Richard J Dawson

List of Publications by Year
in descending order

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104 papers	6,321 citations	100601 38 h-index	78623 77 g-index

117 all docs	117 docs citations	117 times ranked	7621 citing authors

#	Article	IF	Citations
1	A climate resilience research renewal agenda: learning lessons from the COVID-19 pandemic for urban climate resilience. Climate and Development, 2022, 14, 617-624.	2.2	16
2	Energy-water nexus at the building level. Energy and Buildings, 2022, 257, 111778.	3.1	6
3	A Systems Framework for Infrastructure Business Models for Resilient and Sustainable Urban Areas. Frontiers in Sustainable Cities, 2022, 4, .	1.2	1
4	LAYERS: A Decision-Support Tool to Illustrate and Assess the Supply and Value Chain for the Energy Transition. Sustainability, 2022, 14, 7120.	1.6	4
5	The feasibility of inter-basin water transfers to manage climate risk in England. Climate Risk Management, 2021, 33, 100322.	1.6	3
6	Global analysis of sea level rise risk to airports. Climate Risk Management, 2021, 31, 100266.	1.6	23
7	Long-term sea-level rise necessitates a commitment to adaptation: A first order assessment. Climate Risk Management, 2021, 34, 100355.	1.6	22
8	Evaluating the Potential Hydrological Performance of a Bioretention Media with 100% Recycled Waste Components. Water (Switzerland), 2021, 13, 2014.	1.2	3
9	From mathematical models to policy design: Predicting greywater reuse scheme effectiveness and water reclamation benefits based on individualsâ€™ preferences. Sustainable Cities and Society, 2021, 74, 103132.	5.1	5
10	Comparing Generic and Case Study Damage Functions: London Storm-Surge Example. Natural Hazards Review, 2020, 21, 06019003.	0.8	0
11	Integration of mitigation and adaptation in urban climate change action plans in Europe: A systematic assessment. Renewable and Sustainable Energy Reviews, 2020, 121, 109623.	8.2	108
12	Implications of Using Global Digital Elevation Models for Flood Risk Analysis in Cities. Water Resources Research, 2020, 56, e2020WR028241.	1.7	41
13	Understanding the preferences for different types of urban greywater uses and the impact of qualitative attributes. Water Research, 2020, 184, 116007.	5.3	22
14	Public health is moot without water security. Nature, 2020, 583, 360-360.	13.7	3
15	Upscaling urban data science for global climate solutions. Global Sustainability, 2019, 2, .	1.6	73
16	Low Carbon, Low Risk, Low Density: Resolving choices about sustainable development in cities. Cities, 2019, 89, 252-267.	2.7	33
17	A multi-scale urban integrated assessment framework for climate change studies: A flooding application. Computers, Environment and Urban Systems, 2019, 75, 229-243.	3.3	28
18	Preparedness against mobility disruption by floods. Science of the Total Environment, 2019, 654, 1010-1022.	3.9	90

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19	SENSITIVITY OF TRANSPORT MODEL TO HYDRAULIC MODEL FOR FLOOD RISK ASSESSMENT OF ROAD INFRASTRUCTURES. , 2019, , .		0
20	Future heat-waves, droughts and floods in 571 European cities. Environmental Research Letters, 2018, 13, 034009.	2.2	242
21	Locking in positive climate responses in cities. Nature Climate Change, 2018, 8, 174-177.	8.1	170
22	Multi-sector mitigation strategies at the neighbourhood scale. Journal of Cleaner Production, 2018, 187, 893-902.	4.6	14
23	Assessment of Flood Losses with Household Responses: Agent-Based Simulation in an Urban Catchment Area. Environmental Modeling and Assessment, 2018, 23, 369-388.	1.2	44
24	How are cities planning to respond to climate change? Assessment of local climate plans from 885 cities in the EU-28. Journal of Cleaner Production, 2018, 191, 207-219.	4.6	361
25	Integrated Approach to Assess the Resilience of Future Electricity Infrastructure Networks to Climate Hazards. IEEE Systems Journal, 2018, 12, 3169-3180.	2.9	57
26	Drain covers and door steps: decision making and the co-creation of future cities. Proceedings of the Institution of Civil Engineers: Urban Design and Planning, 2018, 171, 177-186.	0.6	2
27	A systems framework for national assessment of climate risks to infrastructure. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170298.	1.6	46
28	Six research priorities for cities and climate change. Nature, 2018, 555, 23-25.	13.7	446
29	Alternative-substitute business models and the provision of local infrastructure: Alterity as a solution to financialization and public-sector failure. Geoforum, 2018, 95, 25-34.	1.4	21
30	Land-use transport models for climate change mitigation and adaptation planning. Journal of Transport and Land Use, 2018, 11, .	0.7	30
31	Spatial Optimization of Future Urban Development with Regards to Climate Risk and Sustainability Objectives. Risk Analysis, 2017, 37, 2164-2181.	1.5	22
32	Impact of Climate Change on Disruption to Urban Transport Networks from Pluvial Flooding. Journal of Infrastructure Systems, 2017, 23, .	1.0	94
33	How do cities support electric vehicles and what difference does it make?. Technological Forecasting and Social Change, 2017, 123, 17-23.	6.2	56
34	Power System Resilience to Extreme Weather: Fragility Modeling, Probabilistic Impact Assessment, and Adaptation Measures. IEEE Transactions on Power Systems, 2017, 32, 3747-3757.	4.6	394
35	The impact of flooding on road transport: A depth-disruption function. Transportation Research, Part D: Transport and Environment, 2017, 55, 67-81.	3.2	286
36	Identifying key technology and policy strategies for sustainable cities: A case study of London. Environmental Development, 2017, 21, 1-18.	1.8	31

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37	Pluvial Flooding in European Citiesâ€"A Continental Approach to Urban Flood Modelling. Water (Switzerland), 2017, 9, 296.	1.2	32
38	Costs of sea dikes â€“ regressions and uncertainty estimates. Natural Hazards and Earth System Sciences, 2017, 17, 765-779.	1.5	22
39	A blueprint for the integrated assessment of climate change in cities. , 2017, , 32-51.		2
40	Adaptation of water resource systems to an uncertain future. Hydrology and Earth System Sciences, 2016, 20, 1869-1884.	1.9	17
41	Alternative business models for flood risk management infrastructure. E3S Web of Conferences, 2016, 7, 20015.	0.2	1
42	Disruption and adaptation of urban transport networks from flooding. E3S Web of Conferences, 2016, 7, 07006.	0.2	10
43	Optimization of urban spatial development against flooding and other climate risks, and wider sustainability objectives. E3S Web of Conferences, 2016, 7, 04016.	0.2	2
44	Assessing urban strategies for reducing the impacts of extreme weather on infrastructure networks. Royal Society Open Science, 2016, 3, 160023.	1.1	74
45	Calibrating a High-Performance Hydrodynamic Model for Broad-Scale Flood Simulation: Application to Thames Estuary, London, UK. Procedia Engineering, 2016, 154, 967-974.	1.2	5
46	Dynamic building stock modelling: Application to 11 European countries to support the energy efficiency and retrofit ambitions of the EU. Energy and Buildings, 2016, 132, 26-38.	3.1	128
47	A Spatial Network Model for Civil Infrastructure System Development. Computer-Aided Civil and Infrastructure Engineering, 2016, 31, 661-680.	6.3	15
48	Building network-level resilience to resource disruption from flooding: Case studies from the Shetland Islands and Hurricane Sandy. E3S Web of Conferences, 2016, 7, 04008.	0.2	12
49	National climate policies across Europe and their impacts on cities strategies. Journal of Environmental Management, 2016, 168, 36-45.	3.8	127
50	Climate impacts on flood and coastal erosion infrastructure. Infrastructure Asset Management, 2015, 2, 69-83.	1.2	18
51	Improving measures of topological robustness in networks of networks and suggestion of a novel way to counter both failure propagation and isolation. Infrastructure Complexity, 2015, 2, .	1.7	9
52	Handling Interdependencies in Climate Change Risk Assessment. Climate, 2015, 3, 1079-1096.	1.2	29
53	Transport Accessibility Analysis Using GIS: Assessing Sustainable Transport in London. ISPRS International Journal of Geo-Information, 2015, 4, 124-149.	1.4	123
54	Broad Scale Coastal Simulation. Advances in Global Change Research, 2015, , .	1.6	10

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55	Assessment of the resilience of transmission networks to extreme wind events. , 2015, , .		25
56	The Challenge for Coastal Management During the Third Millennium. Advances in Global Change Research, 2015, , 1-78.	1.6	1
57	Optimised spatial planning to meet long term urban sustainability objectives. Computers, Environment and Urban Systems, 2015, 54, 154-164.	3.3	55
58	Broadscale Coastal Inundation Modelling. Advances in Global Change Research, 2015, , 213-232.	1.6	1
59	Analysing Flood and Erosion Risks and Coastal Management Strategies on the Norfolk Coast. Advances in Global Change Research, 2015, , 233-254.	1.6	3
60	A Spatial Model for Infrastructure Network Generation and Evolution. Emergence, Complexity and Computation, 2015, , 365-371.	0.2	0
61	GIS Platforms for Managing, Accessing and Integrating Model Results: The Tyndall Coastal Simulator Experience. Advances in Global Change Research, 2015, , 273-298.	1.6	0
62	Integrated Coastal Assessment: The Way Forward. Advances in Global Change Research, 2015, , 349-378.	1.6	0
63	International Opportunities for Broad Scale Coastal Simulation. Advances in Global Change Research, 2015, , 325-347.	1.6	0
64	Uncertainties in Flood Modelling in Urban Areas. , 2014, , 297-334.		7
65	Risk Assessment of the Disruption of Resource Movements from Flooding. , 2014, , .		0
66	Editorial: Modeling the urban water cycle as part of the city. Water Science and Technology, 2014, 70, 1717-1720.	1.2	5
67	Climate change response in Europe: whatâ€™s the reality? Analysis of adaptation and mitigation plans from 200 urban areas in 11 countries. Climatic Change, 2014, 122, 331-340.	1.7	293
68	The energy-water-food nexus: Strategic analysis of technologies for transforming the urban metabolism. Journal of Environmental Management, 2014, 141, 104-115.	3.8	198
69	Interdependent networks: vulnerability analysis and strategies to limit cascading failure. European Physical Journal B, 2014, 87, 1.	0.6	50
70	Briefing: Infrastructure business models, valuation and innovation for local delivery. Infrastructure Asset Management, 2014, 1, 66-67.	1.2	11
71	Optimization of Urban Spatial Development Against Multiple Sustainability Objectives and Climate Risks. , 2014, , .		3
72	Assessment of the climate preparedness of 30 urban areas in the UK. Climatic Change, 2013, 120, 771-784.	1.7	105

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73	An evaluation of thermal Earth observation for characterizing urban heatwave event dynamics using the urban heat island intensity metric. International Journal of Remote Sensing, 2013, 34, 864-884.	1.3	35
74	Experiences of integrated assessment of climate impacts, adaptation and mitigation modelling in London and Durban. Environment and Urbanization, 2013, 25, 361-380.	1.5	39
75	Collaborative platform to facilitate engineering decision-making. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2013, 166, 98-107.	0.4	14
76	Network theory for infrastructure systems modelling. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2013, 166, 281-292.	0.4	19
77	Scenarios of Future Built Environment for Coastal Risk Assessment of Climate Change Using a GIS-Based Multicriteria Analysis. Environment and Planning B: Planning and Design, 2012, 39, 120-136.	1.7	22
78	Issues and Challenges in Flood Risk Managementâ€"Editorial for the Special Issue on Flood Risk Management. Water (Switzerland), 2012, 4, 785-792.	1.2	52
79	Enhanced efficiency of pluvial flood risk estimation in urban areas using spatialâ€“temporal rainfall simulations. Journal of Flood Risk Management, 2012, 5, 143-152.	1.6	57
80	Potential pitfalls on the transition to more sustainable cities and how they might be avoided. Carbon Management, 2011, 2, 175-188.	1.2	26
81	Assessing the effectiveness of non-structural flood management measures in the Thames Estuary under conditions of socio-economic and environmental change. Global Environmental Change, 2011, 21, 628-646.	3.6	161
82	Assessment of climate change mitigation and adaptation in cities. Proceedings of the Institution of Civil Engineers: Urban Design and Planning, 2011, 164, 75-84.	0.6	39
83	An agent-based model for risk-based flood incident management. Natural Hazards, 2011, 59, 167-189.	1.6	247
84	Keeping nuclear and other coastal sites safe from climate change. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2011, 164, 129-136.	0.3	23
85	Imprecise probability assessment of tipping points in the climate system. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5041-5046.	3.3	263
86	Integrated analysis of risks of coastal flooding and cliff erosion under scenarios of long term change. Climatic Change, 2009, 95, 249-288.	1.7	205
87	Sensitivity Analysis for Hydraulic Models. Journal of Hydraulic Engineering, 2009, 135, 959-969.	0.7	78
88	THE TYNDALL COASTAL SIMULATOR AND INTERFACE. , 2009, , .		3
89	PROJECTED LONG TERM CHANGES IN FLOOD RISK ON THE EAST ANGLIA COAST OF THE UK. , 2009, , .		0
90	Plausible responses to the threat of rapid sea-level rise in the Thames Estuary. Climatic Change, 2008, 91, 145-169.	1.7	63

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91	Attribution of flood risk in urban areas. Journal of Hydroinformatics, 2008, 10, 275-288.	1.1	98
92	Re-engineering cities: a framework for adaptation to global change. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 3085-3098.	1.6	55
93	Adaptive importance sampling for risk analysis of complex infrastructure systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 3343-3362.	1.0	59
94	Managing changing risks to infrastructure systems. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2006, 159, 21-27.	0.3	5
95	Broad-Scale Analysis of Morphological and Climate Impacts on Coastal Flood Risk. , 2006, , 1.		3
96	Simplified two-dimensional numerical modelling of coastal flooding and example applications. Coastal Engineering, 2005, 52, 793-810.	1.7	187
97	Sampling-based flood risk analysis for fluvial dike systems. Stochastic Environmental Research and Risk Assessment, 2005, 19, 388-402.	1.9	73
98	National-scale Assessment of Current and Future Flood Risk in England and Wales. Natural Hazards, 2005, 36, 147-164.	1.6	218
99	Quantified Analysis of the Probability of Flooding in the Thames Estuary under Imaginable Worst-case Sea Level Rise Scenarios. International Journal of Water Resources Development, 2005, 21, 577-591.	1.2	67
100	EFFICIENT BROAD SCALE COASTAL FLOOD RISK ASSESSMENT. , 2005, , .		3
101	PROBABILISTIC CONDITION CHARACTERISATION OF COASTAL STRUCTURES USING IMPRECISE INFORMATION. , 2003, , .		1
102	Urban Areas in Coastal Zones. , 0, , 319-362.		5
103	Modelling Infrastructure Systems for Resilience and Sustainability. , 0, , .		0
104	Resilience of Resource Movements to Disruptive Events. , 0, , .		1