Jan H Kwakkel

List of Publications by Citations

91 papers	**3,669** citations	**28** h-index	**59** g-index
110 ext. papers	**4,403** ext. citations	**5.1** avg, IF	**6.18** L-index

#	Paper	IF	Citations
91	Dynamic adaptive policy pathways: A method for crafting robust decisions for a deeply uncertain world. *Global Environmental Change*, **2013**, 23, 485-498	10.1	819
90	Adapt or Perish: A Review of Planning Approaches for Adaptation under Deep Uncertainty. *Sustainability*, **2013**, 5, 955-979	3.6	320
89	An uncertain future, deep uncertainty, scenarios, robustness and adaptation: How do they fit together?. *Environmental Modelling and Software*, **2016**, 81, 154-164	5.2	233
88	Developing dynamic adaptive policy pathways: a computer-assisted approach for developing adaptive strategies for a deeply uncertain world. *Climatic Change*, **2015**, 132, 373-386	4.5	165
87	Exploratory Modeling and Analysis, an approach for model-based foresight under deep uncertainty. *Technological Forecasting and Social Change*, **2013**, 80, 419-431	9.5	121
86	Prospects of modelling societal transitions: Position paper of an emerging community. *Environmental Innovation and Societal Transitions*, **2015**, 17, 41-58	7.6	108
85	Classifying and communicating uncertainties in model-based policy analysis. *International Journal of Technology, Policy and Management*, **2010**, 10, 299	0.3	107
84	Comparing Robust Decision-Making and Dynamic Adaptive Policy Pathways for model-based decision support under deep uncertainty. *Environmental Modelling and Software*, **2016**, 86, 168-183	5.2	104
83	Coping with the Wickedness of Public Policy Problems: Approaches for Decision Making under Deep Uncertainty. *Journal of Water Resources Planning and Management - ASCE*, **2016**, 142, 01816001	2.8	98
82	Robustness Metrics: How Are They Calculated, When Should They Be Used and Why Do They Give Different Results?. *Earth's Future*, **2018**, 6, 169-191	7.9	85
81	The Exploratory Modeling Workbench: An open source toolkit for exploratory modeling, scenario discovery, and (multi-objective) robust decision making. *Environmental Modelling and Software*, **2017**, 96, 239-250	5.2	83
80	An exploratory approach for adaptive policymaking by using multi-objective robust optimization. *Simulation Modelling Practice and Theory*, **2014**, 46, 25-39	3.9	78
79	Adaptive Robust Design under deep uncertainty. *Technological Forecasting and Social Change*, **2013**, 80, 408-418	9.5	75
78	Fit for purpose? Building and evaluating a fast, integrated model for exploring water policy pathways. *Environmental Modelling and Software*, **2014**, 60, 99-120	5.2	72
77	Dynamic scenario discovery under deep uncertainty: The future of copper. *Technological Forecasting and Social Change*, **2013**, 80, 789-800	9.5	69
76	Thresholds, tipping and turning points for sustainability under climate change. *Current Opinion in Environmental Sustainability*, **2013**, 5, 334-340	7.2	65
75	Improving scenario discovery for handling heterogeneous uncertainties and multinomial classified outcomes. *Environmental Modelling and Software*, **2016**, 79, 311-321	5.2	49

74	Using System Dynamics for Grand Challenges: The ESDMA Approach. *Systems Research and Behavioral Science*, **2015**, 32, 358-375	1.8	44
73	Designing monitoring arrangements for collaborative learning about adaptation pathways. *Environmental Science and Policy*, **2017**, 69, 29-38	6.2	40
72	Coping with uncertainty in climate policy making: (Mis)understanding scenario studies. *Futures*, **2013**, 53, 1-12	3.6	33
71	Modeling with Stakeholders for Transformative Change. *Sustainability*, **2019**, 11, 825	3.6	31
70	Narrative-informed exploratory analysis of energy transition pathways: A case study of India's electricity sector. *Energy Policy*, **2017**, 110, 271-287	7.2	31
69	Radicalization under deep uncertainty: a multi-model exploration of activism, extremism, and terrorism. *System Dynamics Review*, **2014**, 30, 1-28	1.6	30
68	Innovation forecasting: A case study of the management of engineering and technology literature. *Technological Forecasting and Social Change*, **2011**, 78, 346-357	9.5	30
67	The geopolitical impact of the shale revolution: Exploring consequences on energy prices and rentier states. *Energy Policy*, **2016**, 98, 390-399	7.2	30
66	Assessing the Efficacy of Dynamic Adaptive Planning of Infrastructure: Results from Computational Experiments. *Environment and Planning B: Planning and Design*, **2012**, 39, 533-550		29
65	Tree-based ensemble methods for sensitivity analysis of environmental models: A performance comparison with Sobol and Morris techniques. *Environmental Modelling and Software*, **2018**, 107, 245-266	5.2	28
64	Including robustness considerations in the search phase of Many-Objective Robust Decision Making. *Environmental Modelling and Software*, **2018**, 105, 201-216	5.2	26
63	A scenario discovery study of the impact of uncertainties in the global container transport system on European ports. *Futures*, **2016**, 81, 148-160	3.6	26
62	Dealing with Uncertainties in Fresh Water Supply: Experiences in the Netherlands. *Water Resources Management*, **2017**, 31, 703-725	3.7	22
61	Ebola in West Africa: Model-Based Exploration of Social Psychological Effects and Interventions. *Systems Research and Behavioral Science*, **2015**, 32, 2-14	1.8	22
60	Societal Ageing in the Netherlands: A Robust System Dynamics Approach. *Systems Research and Behavioral Science*, **2015**, 32, 485-501	1.8	21
59	Exploratory modeling for analyzing coupled human-natural systems under uncertainty. *Global Environmental Change*, **2020**, 65, 102186	10.1	21
58	Lessons for model use in transition research: A survey and comparison with other research areas. *Environmental Innovation and Societal Transitions*, **2015**, 15, 194-210	7.6	20
57	Visualizing geo-spatial data in science, technology and innovation. *Technological Forecasting and Social Change*, **2014**, 81, 67-81	9.5	20

38	An Exploratory Analysis of the Dutch Electricity System in Transition. *Journal of the Knowledge Economy*, **2014**, 5, 670-685	1.3	10
37	Decision Support for Airport Strategic Planning. *Transportation Planning and Technology*, **2008**, 31, 11-34	1.6	10
36	Impact of Scenario Selection on Robustness. *Water Resources Research*, **2020**, 56, e2019WR026515	5.4	10
35	Systemic Flood Risk Management: The Challenge of Accounting for Hydraulic Interactions. *Water (Switzerland)*, **2019**, 11, 2530	3	10
34	Evaluation of flood risk reduction strategies through combinations of interventions. *Journal of Flood Risk Management*, **2019**, 12, e12506	3.1	10
33	Evaluating Adaptive Policymaking using expert opinions. *Technological Forecasting and Social Change*, **2012**, 79, 311-325	9.5	9
32	Efficient or Fair? Operationalizing Ethical Principles in Flood Risk Management: A Case Study on the Dutch-German Rhine. *Risk Analysis*, **2020**, 40, 1844-1862	3.9	9
31	Dynamic Adaptive Policies: A Way to Improve the Cost-Benefit Performance of Megaprojects?. *Environment and Planning B: Planning and Design*, **2014**, 41, 594-612		8
30	Accounting for the uncertain effects of hydraulic interactions in optimising embankments heights: Proof of principle for the IJssel River. *Journal of Flood Risk Management*, **2019**, 12, e12532	3.1	8
29	Participatory multi-modelling as the creation of a boundary object ecology: the case of future energy infrastructures in the Rotterdam Port Industrial Cluster. *Sustainability Science*, **2021**, 16, 901-918	6.4	8
28	A generalized many-objective optimization approach for scenario discovery. *Futures & Foresight Science*, **2019**, 1, e8	1.7	7
27	Simulating endogenous dynamics of intervention-capacity deployment: Ebola outbreak in Liberia. *International Journal of Systems Science: Operations and Logistics*, **2017**, 4, 53-67	2.6	6
26	Dynamic Adaptive Planning (DAP) **2019**, 53-69		6
25	Comment on "From Data to Decisions: Processing Information, Biases, and Beliefs for Improved Management of Natural Resources and Environments" by Glynn et al.. *Earth's Future*, **2018**, 6, 757-761	7.9	6
24	Operationalizing adaptive policymaking. *Futures*, **2013**, 52, 12-26	3.6	6
23	What are the merits of endogenising land-use change dynamics into model-based climate adaptation planning?. *Socio-Environmental Systems Modeling*, 1, 16126		5
22	Exploring Deep Uncertainty Approaches for Application in Life Cycle Engineering. *Procedia CIRP*, **2018**, 69, 457-462	1.8	5
21	Dealing with Multiple Models in System Dynamics. *International Journal of System Dynamics Applications*, **2014**, 3, 17-35	0.7	4

20	Enabling assessment of distributive justice through models for climate change planning: A review of recent advances and a research agenda. *Wiley Interdisciplinary Reviews: Climate Change*, **2021**, 12, e721	8.4	4
19	Is real options analysis fit for purpose in supporting climate adaptation planning and decision-making?. *Wiley Interdisciplinary Reviews: Climate Change*, **2020**, 11, e638	8.4	4
18	Rapid flood risk screening model for compound flood events in Beira, Mozambique. *Natural Hazards and Earth System Sciences*, **2020**, 20, 2633-2646	3.9	3
17	Risk, Uncertainty, and Ignorance in Engineering Systems Design **2022**, 1-31		3
16	Assessing the Capacity of Adaptive Policy Pathways to Adapt on Time by Mapping Trigger Values to Their Outcomes. *Sustainability*, **2019**, 11, 1716	3.6	2
15	Shale Gas and Import Dependency. *International Journal of System Dynamics Applications*, **2015**, 4, 31-56	0.7	2
14	The adoption and diffusion of common-pool resource-dependent technologies: The case of aquifer Thermal Energy Storage systems **2015**,		2
13	The semantics of the uncertainty literature **2008**,		2
12	Guidance framework and software for understanding and achieving system robustness. *Environmental Modelling and Software*, **2021**, 142, 105059	5.2	2
11	Multi-scenario multi-objective robust optimization under deep uncertainty: A posteriori approach. *Environmental Modelling and Software*, **2021**, 144, 105134	5.2	2
10	A novel concurrent approach for multiclass scenario discovery using Multivariate Regression Trees: Exploring spatial inequality patterns in the Vietnam Mekong Delta under uncertainty. *Environmental Modelling and Software*, **2021**, 145, 105177	5.2	2
9	Technological Frontiers and Embeddings: A Visualization Approach. *International Journal of Innovation and Technology Management*, **2017**, 14, 1740009	1.1	1
8	Grappling with uncertainty in the long-term development of infrastructure systems **2010**,		1
7	Evaluation of infrastructure planning approaches: an analogy with medicine **2009**,		1
6	Managing polysemy and synonymy in science mapping using the mixtures of factor analyzers model. *Journal of the Association for Information Science and Technology*, **2009**, 60, 2064-2078		1
5	Adaptive policymaking for Airport Strategic Planning **2008**,		1
4	Techniques and methods for uncertainty management **2008**,		1
3	Accounting for Multisectoral Dynamics in Supporting Equitable Adaptation Planning: A Case Study on the Rice Agriculture in the Vietnam Mekong Delta. *Earth's Future*, **2021**, 9, e2020EF001939	7.9	1

LIST OF PUBLICATIONS

2   Polder pumping-station for the future: designing and retrofitting infrastructure systems under structural uncertainty. *Sustainable and Resilient Infrastructure*, **2020**, 1-17   3.3

1   Reaction: A commentary on Lustick and Tetlock (2021). *Futures & Foresight Science*, **2021**, 3, e84   1.7