

J Gareth Polhill

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6509069/publications.pdf>

Version: 2024-02-01

80
papers

4,586
citations

361296

20
h-index

106281

65
g-index

85
all docs

85
docs citations

85
times ranked

5198
citing authors

#	ARTICLE	IF	CITATIONS
1	The ODD protocol: A review and first update. <i>Ecological Modelling</i> , 2010, 221, 2760-2768.	1.2	1,913
2	Agent-based land-use models: a review of applications. <i>Landscape Ecology</i> , 2007, 22, 1447-1459.	1.9	689
3	The ODD Protocol for Describing Agent-Based and Other Simulation Models: A Second Update to Improve Clarity, Replication, and Structural Realism. <i>Jasss</i> , 2020, 23, .	1.0	349
4	The Complexities of Agent-Based Modeling Output Analysis. <i>Jasss</i> , 2015, 18, .	1.0	198
5	Representation of decision-making in European agricultural agent-based models. <i>Agricultural Systems</i> , 2018, 167, 143-160.	3.2	108
6	Agent-Based Simulation in the Study of Social Dilemmas. <i>Artificial Intelligence Review</i> , 2003, 19, 3-92.	9.7	107
7	Regime shifts in coupled socio-environmental systems: Review of modelling challenges and approaches. <i>Environmental Modelling and Software</i> , 2016, 75, 333-347.	1.9	105
8	Computational Models That Matter During a Global Pandemic Outbreak: A Call to Action. <i>Jasss</i> , 2020, 23, .	1.0	89
9	Call for transparency of COVID-19 models. <i>Science</i> , 2020, 368, 482-483.	6.0	85
10	IMITATIVE VERSUS NONIMITATIVE STRATEGIES IN A LAND-USE SIMULATION. <i>Cybernetics and Systems</i> , 2001, 32, 285-307.	1.6	77
11	Standardised and transparent model descriptions for agent-based models: Current status and prospects. <i>Environmental Modelling and Software</i> , 2014, 55, 156-163.	1.9	71
12	Transient and asymptotic dynamics of reinforcement learning in games. <i>Games and Economic Behavior</i> , 2007, 61, 259-276.	0.4	51
13	Modelling food security: Bridging the gap between the micro and the macro scale. <i>Global Environmental Change</i> , 2020, 63, 102085.	3.6	47
14	Using Qualitative Evidence to Enhance an Agent-Based Modelling System for Studying Land Use Change. <i>Jasss</i> , 2010, 13, .	1.0	46
15	Modelling systemic change in coupled socio-environmental systems. <i>Environmental Modelling and Software</i> , 2016, 75, 318-332.	1.9	44
16	Nonlinearities in biodiversity incentive schemes: A study using an integrated agent-based and metacommunity model. <i>Environmental Modelling and Software</i> , 2013, 45, 74-91.	1.9	34
17	Agent-based modelling of socio-ecological systems: Models, projects and ontologies. <i>Ecological Complexity</i> , 2019, 40, 100728.	1.4	33
18	ASPIRATION LEVELS IN A LAND USE SIMULATION. <i>Cybernetics and Systems</i> , 2003, 34, 663-683.	1.6	32

#	ARTICLE	IF	CITATIONS
19	Ontologies for transparent integrated human-natural system modelling. <i>Landscape Ecology</i> , 2009, 24, 1255-1267.	1.9	25
20	Too much of a good thing? Using a spatial agent-based model to evaluate "unconventional" workplace sharing programmes. <i>Journal of Transport Geography</i> , 2018, 69, 83-97.	2.3	21
21	Crossing the chasm: a "tube-map"™ for agent-based social simulation of policy scenarios in spatially-distributed systems. <i>Geoinformatica</i> , 2019, 23, 169-199.	2.0	21
22	Exploring factors affecting on-farm renewable energy adoption in Scotland using large-scale microdata. <i>Energy Policy</i> , 2017, 107, 548-560.	4.2	20
23	Documenting Social Simulation Models: The ODD Protocol as a Standard. <i>Understanding Complex Systems</i> , 2013, , 117-133.	0.3	19
24	The North East Scotland Energy Monitoring Project: Exploring relationships between household occupants and energy usage. <i>Energy and Buildings</i> , 2014, 75, 493-503.	3.1	19
25	Keeping modelling notebooks with TRACE: Good for you and good for environmental research and management support. <i>Environmental Modelling and Software</i> , 2021, 136, 104932.	1.9	19
26	ODD Updated. <i>Jasss</i> , 2010, 13, .	1.0	19
27	Agent-based modelling of land use effects on ecosystem processes and services. <i>Journal of Land Use Science</i> , 2011, 6, 75-81.	1.0	18
28	What every agent-based modeller should know about floating point arithmetic. <i>Environmental Modelling and Software</i> , 2006, 21, 283-309.	1.9	17
29	Documenting Social Simulation Models: The ODD Protocol as a Standard. <i>Understanding Complex Systems</i> , 2017, , 349-365.	0.3	16
30	Enhancing workflow with a semantic description of scientific intent. <i>Web Semantics</i> , 2011, 9, 222-244.	2.2	15
31	Exploring robustness of biodiversity policy with a coupled metacommunity and agent-based model. <i>Journal of Land Use Science</i> , 2011, 6, 175-193.	1.0	15
32	Exploring sustainable land use in forested tropical social-ecological systems: A case-study in the Wet Tropics. <i>Journal of Environmental Management</i> , 2019, 231, 940-952.	3.8	15
33	An Agent-Based Model for Simulating Environmental Behavior in an Educational Organization. <i>Neural Processing Letters</i> , 2015, 42, 89-118.	2.0	14
34	Habitat networks and food security: promoting species range shift under climate change depends on life history and the dynamics of land use choices. <i>Landscape Ecology</i> , 2015, 30, 771-789.	1.9	14
35	e-Social Science and Evidence-Based Policy Assessment. <i>Social Science Computer Review</i> , 2009, 27, 553-568.	2.6	13
36	UK food and nutrition security during and after the COVID-19 pandemic. <i>Nutrition Bulletin</i> , 2021, 46, 88-97.	0.8	12

#	ARTICLE	IF	CITATIONS
37	Food and nutrition security under global trade: a relation-driven agent-based global trade model. Royal Society Open Science, 2021, 8, 201587.	1.1	12
38	An approach to guaranteeing generalisation in neural networks. Neural Networks, 2001, 14, 1035-1048.	3.3	11
39	Effects of Land Markets on Competition Between Innovators and Imitators in Land Use. , 2008, , 81-97.		11
40	Using Agent-Based Models for Prediction in Complex and Wicked Systems. Jasss, 2021, 24, .	1.0	10
41	Extracting OWL Ontologies from Agent-Based Models: A Netlogo Extension. Jasss, 2015, 18, .	1.0	10
42	Tackling the challenge of interdisciplinary energy research: A research toolkit. Energy Research and Social Science, 2021, 74, 101966.	3.0	9
43	SIZE MATTERS: LARGE-SCALE REPLICATIONS OF EXPERIMENTS WITH FEARLUS. International Journal of Modeling, Simulation, and Scientific Computing, 2010, 13, 453-467.	0.9	8
44	Testing Scenarios to Achieve Workplace Sustainability Goals Using Backcasting and Agent-Based Modeling. Environment and Behavior, 2017, 49, 1007-1037.	2.1	8
45	The Importance of Ontological Structure: Why Validation by "Fit-to-Data"™ Is Insufficient. Understanding Complex Systems, 2017, , 141-172.	0.3	7
46	A prototype cloud-based reproducible data analysis and visualization platform for outputs of agent-based models. Environmental Modelling and Software, 2017, 96, 172-180.	1.9	6
47	From oil wealth to green growth - An empirical agent-based model of recession, migration and sustainable urban transition. Environmental Modelling and Software, 2018, 107, 119-140.	1.9	6
48	Transmission of pro-environmental norms in large organizations. Sustainable Production and Consumption, 2019, 19, 25-32.	5.7	6
49	Semantic support for computational land-use modelling. , 2005, , .		5
50	A semantic workflow mechanism to realise experimental goals and constraints. , 2008, , .		5
51	Lessons learnt from the deployment of a semantic virtual research environment. Web Semantics, 2014, 27-28, 70-77.	2.2	5
52	Empirically-Derived Behavioral Rules in Agent-Based Models Using Decision Trees Learned from Questionnaire Data. Understanding Complex Systems, 2017, , 53-76.	0.3	5
53	It's not the 'what', but the 'how': Exploring the role of debt in natural resource (un)sustainability. PLoS ONE, 2018, 13, e0201141.	1.1	5
54	Narrative Scenarios, Mediating Formalisms, and the Agent-Based Simulation of Land Use Change. Lecture Notes in Computer Science, 2009, , 99-116.	1.0	5

#	ARTICLE	IF	CITATIONS
55	Experiments with a Model of Domestic Energy Demand. <i>Jasss</i> , 2017, 20, .	1.0	5
56	Using provenance to analyse agent-based simulations. , 2013, , .		4
57	Not one Brexit: How local context and social processes influence policy analysis. <i>PLoS ONE</i> , 2018, 13, e0208451.	1.1	4
58	Exploring sustainable scenarios in debt-based social-ecological systems: The case for palm oil production in Indonesia. <i>Ambio</i> , 2020, 49, 1530-1548.	2.8	4
59	How Precise Are the Specifications of a Psychological Theory? Comparing Implementations of Lindenberg and Steg's Goal-Framing Theory of Everyday Pro-environmental Behaviour. <i>Advances in Intelligent Systems and Computing</i> , 2017, , 341-354.	0.5	4
60	Exploring the Combined Effect of Factors Influencing Commuting Patterns and CO2 Emissions in Aberdeen Using an Agent-Based Model. <i>Jasss</i> , 2016, 19, .	1.0	4
61	Agent-based modeling of socio-economic processes related to the environment: Example of land-use change. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2009, , 61-76.	0.1	3
62	Editorial - Agent-Based Modelling for Resilience. <i>Ecological Complexity</i> , 2019, 40, 100775.	1.4	2
63	Trajectories toward maximum power and inequality in resource distribution networks. <i>PLoS ONE</i> , 2020, 15, e0229956.	1.1	2
64	Measuring heterogeneity in soil networks: a network analysis and simulation-based approach. <i>Ecological Modelling</i> , 2021, 439, 109308.	1.2	2
65	An Agent-Based Prototype for Enhancing Sustainability Behavior at an Academic Environment. <i>Advances in Intelligent and Soft Computing</i> , 2012, , 257-264.	0.2	2
66	Open Modelling for Simulators. <i>Advances in Knowledge Acquisition, Transfer and Management Book Series</i> , 2015, , 237-254.	0.1	2
67	Sinks, sustainability, and conservation incentives. , 0, , 155-178.		1
68	Agent-based Models of Coupled Social and Natural Systems. , 2020, , 56-81.		1
69	Projecting the effect of crop yield increases, dietary change and different price scenarios on land use under two different state security regimes. <i>International Journal of Agricultural Sustainability</i> , 2021, 19, 288-304.	1.3	1
70	Designing Decision Trees for Representing Sustainable Behaviours in Agents. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 169-176.	0.5	1
71	A Decision-Making Model for Environmental Behavior in Agent-Based Modeling. <i>Lecture Notes in Computer Science</i> , 2013, , 152-160.	1.0	1
72	Simulating the Actions of Commuters Using a Multi-Agent System. <i>Jasss</i> , 2019, 22, .	1.0	1

#	ARTICLE	IF	CITATIONS
73	Enhancing Workflow with a Semantic Description of Scientific Intent. SSRN Electronic Journal, 0, , .	0.4	1
74	PROV-O provenance traces from agent-based social simulation. , 2013, , .		0
75	Interactions Matter: Modelling Everyday Pro-environmental Norm Transmission and Diffusion in Workplace Networks. Understanding Complex Systems, 2017, , 27-52.	0.3	0
76	Lessons Learned Replicating the Analysis of Outputs from a Social Simulation of Biodiversity Incentivisation. Advances in Intelligent Systems and Computing, 2017, , 355-365.	0.5	0
77	Informing Agent-Based Models of Social Innovation Uptake. Lecture Notes in Computer Science, 2021, , 105-117.	1.0	0
78	Sensitivity Analysis of an Empirical Agent-Based Model of District Heating Network Adoption. Lecture Notes in Computer Science, 2021, , 118-127.	1.0	0
79	Preliminary Results from an Agent-Based Model of the Daily Commute in Aberdeen and Aberdeenshire, UK. Advances in Intelligent Systems and Computing, 2017, , 129-142.	0.5	0
80	Sensemaking of causality in agent-based models. International Journal of Social Research Methodology: Theory and Practice, 2022, 25, 557-567.	2.3	0