence and stationary distribution in a Hollingâ€“Tanner type preyâ€“predator model. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 1216-1233.	2.6	76
94	Almost periodic solution ofÂa non-autonomous model ofÂphytoplankton allelopathy. Nonlinear Dynamics, 2012, 67, 203-214.	5.2	32
95	A phytoplanktonâ€“toxic phytoplanktonâ€“zooplankton model. Ecological Complexity, 2011, 8, 239-248.	2.9	66
96	Dynamical analysis of fractional-order modified logistic model. Computers and Mathematics With Applications, 2011, 62, 1098-1104.	2.7	52
97	Self-organised spatial patterns and chaos in a ratio-dependent predatorâ€“prey system. Theoretical Ecology, 2011, 4, 37-53.	1.0	125
98	DETERMINISTIC CHAOS VERSUS STOCHASTIC OSCILLATION IN A PREY-PREDATOR-TOP PREDATOR MODEL. Mathematical Modelling and Analysis, 2011, 16, 343-364.	1.5	12
99	Spatial pattern formation in ratio-dependent model: higher-order stability analysis. Mathematical Medicine and Biology, 2011, 28, 111-128.	1.2	13
100	Existence, uniqueness and stability analysis of allelopathic stimulatory phytoplankton model. Journal of Mathematical Analysis and Applications, 2010, 367, 249-259.	1.0	48
101	A Primary Infection Model for HIV and Immune response with Two Discrete Time Delays. Differential Equations and Dynamical Systems, 2010, 18, 385-399.	1.0	20
102	Self-replication of spatial patterns in a ratio-dependent predatorâ€“prey model. Mathematical and Computer Modelling, 2010, 51, 44-52.	2.0	31
103	Effect of stochastic perturbation on a two species competitive model. Nonlinear Analysis: Hybrid Systems, 2009, 3, 195-206.	3.5	9
104	Modelling of phytoplankton allelopathy with Monodâ€“Haldane-type functional responseâ€”A mathematical study. BioSystems, 2009, 95, 243-253.	2.0	66
105	Effect of small time delay in a predator-prey model within random environment. Differential Equations and Dynamical Systems, 2008, 16, 225-250.	1.0	7
106	Cross-diffusion induced Turing and non-Turing patterns in Rosenzweigâ€“MacArthur model. Letters in Biomathematics, 0, , 1-22.	0.1	1
107	Immuno-epidemiological model-based prediction of further COVID-19 epidemic outbreaks due to immunity waning. Mathematical Modelling of Natural Phenomena, 0, , .	2.4	11