## Jan H Kwakkel

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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

#	Paper	IF	Citations
91	Risk, Uncertainty, and Ignorance in Engineering Systems Design <b>2022</b> , 1-31		3
90	Reaction: A commentary on Lustick and Tetlock (2021). Futures & Foresight Science, 2021, 3, e84	1.7	
89	Accounting for Multisectoral Dynamics in Supporting Equitable Adaptation Planning: A Case Study on the Rice Agriculture in the Vietnam Mekong Delta. <i>Earthles Future</i> , <b>2021</b> , 9, e2020EF001939	7.9	1
88	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, e7	2 <sup>8.4</sup>	4
87	Participatory multi-modelling as the creation of a boundary object ecology: the case of future energy infrastructures in the Rotterdam Port Industrial Cluster. <i>Sustainability Science</i> , <b>2021</b> , 16, 901-91	8 <sup>6.4</sup>	8
86	Guidance framework and software for understanding and achieving system robustness. Environmental Modelling and Software, <b>2021</b> , 142, 105059	5.2	2
85	Multi-scenario multi-objective robust optimization under deep uncertainty: A posteriori approach. <i>Environmental Modelling and Software</i> , <b>2021</b> , 144, 105134	5.2	2
84	A novel concurrent approach for multiclass scenario discovery using Multivariate Regression Trees: Exploring spatial inequality patterns in the Vietnam Mekong Delta under uncertainty. <i>Environmental Modelling and Software</i> , <b>2021</b> , 145, 105177	5.2	2
83	On considering robustness in the search phase of Robust Decision Making: A comparison of Many-Objective Robust Decision Making, multi-scenario Many-Objective Robust Decision Making, and Many Objective Robust Optimization. <i>Environmental Modelling and Software</i> , <b>2020</b> , 127, 104699	5.2	13
82	Behavior-based scenario discovery using time series clustering. <i>Technological Forecasting and Social Change</i> , <b>2020</b> , 156, 120052	9.5	11
81	Rapid flood risk screening model for compound flood events in Beira, Mozambique. <i>Natural Hazards and Earth System Sciences</i> , <b>2020</b> , 20, 2633-2646	3.9	3
80	Transport network criticality metrics: a comparative analysis and a guideline for selection. <i>Transport Reviews</i> , <b>2020</b> , 40, 241-264	9.9	14
79	Polder pumping-station for the future: designing and retrofitting infrastructure systems under structural uncertainty. <i>Sustainable and Resilient Infrastructure</i> , <b>2020</b> , 1-17	3.3	
78	Exploratory modeling for analyzing coupled human-natural systems under uncertainty. <i>Global Environmental Change</i> , <b>2020</b> , 65, 102186	10.1	21
77	Efficient or Fair? Operationalizing Ethical Principles in Flood Risk Management: A Case Study on the Dutch-German Rhine. <i>Risk Analysis</i> , <b>2020</b> , 40, 1844-1862	3.9	9
76	Governing climate risks in the face of normative uncertainties. <i>Wiley Interdisciplinary Reviews:</i> Climate Change, <b>2020</b> , 11, e666	8.4	12
75	Impact of Scenario Selection on Robustness. <i>Water Resources Research</i> , <b>2020</b> , 56, e2019WR026515	5.4	10

## (2018-2020)

74	Is real options analysis fit for purpose in supporting climate adaptation planning and decision-making?. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , <b>2020</b> , 11, e638	8.4	4
73	How to evaluate a monitoring system for adaptive policies: criteria for signposts selection and their model-based evaluation. <i>Climatic Change</i> , <b>2019</b> , 153, 267-283	4.5	16
72	A coupled simulation architecture for agent-based/geohydrological modelling with NetLogo and MODFLOW. <i>Environmental Modelling and Software</i> , <b>2019</b> , 115, 19-37	5.2	16
71	A generalized many-objective optimization approach for scenario discovery. <i>Futures &amp; Foresight Science</i> , <b>2019</b> , 1, e8	1.7	7
70	Assessing the Capacity of Adaptive Policy Pathways to Adapt on Time by Mapping Trigger Values to Their Outcomes. <i>Sustainability</i> , <b>2019</b> , 11, 1716	3.6	2
69	Dynamic Adaptive Policy Pathways (DAPP) <b>2019</b> , 71-92		16
68	Aquifer Thermal Energy Storage (ATES) smart grids: Large-scale seasonal energy storage as a distributed energy management solution. <i>Applied Energy</i> , <b>2019</b> , 242, 624-639	10.7	14
67	Dynamic Adaptive Planning (DAP) <b>2019</b> , 53-69		6
66	Modeling with Stakeholders for Transformative Change. Sustainability, 2019, 11, 825	3.6	31
65	Supporting DMDU: A Taxonomy of Approaches and Tools <b>2019</b> , 355-374		14
64	Systemic Flood Risk Management: The Challenge of Accounting for Hydraulic Interactions. <i>Water</i> (Switzerland), <b>2019</b> , 11, 2530	3	10
63	Accounting for the uncertain effects of hydraulic interactions in optimising embankments heights: Proof of principle for the IJssel River. <i>Journal of Flood Risk Management</i> , <b>2019</b> , 12, e12532	3.1	8
62	Evaluation of flood risk reduction strategies through combinations of interventions. <i>Journal of Flood Risk Management</i> , <b>2019</b> , 12, e12506	3.1	10
61	Including robustness considerations in the search phase of Many-Objective Robust Decision Making. <i>Environmental Modelling and Software</i> , <b>2018</b> , 105, 201-216	5.2	26
60	Robustness Metrics: How Are They Calculated, When Should They Be Used and Why Do They Give Different Results?. <i>Earthle Future</i> , <b>2018</b> , 6, 169-191	7.9	85
59	Comment on <b>E</b> rom Data to Decisions: Processing Information, Biases, and Beliefs for Improved Management of Natural Resources and Environments By Glynn et al <i>Earthle Future</i> , <b>2018</b> , 6, 757-761	7.9	6
58	Tree-based ensemble methods for sensitivity analysis of environmental models: A performance comparison with Sobol and Morris techniques. <i>Environmental Modelling and Software</i> , <b>2018</b> , 107, 245-26	ē.2	28
57	PyNetLogo: Linking NetLogo with Python. <i>Jasss</i> , <b>2018</b> , 21,	4.8	15

56	Exploring Deep Uncertainty Approaches for Application in Life Cycle Engineering. <i>Procedia CIRP</i> , <b>2018</b> , 69, 457-462	1.8	5
55	Dealing with Uncertainties in Fresh Water Supply: Experiences in the Netherlands. <i>Water Resources Management</i> , <b>2017</b> , 31, 703-725	3.7	22
54	Simulating endogenous dynamics of intervention-capacity deployment: Ebola outbreak in Liberia. <i>International Journal of Systems Science: Operations and Logistics</i> , <b>2017</b> , 4, 53-67	2.6	6
53	Technological Frontiers and Embeddings: A Visualization Approach. <i>International Journal of Innovation and Technology Management</i> , <b>2017</b> , 14, 1740009	1.1	1
52	Designing monitoring arrangements for collaborative learning about adaptation pathways. <i>Environmental Science and Policy</i> , <b>2017</b> , 69, 29-38	6.2	40
51	Narrative-informed exploratory analysis of energy transition pathways: A case study of India's electricity sector. <i>Energy Policy</i> , <b>2017</b> , 110, 271-287	7.2	31
50	The Exploratory Modeling Workbench: An open source toolkit for exploratory modeling, scenario discovery, and (multi-objective) robust decision making. <i>Environmental Modelling and Software</i> , <b>2017</b> , 96, 239-250	5.2	83
49	How Robust is a Robust Policy? Comparing Alternative Robustness Metrics for Robust Decision-Making. <i>Profiles in Operations Research</i> , <b>2016</b> , 221-237	1	15
48	A strategic model of port-hinterland freight distribution networks. <i>Transportation Research, Part E: Logistics and Transportation Review,</i> <b>2016</b> , 95, 368-384	9	16
47	Coping with the Wickedness of Public Policy Problems: Approaches for Decision Making under Deep Uncertainty. <i>Journal of Water Resources Planning and Management - ASCE</i> , <b>2016</b> , 142, 01816001	2.8	98
46	The Emergence of Climate Change Mitigation Action by Society: An Agent-Based Scenario Discovery Study. <i>Jasss</i> , <b>2016</b> , 19,	4.8	13
45	A scenario discovery study of the impact of uncertainties in the global container transport system on European ports. <i>Futures</i> , <b>2016</b> , 81, 148-160	3.6	26
44	Improving scenario discovery for handling heterogeneous uncertainties and multinomial classified outcomes. <i>Environmental Modelling and Software</i> , <b>2016</b> , 79, 311-321	5.2	49
43	An uncertain future, deep uncertainty, scenarios, robustness and adaptation: How do they fit together?. <i>Environmental Modelling and Software</i> , <b>2016</b> , 81, 154-164	5.2	233
42	The geopolitical impact of the shale revolution: Exploring consequences on energy prices and rentier states. <i>Energy Policy</i> , <b>2016</b> , 98, 390-399	7.2	30
41	Comparing Robust Decision-Making and Dynamic Adaptive Policy Pathways for model-based decision support under deep uncertainty. <i>Environmental Modelling and Software</i> , <b>2016</b> , 86, 168-183	5.2	104
40	Improving scenario discovery by bagging random boxes. <i>Technological Forecasting and Social Change</i> , <b>2016</b> , 111, 124-134	9.5	11
39	Using System Dynamics for Grand Challenges: The ESDMA Approach. <i>Systems Research and Behavioral Science</i> , <b>2015</b> , 32, 358-375	1.8	44

## (2013-2015)

38	Ebola in West Africa: Model-Based Exploration of Social Psychological Effects and Interventions. Systems Research and Behavioral Science, <b>2015</b> , 32, 2-14	1.8	22
37	Societal Ageing in the Netherlands: A Robust System Dynamics Approach. <i>Systems Research and Behavioral Science</i> , <b>2015</b> , 32, 485-501	1.8	21
36	Shale Gas and Import Dependency. International Journal of System Dynamics Applications, 2015, 4, 31-50	6 0.7	2
35	Lessons for model use in transition research: A survey and comparison with other research areas. <i>Environmental Innovation and Societal Transitions</i> , <b>2015</b> , 15, 194-210	7.6	20
34	Prospects of modelling societal transitions: Position paper of an emerging community. <i>Environmental Innovation and Societal Transitions</i> , <b>2015</b> , 17, 41-58	7.6	108
33	The adoption and diffusion of common-pool resource-dependent technologies: The case of aquifer Thermal Energy Storage systems <b>2015</b> ,		2
32	Developing dynamic adaptive policy pathways: a computer-assisted approach for developing adaptive strategies for a deeply uncertain world. <i>Climatic Change</i> , <b>2015</b> , 132, 373-386	4.5	165
31	Fit for purpose? Building and evaluating a fast, integrated model for exploring water policy pathways. <i>Environmental Modelling and Software</i> , <b>2014</b> , 60, 99-120	5.2	72
30	An exploratory approach for adaptive policymaking by using multi-objective robust optimization. <i>Simulation Modelling Practice and Theory</i> , <b>2014</b> , 46, 25-39	3.9	78
29	Tipping points in science: A catastrophe model of scientific change. <i>Journal of Engineering and Technology Management - JET-M</i> , <b>2014</b> , 32, 185-205	3.7	10
28	Dynamic Adaptive Policies: A Way to Improve the CostBenefit Performance of Megaprojects?. <i>Environment and Planning B: Planning and Design</i> , <b>2014</b> , 41, 594-612		8
27	Radicalization under deep uncertainty: a multi-model exploration of activism, extremism, and terrorism. <i>System Dynamics Review</i> , <b>2014</b> , 30, 1-28	1.6	30
26	Visualizing geo-spatial data in science, technology and innovation. <i>Technological Forecasting and Social Change</i> , <b>2014</b> , 81, 67-81	9.5	20
25	An Exploratory Analysis of the Dutch Electricity System in Transition. <i>Journal of the Knowledge Economy</i> , <b>2014</b> , 5, 670-685	1.3	10
24	Dealing with Multiple Models in System Dynamics. <i>International Journal of System Dynamics Applications</i> , <b>2014</b> , 3, 17-35	0.7	4
23	Coping with uncertainty in climate policy making: (Mis)understanding scenario studies. <i>Futures</i> , <b>2013</b> , 53, 1-12	3.6	33
22	Thresholds, tipping and turning points for sustainability under climate change. <i>Current Opinion in Environmental Sustainability</i> , <b>2013</b> , 5, 334-340	7.2	65
21	Dynamic adaptive policy pathways: A method for crafting robust decisions for a deeply uncertain world. <i>Global Environmental Change</i> , <b>2013</b> , 23, 485-498	10.1	819

20	Operationalizing adaptive policymaking. <i>Futures</i> , <b>2013</b> , 52, 12-26	3.6	6
19	Adaptive Robust Design under deep uncertainty. <i>Technological Forecasting and Social Change</i> , <b>2013</b> , 80, 408-418	9.5	75
18	Exploratory Modeling and Analysis, an approach for model-based foresight under deep uncertainty. <i>Technological Forecasting and Social Change</i> , <b>2013</b> , 80, 419-431	9.5	121
17	Dynamic scenario discovery under deep uncertainty: The future of copper. <i>Technological Forecasting and Social Change</i> , <b>2013</b> , 80, 789-800	9.5	69
16	Uncertainty in the Framework of Policy Analysis. <i>Profiles in Operations Research</i> , <b>2013</b> , 215-261	1	19
15	Adapt or Perish: A Review of Planning Approaches for Adaptation under Deep Uncertainty. <i>Sustainability</i> , <b>2013</b> , 5, 955-979	3.6	320
14	Evaluating Adaptive Policymaking using expert opinions. <i>Technological Forecasting and Social Change</i> , <b>2012</b> , 79, 311-325	9.5	9
13	Assessing the Efficacy of Dynamic Adaptive Planning of Infrastructure: Results from Computational Experiments. <i>Environment and Planning B: Planning and Design</i> , <b>2012</b> , 39, 533-550		29
12	Framing flexibility: Theorising and data mining to develop a useful definition of flexibility and related concepts. <i>Futures</i> , <b>2011</b> , 43, 923-933	3.6	16
11	Evaluation of infrastructure planning approaches: An analogy with medicine. Futures, 2011, 43, 934-946	3.6	14
10	Innovation forecasting: A case study of the management of engineering and technology literature. <i>Technological Forecasting and Social Change</i> , <b>2011</b> , 78, 346-357	9.5	30
9	Classifying and communicating uncertainties in model-based policy analysis. <i>International Journal of Technology, Policy and Management</i> , <b>2010</b> , 10, 299	0.3	107
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. <i>Journal of the Association for Information Science and Technology</i> , <b>2009</b> , 60, 2064-2078		1
5	Decision Support for Airport Strategic Planning. <i>Transportation Planning and Technology</i> , <b>2008</b> , 31, 11-3	41.6	10
4	Adaptive policymaking for Airport Strategic Planning 2008,		1
3	Techniques and methods for uncertainty management 2008,		1

The semantics of the uncertainty literature **2008**,

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What are the merits of endogenising land-use change dynamics into model-based climate adaptation planning?. *Socio-Environmental Systems Modeling*,1, 16126

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