Ian Holman

List of Publications by Year
in descending order

121 papers	6,491 citations	70961 41 h-index	71532 76 g-index
127 all docs	127 docs citations	127 times ranked	8578 citing authors

#	Article	IF	Citations
1	Ground water and climate change. Nature Climate Change, 2013, 3, 322-329.	8.1	1,513
2	Climate change impacts on groundwater recharge- uncertainty, shortcomings, and the way forward?. Hydrogeology Journal, 2006, 14, 637-647.	0.9	201
3	A restatement of the natural science evidence concerning catchment-based â€˜naturalâ€™ flood management in the UK. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160706.	1.0	184
4	Phosphorus in groundwaterâ€"an overlooked contributor to eutrophication?. Hydrological Processes, 2008, 22, 5121-5127.	1.1	169
5	Chinaâ€™s waterâ€"energy nexus: greenhouse-gas emissions from groundwater use for agriculture. Environmental Research Letters, 2012, 7, 014035.	2.2	152
6	Climate change, water availability and future cereal production in China. Agriculture, Ecosystems and Environment, 2010, 135, 58-69.	2.5	144
7	A Regional, Multi-Sectoral And Integrated Assessment Of The Impacts Of Climate And Socio-Economic Change In The Uk. Climatic Change, 2005, 71, 9-41.	1.7	138
8	Climate change impact modelling needs to include cross-sectoral interactions. Nature Climate Change, 2016, 6, 885-890.	8.1	117
9	Future cereal production in China: The interaction of climate change, water availability and socio-economic scenarios. Global Environmental Change, 2009, 19, 34-44.	3.6	116
10	Modelling Chinaâ€™s potential maize production at regional scale under climate change. Climatic Change, 2007, 85, 433-451.	1.7	107
11	Combining qualitative and quantitative understanding for exploring cross-sectoral climate change impacts, adaptation and vulnerability in Europe. Regional Environmental Change, 2013, 13, 761-780.	1.4	100
12	Towards best practice for assessing the impacts of climate change on groundwater. Hydrogeology Journal, 2012, 20, 1-4.	0.9	99
13	Untangling the water-food-energy-environment nexus for global change adaptation in a complex Himalayan water resource system. Science of the Total Environment, 2019, 655, 35-47.	3.9	93
14	IdentificaÃ§Ã£o de respostas nÃ£o estacionÃ¡rias dos nÃveis de Ã¡gua subterrÃ¢nea aos padrÃµes de teleconexÃ£o oceano-atmosfera no AtlÃ¢ntico Norte, utilizando a coerÃªncia de onduletas. Hydrogeology Journal, 2011, 19, 1269-1278.	0.9	89
15	New European socio-economic scenarios for climate change research: operationalising concepts to extend the shared socio-economic pathways. Regional Environmental Change, 2019, 19, 643-654.	1.4	89
16	A crop model cross calibration for use in regional climate impacts studies. Ecological Modelling, 2008, 213, 365-380.	1.2	82
17	Can we be certain about future land use change in Europe? A multi-scenario, integrated-assessment analysis. Agricultural Systems, 2017, 151, 126-135.	3.2	80
18	A comparison of stochastic and deterministic downscaling methods for modelling potential groundwater recharge under climate change in East Anglia, UK: implications for groundwater resource management. Hydrogeology Journal, 2009, 17, 1629-1641.	0.9	78

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19	Regional variations in the link between drought indices and reported agricultural impacts of drought. Agricultural Systems, 2019, 173, 119-129.	3.2	78
20	Impacts of climate change adaptation options on soil functions: A review of European caseâ€studies. Land Degradation and Development, 2018, 29, 2378-2389.	1.8	74
21	An assessment of the risk to surface water ecosystems of groundwater P in the UK and Ireland. Science of the Total Environment, 2010, 408, 1847-1857.	3.9	73
22	Probabilistic modeling of flood characterizations with parametric and minimum information pair-copula model. Journal of Hydrology, 2016, 540, 469-487.	2.3	73
23	Developing drought resilience in irrigated agriculture in the face of increasing water scarcity. Regional Environmental Change, 2017, 17, 1527-1540.	1.4	73
24	A Regional, Multi-sectoral And Integrated Assessment Of The Impacts Of Climate And Socio-economic Change In The Uk. Climatic Change, 2005, 71, 43-73.	1.7	72
25	European participatory scenario development: strengthening the link between stories and models. Climatic Change, 2015, 128, 187-200.	1.7	68
26	Potential impacts of climate change and climate variability on Chinaâ€™s rice yield and production. Climate Research, 2009, 40, 23-35.	0.4	63
27	The concepts and development of a participatory regional integrated assessment tool. Climatic Change, 2008, 90, 5-30.	1.7	62
28	Achievement of Paris climate goals unlikely due to time lags in the land system. Nature Climate Change, 2019, 9, 203-208.	8.1	61
29	Assessing cross-sectoral climate change impacts, vulnerability and adaptation: an introduction to the CLIMSAVE project. Climatic Change, 2015, 128, 153-167.	1.7	58
30	Shared Socio-economic Pathways for European agriculture and food systems: The Eur-Agri-SSPs. Global Environmental Change, 2020, 65, 102159.	3.6	58
31	Impacts of observed growing-season warming trends since 1980 on crop yields in China. Regional Environmental Change, 2014, 14, 7-16.	1.4	57
32	Modelling and mapping the economic value of supplemental irrigation in a humid climate. Agricultural Water Management, 2016, 173, 13-22.	2.4	57
33	Adapting to climate change by water management organisations: Enablers and barriers. Journal of Hydrology, 2018, 559, 736-748.	2.3	54
34	Evaluation of CERESâ€Wheat simulation of Wheat Production in China. Agronomy Journal, 2008, 100, 1720-1728.	0.9	51
35	Untangling relative contributions of recent climate and CO ₂ trends to national cereal production in China. Environmental Research Letters, 2012, 7, 044014.	2.2	49
36	Adapting water management to climate change: Institutional involvement, inter-institutional networks and barriers in India. Global Environmental Change, 2017, 44, 144-157.	3.6	49

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37	Cross-sectoral impacts of climate change and socio-economic change for multiple, European land- and water-based sectors. Climatic Change, 2015, 128, 279-292.	1.7	48
38	Spatio-temporal analysis of land use and land cover change: a systematic model inter-comparison driven by integrated modelling techniques. International Journal of Remote Sensing, 2020, 41, 9229-9255.	1.3	47
39	Differences between low-end and high-end climate change impacts in Europe across multiple sectors. Regional Environmental Change, 2019, 19, 695-709.	1.4	46
40	Regional impact assessment of flooding under future climate and socio-economic scenarios for East Anglia and North West England. Climatic Change, 2008, 90, 31-55.	1.7	45
41	Which catchment characteristics control the temporal dependence structure of daily river flows?. Hydrological Processes, 2015, 29, 1353-1369.	1.1	45
42	Improving the representation of adaptation in climate change impact models. Regional Environmental Change, 2019, 19, 711-721.	1.4	45
43	Can climate-smart agriculture reverse the recent slowing of rice yield growth in China?. Agriculture, Ecosystems and Environment, 2014, 196, 125-136.	2.5	44
44	Dynamic response of land use and river nutrient concentration to long-term climatic changes. Science of the Total Environment, 2017, 590-591, 818-831.	3.9	40
45	Using a linked soil model emulator and unsaturated zone leaching model to account for preferential flow when assessing the spatially distributed risk of pesticide leaching to groundwater in England and Wales. Science of the Total Environment, 2004, 318, 73-88.	3.9	39
46	A method for monthly mapping of wet and dry snow using Sentinel-1 and MODIS: Application to a Himalayan river basin. International Journal of Applied Earth Observation and Geoinformation, 2019, 74, 222-230.	1.4	39
47	Evaluation of River Water Quality Simulations at a Daily Time Step â€“ Experience with SWAT in the Axe Catchment, UK. Clean - Soil, Air, Water, 2011, 39, 43-54.	0.7	37
48	Understanding the potential of climate teleconnections to project future groundwater drought. Hydrology and Earth System Sciences, 2019, 23, 3233-3245.	1.9	37
49	A Probabilistic Risk Assessment of the National Economic Impacts of Regulatory Drought Management on Irrigated Agriculture. Earth's Future, 2019, 7, 178-196.	2.4	37
50	Priority questions in multidisciplinary drought research. Climate Research, 2018, 75, 241-260.	0.4	35
51	Development and application of a soil classification-based conceptual catchment-scale hydrological model. Journal of Hydrology, 2005, 312, 277-293.	2.3	34
52	An interactive multi-scale integrated assessment of future regional water availability for agricultural irrigation in East Anglia and North West England. Climatic Change, 2008, 90, 89-111.	1.7	34
53	Cross-sectoral impacts of climate and socio-economic change in Scotland: implications for adaptation policy. Regional Environmental Change, 2016, 16, 97-109.	1.4	34
54	Developing a reduced-form ensemble of climate change scenarios for Europe and its application to selected impact indicators. Climatic Change, 2015, 128, 169-186.	1.7	32

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55	Changes in discharge rise and fall rates applied to impact assessment of catchment land use. Hydrology Research, 2010, 41, 13-26.	1.1	31
56	A conceptual model for climatic teleconnection signal control on groundwater variability in Europe. Earth-Science Reviews, 2018, 177, 164-174.	4.0	31
57	Transition pathways to sustainability in greater than 2Â°C climate futures of Europe. Regional Environmental Change, 2019, 19, 777-789.	1.4	31
58	Developing adaptive capacity within groundwater abstraction management systems. Journal of Environmental Management, 2011, 92, 1542-1549.	3.8	30
59	Direct and indirect impacts of climate and socio-economic change in Europe: a sensitivity analysis for key land- and water-based sectors. Climatic Change, 2015, 128, 261-277.	1.7	30
60	Bias Correction of Highâ€Resolution Regional Climate Model Precipitation Output Gives the Best Estimates of Precipitation in Himalayan Catchments. Journal of Geophysical Research D: Atmospheres, 2019, 124, 14220-14239.	1.2	30
61	Enriching the Shared Socioeconomic Pathways to co-create consistent multi-sector scenarios for the UK. Science of the Total Environment, 2021, 756, 143172.	3.9	29
62	Identifying uncertainties in scenarios and models of socio-ecological systems in support of decision-making. One Earth, 2021, 4, 967-985.	3.6	29
63	Development and application of a catchment scale pesticide fate and transport model for use in drinking water risk assessment. Science of the Total Environment, 2016, 563-564, 434-447.	3.9	28
64	Synthesizing plausible futures for biodiversity and ecosystem services in Europe and Central Asia using scenario archetypes. Ecology and Society, 2019, 24, .	1.0	27
65	Effect of baseline meteorological data selection on hydrological modelling of climate change scenarios. Journal of Hydrology, 2015, 528, 631-642.	2.3	26
66	A protocol to develop Shared Socio-economic Pathways for European agriculture. Journal of Environmental Management, 2019, 252, 109701.	3.8	26
67	Advancing the use of scenarios to understand societyâ€™s capacity to achieve the 1.5 degree target. Global Environmental Change, 2019, 56, 75-85.	3.6	26
68	Validation of an intrinsic groundwater pollution vulnerability methodology using a national nitrate database. Hydrogeology Journal, 2005, 13, 665-674.	0.9	25
69	Impacts of socio-economic and climate change scenarios on wetlands: linking water resource and biodiversity meta-models. Climatic Change, 2008, 90, 113-139.	1.7	25
70	A framework for a joint hydro-meteorological-social analysis of drought. Science of the Total Environment, 2017, 578, 297-306.	3.9	25
71	Bridging uncertainty concepts across narratives and simulations in environmental scenarios. Regional Environmental Change, 2019, 19, 655-666.	1.4	25
72	Current Practice and Recommendations for Modelling Global Change Impacts on Water Resource in the Himalayas. Water (Switzerland), 2019, 11, 1303.	1.2	25

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73	Estimating the impact of rural land management changes on catchment runoff generation in England and Wales. Hydrological Processes, 2010, 24, 1357-1368.	1.1	24
74	Water quality targets and maintenance of valued landscape character â€“ Experience in the Axe catchment, UK. Journal of Environmental Management, 2012, 103, 142-153.	3.8	24
75	Linking North Atlantic oceanâ€"atmosphere teleconnection patterns and hydrogeological responses in temperate groundwater systems. Hydrological Processes, 2009, 23, 3123-3126.	1.1	23
76	Adaptive management of river flows in Europe: A transferable framework for implementation. Journal of Hydrology, 2015, 531, 696-705.	2.3	23
77	Drought Impacts, Coping Responses and Adaptation in the UK Outdoor Livestock Sector: Insights to Increase Drought Resilience. Land, 2020, 9, 202.	1.2	23
78	Detecting land use and land management influences on catchment hydrology by modelling and wavelets. Journal of Hydrology, 2014, 517, 378-389.	2.3	22
79	Contextual and interdependent causes of climate change adaptation barriers: Insights from water management institutions in Himachal Pradesh, India. Science of the Total Environment, 2017, 576, 817-828.	3.9	22
80	Enhancing production and flow of freshwater ecosystem services in a managed Himalayan river system under uncertain future climate. Climatic Change, 2020, 162, 343-361.	1.7	22
81	Determining sectoral and regional sensitivity to climate and socio-economic change in Europe using impact response surfaces. Regional Environmental Change, 2019, 19, 679-693.	1.4	21
82	Improving bank erosion modelling at catchment scale by incorporating temporal and spatial variability. Earth Surface Processes and Landforms, 2018, 43, 124-133.	1.2	20
83	A Multi-Level Framework for Adaptation to Drought Within Temperate Agriculture. , 2021, 8, .		20
84	A broadâ€scale assessment of the effect of improved soil management on catchment baseflow index. Hydrological Processes, 2011, 25, 2563-2572.	1.1	17
85	D-Risk: A decision-support webtool for improving drought risk management in irrigated agriculture. Computers and Electronics in Agriculture, 2019, 162, 855-858.	3.7	16
86	Land drainage and saline intrusion in the coastal marshes of northeast Norfolk. Quarterly Journal of Engineering Geology and Hydrogeology, 1998, 31, 47-62.	0.8	15
87	Development and application of participatory integrated assessment software to support local/regional impact and adaptation assessment. Climatic Change, 2008, 90, 1-4.	1.7	15
88	What is the evidence linking financial assistance for drought-affected agriculture and resilience in tropical Asia? A systematic review. Regional Environmental Change, 2022, 22, 1.	1.4	15
89	Developing a multi-pollutant conceptual framework for the selection and targeting of interventions in water industry catchment management schemes. Journal of Environmental Management, 2015, 161, 153-162.	3.8	14
90	Evaluation of changing surface water abstraction reliability for supplemental irrigation under climate change. Agricultural Water Management, 2018, 206, 200-208.	2.4	14

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91	Implementing land-based mitigation to achieve the Paris Agreement in Europe requires food system transformation. Environmental Research Letters, 2019, 14, 104009.	2.2	14
92	Critical Review of Adaptation Measures to Reduce the Vulnerability of European Drinking Water Resources to the Pressures of Climate Change. Environmental Management, 2019, 64, 138-153.	1.2	14
93	How modelling paradigms affect simulated future land use change. Earth System Dynamics, 2021, 12, 211-231.	2.7	14
94	Understanding and modelling spatial drainâ€“aquifer interactions in a lowâ€lying coastal aquiferâ€”the Thurne catchment, Norfolk, UK. Hydrological Processes, 2011, 25, 580-592.	1.1	13
95	Trade-offs are unavoidable in multi-objective adaptation even in a post-Paris Agreement world. Science of the Total Environment, 2019, 696, 134027.	3.9	13
96	Understanding the hydrological functioning of a shallow lake system within a coastal karstic aquifer in Wales, UK. Journal of Hydrology, 2009, 376, 285-294.	2.3	12
97	Resilience of Primary Food Production to a Changing Climate: On-Farm Responses to Water-Related Risks. Water (Switzerland), 2020, 12, 2155.	1.2	12
98	Application of flow variability analysis to identify impacts of agricultural land-use change on the River Axe, southwest England. Hydrology Research, 2009, 40, 380-393.	1.1	11
99	WRF model sensitivity to choice of parameterization: a study of the â€˜York Flood 1999â€™. Theoretical and Applied Climatology, 2015, 122, 229-247.	1.3	11
100	Exploring the role of hydrological pathways in modulating multi-annual climate teleconnection periodicities from UK rainfall to streamflow. Hydrology and Earth System Sciences, 2021, 25, 2223-2237.	1.9	11
101	The landâ€“river interface: a conceptual framework of environmental process interactions to support sustainable development. Sustainability Science, 2022, 17, 1677-1693.	2.5	11
102	Preliminary evaluation of the benefits of a participatory regional integrated assessment software. Climatic Change, 2008, 90, 169-187.	1.7	10
103	Evaluating the effects of climate change on the water resources for the city of <scp>B</scp>irmingham, <scp>UK</scp>. Water and Environment Journal, 2012, 26, 361-370.	1.0	10
104	Using variograms to detect and attribute hydrological change. Hydrology and Earth System Sciences, 2015, 19, 2395-2408.	1.9	9
105	Nonâ€stationary control of the <scp>NAO</scp> on European rainfall and its implications for water resource management. Hydrological Processes, 2021, 35, e14099.	1.1	9
106	Crag aquifer characteristics and water balance for the Thurne catchment, northeast Norfolk. Quarterly Journal of Engineering Geology and Hydrogeology, 1999, 32, 365-380.	0.8	8
107	An investigation of the basement complex aquifer system in Lofa county, Liberia, for the purpose of siting boreholes. Quarterly Journal of Engineering Geology and Hydrogeology, 2014, 47, 159-167.	0.8	7
108	Exploring trade-offs between SDGs for Indus River Dolphin conservation and human water security in the regulated Beas River, India. Sustainability Science, 2022, 17, 1619-1637.	2.5	7

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109	Using soil and Quaternary geological information to assess the intrinsic groundwater vulnerability of shallow aquifers: an example from Lithuania. Hydrogeology Journal, 2000, 8, 636-645.	0.9	6
110	Towards climate-adaptive development of small hydropower projects in Himalaya: A multi-model assessment in upper Beas basin. Journal of Hydrology: Regional Studies, 2021, 34, 100797.	1.0	6
111	Place-based interpretation of the sustainable development goals for the land-river interface. Sustainability Science, 2022, 17, 1695-1714.	2.5	6
112	Evaluating the Feasibility of Water Sharing as a Drought Risk Management Tool for Irrigated Agriculture. Sustainability, 2021, 13, 1456.	1.6	5
113	Drainage ditch-aquifer interaction with special reference to surface water salinity in the Thurne catchment, Norfolk, UK. Water and Environment Journal, 2011, 25, 116-128.	1.0	4
114	Cross-sectoral and trans-national interactions in national-scale climate change impacts assessmentâ€"the case of the Czech Republic. Regional Environmental Change, 2019, 19, 2453-2464.	1.4	4
115	Effect of baseline snowpack assumptions in the HySIM model in predicting future hydrological behaviour of a Himalayan catchment. Hydrology Research, 2019, 50, 691-708.	1.1	4
116	Erosion and Sediment Transport Modelling to Inform Payment for Ecosystem Services Schemes. Environmental Modeling and Assessment, 2021, 26, 89-102.	1.2	4
117	The importance of non-stationary multiannual periodicities in the North Atlantic Oscillation index for forecasting water resource drought. Hydrology and Earth System Sciences, 2022, 26, 2449-2467.	1.9	3
118	The Benefits of Spatially Targeted Water Level Management for Salinity Reduction in a Coastal Aquifer. Water Resources Management, 2013, 27, 169-186.	1.9	1
119	Operationalising Transition Management for Navigating High-End Climate Futures. Palgrave Studies in Environmental Transformation, Transition and Accountability, 2020, , 315-358.	2.0	1
120	Climate Governance and High-End Futures in Europe. Palgrave Studies in Environmental Transformation, Transition and Accountability, 2020, , 285-314.	2.0	1
121	Reply to Discussion on â€˜An investigation of the basement complex aquifer system in Lofa county, Liberia, for the purpose of siting boreholesâ€™ Quarterly Journal of Engineering Geology and Hydrogeology, Vol. 47, 2014, pp. 159â€"167. Quarterly Journal of Engineering Geology and Hydrogeology, 2015, 48, 72-72.	0.8	0