Alex James

List of Publications by Year
in descending order

65 papers	2,583 citations	394421 19 h-index	214800 47 g-index
83 all docs	83 docs citations	83 times ranked	3446 citing authors

#	Article	IF	Citations
1	Potential reduction in transmission of COVID-19 by digital contact tracing systems: a modelling study. Mathematical Medicine and Biology, 2022, 39, 156-168.	1.2	8
2	Longâ€term biodiversity trajectories for pestâ€managed ecological restorations: eradication vs. suppression. Ecological Monographs, 2021, 91, e01439.	5.4	11
3	Individual heterogeneity affects the outcome of small mammal pest eradication. Theoretical Ecology, 2021, 14, 219-231.	1.0	2
4	Mathematical modelling to inform New Zealandâ€™s COVID-19 response. Journal of the Royal Society of New Zealand, 2021, 51, S86-S106.	1.9	19
5	Model-free estimation of COVID-19 transmission dynamics from a complete outbreak. PLoS ONE, 2021, 16, e0238800.	2.5	12
6	Longâ€Term Biodiversity Benefits from Invasive Mammalian Pest Control in Ecological Restorations. Bulletin of the Ecological Society of America, 2021, 102, e01843.	0.2	0
7	Managing the risk of a COVID-19 outbreak from border arrivals. Journal of the Royal Society Interface, 2021, 18, 20210063.	3.4	19
8	A structured model for COVID-19 spread: modelling age and healthcare inequities. Mathematical Medicine and Biology, 2021, 38, 299-313.	1.2	14
9	Comment: weekly COVID-19 testing with household quarantine and contact tracing is feasible and would probably end the epidemic. Royal Society Open Science, 2021, 8, 201546.	2.4	1
10	Successful contact tracing systems for COVID-19 rely on effective quarantine and isolation. PLoS ONE, 2021, 16, e0252499.	2.5	25
11	Worldwide border interceptions provide a window into humanâ€mediated global insect movement. Ecological Applications, 2021, 31, e02412.	3.8	53
12	Early intervention is the key to success in COVID-19 control. Royal Society Open Science, 2021, 8, 210488.	2.4	20
13	MÄori and Pacific people in New Zealand have a higher risk of hospitalisation for COVID-19. New Zealand Medical Journal, 2021, 134, 28-43.	0.5	7
14	Kia kaua te reo e rite ki te moa, ka ngaro: do not let the language suffer the same fate as the moa. Journal of the Royal Society Interface, 2020, 17, 20190526.	3.4	6
15	Considering unseen arrivals in predictions of establishment risk based on border biosecurity interceptions. Ecological Applications, 2020, 30, e02194.	3.8	16
16	The necessity of tailored control of irrupting pest populations driven by pulsed resources. Theoretical Ecology, 2020, 13, 261-275.	1.0	5
17	Estimated inequities in COVID-19 infection fatality rates by ethnicity for Aotearoa New Zealand. New Zealand Medical Journal, 2020, 133, 28-39.	0.5	25
18	Using family network data in child protection services. PLoS ONE, 2019, 14, e0224554.	2.5	7

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19	Emergence of balanced harvesting in an agent-based model of an open-access small-scale fishery. Mathematical Biosciences, 2019, 316, 108245.	1.9	4
20	Limiting Effect of Self-Shading on the Height of Tradescantia fluminensis Mats. Bulletin of Mathematical Biology, 2019, 81, 3918-3932.	1.9	0
21	Predicting water levels in ephemeral wetlands under climate change scenarios. Theoretical Ecology, 2019, 12, 427-435.	1.0	1
22	Gender and societies: a grassroots approach to women in science. Royal Society Open Science, 2019, 6, 190633.	2.4	33
23	Optimal control of irrupting pest populations in a climate-driven ecosystem. PeerJ, 2018, 6, e6146.	2.0	4
24	How Herbivore Browsing Strategy Affects Whole-Plant Photosynthetic Capacity. Bulletin of Mathematical Biology, 2017, 79, 772-787.	1.9	4
25	Spatial utilization predicts animal social contact networks are not scale-free. Royal Society Open Science, 2017, 4, 171209.	2.4	1
26	Collective Cell Behaviour with Neighbour-Dependent Proliferation, Death and Directional Bias. Bulletin of Mathematical Biology, 2016, 78, 2277-2301.	1.9	30
27	Evolutionarily Stable Strategies for Fecundity and Swimming Speed of Fish. Bulletin of Mathematical Biology, 2016, 78, 280-292.	1.9	3
28	Spatial structure arising from neighbour-dependent bias in collective cell movement. PeerJ, 2016, 4, e1689.	2.0	24
29	Climate-Based Models for Pulsed Resources Improve Predictability of Consumer Population Dynamics: Outbreaks of House Mice in Forest Ecosystems. PLoS ONE, 2015, 10, e0119139.	2.5	14
30	Assessing the efficacy of population-level models of mast seeding. Theoretical Ecology, 2015, 8, 121-132.	1.0	13
31	Spatial moment dynamics for collective cell movement incorporating a neighbour-dependent directional bias. Journal of the Royal Society Interface, 2015, 12, 20150228.	3.4	35
32	Constructing Random Matrices to Represent Real Ecosystems. American Naturalist, 2015, 185, 680-692.	2.1	31
33	ModellingTradescantia fluminensisto assess long term survival. PeerJ, 2015, 3, e1013.	2.0	3
34	â€œWe definitely wouldn't be able to solve it all by ourselves, but togetherâ€¦â€• group synergy in tertiary students' problem-solving practices. Research in Mathematics Education, 2014, 16, 306-323.	1.2	12
35	Does computer-aided formative assessment improve learning outcomes?. International Journal of Mathematical Education in Science and Technology, 2014, 45, 269-281.	1.4	7
36	Of mast and mean: differentialâ€temperature cue makes mast seeding insensitive to climate change. Ecology Letters, 2013, 16, 90-98.	6.4	195

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37	Control of Competitive Bioinvasion. Lecture Notes in Mathematics, 2013, , 293-305.	0.2	1
38	James et al. reply. Nature, 2013, 500, E2-E3.	27.8	16
39	A mathematical model of the defence mechanism of a bombardier beetle. Journal of the Royal Society Interface, 2013, 10, 20120801.	3.4	8
40	A phenomenological model of muscle fatigue and the power-endurance relationship. Journal of Applied Physiology, 2012, 113, 1643-1651.	2.5	18
41	Disentangling nestedness from models of ecological complexity. Nature, 2012, 487, 227-230.	27.8	195
42	An episodic model of honeydew production in scale insects. Austral Ecology, 2012, 37, 308-312.	1.5	0
43	Application of a spatial meta-population model with stochastic parameters to the management of the invasive grass Nassella trichotoma in North Canterbury, New Zealand. Ecological Modelling, 2011, 222, 1030-1037.	2.5	8
44	Group by subject or by ability? Tertiary mathematics for engineering students. International Journal of Mathematical Education in Science and Technology, 2011, 42, 857-865.	1.4	2
45	Meeting the needs of our best and brightest: curriculum acceleration in tertiary mathematics. International Journal of Mathematical Education in Science and Technology, 2011, 42, 299-312.	1.4	6
46	Competition and diffusive invasion in a noisy environment. Mathematical Medicine and Biology, 2011, 28, 153-163.	1.2	6
47	Assessing LÃ©vy walks as models of animal foraging. Journal of the Royal Society Interface, 2011, 8, 1233-1247.	3.4	139
48	Efficient or Inaccurate? Analytical and Numerical Modelling of Random Search Strategies. Bulletin of Mathematical Biology, 2010, 72, 896-913.	1.9	29
49	Sizeâ€spectra dynamics from stochastic predation and growth of individuals. Ecology, 2009, 90, 802-811.	3.2	98
50	Modelling the dynamic response of oxygen uptake to exercise. Discrete and Continuous Dynamical Systems - Series B, 2009, 12, 361-370.	0.9	1
51	Scaling laws of marine predator search behaviour. Nature, 2008, 451, 1098-1102.	27.8	852
52	Optimal foraging: LÃ©vy pattern or process?. Journal of the Royal Society Interface, 2008, 5, 1077-1086.	3.4	107
53	From lessons to lectures: NCEA mathematics results and first-year mathematics performance. International Journal of Mathematical Education in Science and Technology, 2008, 39, 1037-1050.	1.4	9
54	Optimizing the encounter rate in biological interactions: Ballistic versus LÃ©vy versus Brownian strategies. Physical Review E, 2008, 78, 051128.	2.1	67

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55	An event-based model of superspreading in epidemics. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 741-747.	2.6	64
56	A nonlinear model of age and size-structured populations with applications to cell cycles. ANZIAM Journal, 2007, 49, 151-169.	0.2	13
57	A dynamical model of honeydew droplet production by sooty-beech scale insects (Ultracoelostoma) Tj ETQq1 1 0.784314 rgBT /Overl	2.5	9
58	The role of variance in capped-rate stochastic growth models with external mortality. Journal of Theoretical Biology, 2007, 244, 228-238.	1.7	4
59	Quantifying the effects of individual and environmental variability in fish recruitment. Fisheries Oceanography, 2005, 14, 156-160.	1.7	37
60	Modelling predation as a capped rate stochastic process, with applications to fish recruitment. Journal of the Royal Society Interface, 2005, 2, 477-487.	3.4	5
61	The relationship between plankton blooms, the hatching of fish larvae, and recruitment. Ecological Modelling, 2003, 160, 77-90.	2.5	42
62	Multi-channel monolith reactors as dynamical systems. Combustion and Flame, 2003, 134, 193-205.	5.2	7
63	Optimal foraging in patchy turbulent environments. Marine Ecology - Progress Series, 2003, 256, 99-110.	1.9	24
64	Stability of multiple steady states of catalytic combustion. Combustion and Flame, 2002, 130, 137-146.	5.2	3
65	Classification of behaviour in a steady plug-flow model of catalytic combustion. Chemical Engineering Science, 2001, 56, 4649-4658.	3.8	5