Penny J Johnes

List of Publications by Year
in descending order

89 papers	5,932 citations	109321 35 h-index	79698 73 g-index
99 all docs	99 docs citations	99 times ranked	6109 citing authors

#	Article	IF	Citations
1	Nutrient Imbalances in Agricultural Development. Science, 2009, 324, 1519-1520.	12.6	1,082
2	Evaluation and management of the impact of land use change on the nitrogen and phosphorus load delivered to surface waters: the export coefficient modelling approach. Journal of Hydrology, 1996, 183, 323-349.	5.4	595
3	Nitrogen fluxes from the landscape are controlled by net anthropogenic nitrogen inputs and by climate. Frontiers in Ecology and the Environment, 2012, 10, 37-43.	4.0	281
4	Uncertainties in annual riverine phosphorus load estimation: Impact of load estimation methodology, sampling frequency, baseflow index and catchment population density. Journal of Hydrology, 2007, 332, 241-258.	5.4	268
5	Using hysteresis analysis of high-resolution water quality monitoring data, including uncertainty, to infer controls on nutrient and sediment transfer in catchments. Science of the Total Environment, 2016, 543, 388-404.	8.0	221
6	MODELLING THE IMPACT OF LAND USE CHANGE ON WATER QUALITY IN AGRICULTURAL CATCHMENTS. Hydrological Processes, 1997, 11, 269-286.	2.6	176
7	The determination of total nitrogen and total phosphorus concentrations in freshwaters from land use, stock headage and population data: testing of a model for use in conservation and water quality management. Freshwater Biology, 1996, 36, 451-473.	2.4	165
8	A comparison of models for estimating the riverine export of nitrogen from large watersheds. Biogeochemistry, 2002, 57, 295-339.	3.5	153
9	Organic phosphorus in the terrestrial environment: a perspective on the state of the art and future priorities. Plant and Soil, 2018, 427, 191-208.	3.7	145
10	Trends in nutrients. Hydrological Processes, 1996, 10, 263-293.	2.6	133
11	CONTRIBUTION OF NITROGEN SPECIES AND PHOSPHORUS FRACTIONS TO STREAM WATER QUALITY IN AGRICULTURAL CATCHMENTS. Hydrological Processes, 1996, 10, 971-983.	2.6	133
12	Major agricultural changes required to mitigate phosphorus losses under climate change. Nature Communications, 2017, 8, 161.	12.8	121
13	A procedure for the simultaneous determination of total nitrogen and total phosphorus in freshwater samples using persulphate microwave digestion. Water Research, 1992, 26, 1281-1287.	11.3	117
14	Technical Note: Testing an improved index for analysing storm dischargeâ€“concentration hysteresis. Hydrology and Earth System Sciences, 2016, 20, 625-632.	4.9	108
15	High-frequency monitoring of nitrogen and phosphorus response in three rural catchments to the end of the 2011â€“2012 drought in England. Hydrology and Earth System Sciences, 2014, 18, 3429-3448.	4.9	103
16	The Phosphorus Indicators Tool: a simple model of diffuse P loss from agricultural land to water. Soil Use and Management, 2003, 19, 1-11.	4.9	98
17	Physico-chemical controls on phosphorus cycling in two lowland streams. Part 2â€“The sediment phase. Science of the Total Environment, 2004, 329, 165-182.	8.0	91
18	Soil functions and ecosystem services research in the Chinese karst Critical Zone. Chemical Geology, 2019, 527, 119107.	3.3	82

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19	Nitrogen as a threat to European water quality. , 2011, , 379-404.		80
20	An exploration of individual, social and material factors influencing water pollution mitigation behaviours within the farming community. Land Use Policy, 2018, 70, 16-26.	5.6	67
21	Integrating nitrogen fluxes at the European scale. , 0, , 345-376.		65
22	Steady state and dynamic modelling of nitrogen in the River Kennet: impacts of land use change since the 1930s. Science of the Total Environment, 2002, 282-283, 417-434.	8.0	63
23	Benchmarking the predictive capability of hydrological models for river flow and flood peak predictions across over 1000Âcatchments in Great Britain. Hydrology and Earth System Sciences, 2019, 23, 4011-4032.	4.9	63
24	Impacts of runoff from sulfuric soils on sediment chemistry in an estuarine lake. Science of the Total Environment, 2004, 329, 115-130.	8.0	62
25	THE MONITORING OF ECOLOGICAL QUALITY AND THE CLASSIFICATION OF STANDING WATERS IN TEMPERATE REGIONS: A REVIEW AND PROPOSAL BASED ON A WORKED SCHEME FOR BRITISH WATERS. Biological Reviews, 1996, 71, 301-339.	10.4	61
26	Physico-chemical controls on phosphorus cycling in two lowland streams. Part 1 â€“ the water column. Science of the Total Environment, 2004, 329, 145-163.	8.0	61
27	Land use scenarios for England and Wales: evaluation of management options to support ?good ecological status? in surface freshwaters. Soil Use and Management, 2007, 23, 176-194.	4.9	60
28	Nitrogen flows from European regional watersheds to coastal marine waters. , 0, , 271-297.		54
29	Tackling agricultural diffuse pollution: What might uptake of farmer-preferred measures deliver for emissions to water and air?. Science of the Total Environment, 2016, 547, 269-281.	8.0	54
30	Regulation of surface water quality in a Cretaceous Chalk catchment, UK: an assessment of the relative importance of instream and wetland processes. Science of the Total Environment, 2002, 282-283, 159-174.	8.0	53
31	Methods for detecting change in hydrochemical time series in response to targeted pollutant mitigation in river catchments. Journal of Hydrology, 2014, 514, 297-312.	5.4	49
32	Variation in dissolved organic matter (DOM) stoichiometry in U.K. freshwaters: Assessing the influence of land cover and soil C:N ratio on DOM composition. Limnology and Oceanography, 2019, 64, 2328-2340.	3.1	49
33	Phosphorus loss from agricultural catchments: pathways and implications for management. Soil Use and Management, 1998, 14, 175-185.	4.9	48
34	Discharge and nutrient uncertainty: implications for nutrient flux estimation in small streams. Hydrological Processes, 2016, 30, 135-152.	2.6	48
35	A comparison of diatom phosphorus transfer functions and export coefficient models as tools for reconstructing lake nutrient histories. Freshwater Biology, 2005, 50, 1651-1670.	2.4	46
36	Nitrogen processes in aquatic ecosystems. , 2011, , 126-146.		46

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37	Title is missing!. Biogeochemistry, 2002, 57, 429-476.	3.5	45
38	Bryozoan populations reflect nutrient enrichment and productivity gradients in rivers. Freshwater Biology, 2009, 54, 2320-2334.	2.4	45
39	Identifying the main drivers of change of phytoplankton community structure and gross primary productivity in a river-lake system. Journal of Hydrology, 2020, 583, 124633.	5.4	44
40	Dissolved organic nutrient uptake by riverine phytoplankton varies along a gradient of nutrient enrichment. Science of the Total Environment, 2020, 722, 137837.	8.0	40
41	Nitrogen speciation and phosphorus fractionation dynamics in a lowland Chalk catchment. Science of the Total Environment, 2013, 444, 466-479.	8.0	31
42	Microbial uptake kinetics of dissolved organic carbon (DOC) compound groups from river water and sediments. Scientific Reports, 2019, 9, 11229.	3.3	31
43	Determining the sources of nutrient flux to water in headwater catchments: Examining the speciation balance to inform the targeting of mitigation measures. Science of the Total Environment, 2019, 648, 1179-1200.	8.0	31
44	Assessing the drivers of dissolved organic matter export from two contrasting lowland catchments, U.K. Science of the Total Environment, 2016, 569-570, 1330-1340.	8.0	30
45	Catchment Phosphorous Losses: An Export Coefficient Modelling Approach with Scenario Analysis for Water Management. Water Resources Management, 2012, 26, 1041-1064.	3.9	29
46	Microbial use of low molecular weight DOM in filtered and unfiltered freshwater: Role of ultra-small microorganisms and implications for water quality monitoring. Science of the Total Environment, 2017, 598, 377-384.	8.0	27
47	A geospatial framework to support integrated biogeochemical modelling in the United Kingdom. Environmental Modelling and Software, 2015, 68, 219-232.	4.5	26
48	Hydrological controls on DOCâ€‰â€¯:â€‰â€¯nitrate resource stoichiometry in a lowland, agricultural catchment, southern UK. Hydrology and Earth System Sciences, 2017, 21, 4785-4802.	4.9	25
49	Ecosystem service delivery in Karst landscapes: anthropogenic perturbation and recovery. Acta Geochimica, 2017, 36, 416-420.	1.7	22
50	Nutrient enrichment induces a shift in dissolved organic carbon (DOC) metabolism in oligotrophic freshwater sediments. Science of the Total Environment, 2019, 690, 1131-1139.	8.0	22
51	Gradients of Anthropogenic Nutrient Enrichment Alter N Composition and DOM Stoichiometry in Freshwater Ecosystems. Global Biogeochemical Cycles, 2021, 35, e2021GB006953.	4.9	22
52	Shifting stoichiometry: Longâ€term trends in streamâ€dissolved organic matter reveal altered C:N ratios due to history of atmospheric acid deposition. Global Change Biology, 2022, 28, 98-114.	9.5	22
53	Understanding lake and catchment history as a tool for integrated lake management. Hydrobiologia, 1999, 395/396, 41-60.	2.0	21
54	Projected impacts of increased uptake of source control mitigation measures on agricultural diffuse pollution emissions to water and air. Land Use Policy, 2017, 62, 185-201.	5.6	21

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55	The potential benefits of on-farm mitigation scenarios for reducing multiple pollutant loadings in prioritised agri-environment areas across England. Environmental Science and Policy, 2017, 73, 100-114.	4.9	21
56	Characterisation of treated effluent from four commonly employed wastewater treatment facilities: A UK case study. Journal of Environmental Management, 2019, 232, 919-927.	7.8	19
57	Distributed and dynamic modelling of hydrology, phosphorus and ecology in the Hampshire Avon and Blashford Lakes: Evaluating alternative strategies to meet WFD standards. Science of the Total Environment, 2014, 481, 157-166.	8.0	17
58	Nutrient monitoring, simulation and management within a major lowland UK river system: the Kennet. Mathematics and Computers in Simulation, 2004, 64, 307-317.	4.4	16
59	Title is missing!. Hydrobiologia, 2002, 475/476, 239-250.	2.0	15
60	Short-term biotic removal of dissolved organic nitrogen (DON) compounds from soil solution and subsequent mineralisation in contrasting grassland soils. Soil Biology and Biochemistry, 2016, 96, 82-85.	8.8	14
61	Untargeted characterisation of dissolved organic matter contributions to rivers from anthropogenic point sources using directâ€infusion and highâ€performance liquid chromatography/Orbitrap mass spectrometry. Rapid Communications in Mass Spectrometry, 2020, 34, e8618.	1.5	14
62	Determining the Impact of Riparian Wetlands on Nutrient Cycling, Storage and Export in Permeable Agricultural Catchments. Water (Switzerland), 2020, 12, 167.	2.7	14
63	Using Î´13C to reveal the importance of different water transport pathways in two nested karst basins, Southwest China. Journal of Hydrology, 2019, 571, 425-436.	5.4	12
64	August Thienemann and Loch Lomond â€" an approach to the design of a system for monitoring the state of north-temperate standing waters. Hydrobiologia, 1994, 290, 1-12.	2.0	11
65	Responseâ€"Nutrient Imbalances. Science, 2009, 326, 665-666.	12.6	10
66	High resolution HPLC-MS confirms overestimation of urea in soil by the diacetyl monoxime (DAM) colorimetric method. Soil Biology and Biochemistry, 2019, 135, 127-133.	8.8	10
67	Rapid depletion of dissolved organic sulphur (DOS) in freshwaters. Biogeochemistry, 2020, 149, 105-113.	3.5	10
68	Land cover and nutrient enrichment regulates lowâ€molecular weight dissolved organic matter turnover in freshwater ecosystems. Limnology and Oceanography, 2021, 66, 2979-2987.	3.1	10
69	Rates of hydroxyapatite formation and dissolution in a sandstone aquifer: Implications for understanding dynamic phosphate behaviour within an agricultural catchment. Applied Geochemistry, 2020, 115, 104534.	3.0	8
70	Cascading multiscale watershed effects on differential carbon isotopic characteristics and associated hydrological processes. Journal of Hydrology, 2020, 588, 125139.	5.4	7
71	Developing integrated approaches to nitrogen management. , 2011, , 541-550.		6
72	Understanding lake and catchment history as a tool for integrated lake management. , 1999, , 41-60.		6

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73	Meeting ecological restoration targets in European waters: a challenge for animal agriculture.. , 2007, , 185-203.		6
74	The Phosphorus Indicators Tool: a simple model of diffuse P loss from agricultural land to water. Soil Use and Management, 2003, 19, 1-11.	4.9	6
75	Impact of microbial activity on the leaching of soluble N forms in soil. Biology and Fertility of Soils, 2018, 54, 21-25.	4.3	5
76	Identification and quantification of myo-inositol hexakisphosphate in complex environmental matrices using ion chromatography and high-resolution mass spectrometry in comparison to 31P NMR spectroscopy. Talanta, 2020, 210, 120188.	5.5	5
77	A comparison of models for estimating the riverine export of nitrogen from large watersheds. , 2002, , 295-339.		5
78	Tracing carbon and nitrogen microbial assimilation in suspended particles in freshwaters. Biogeochemistry, 2023, 164, 277-293.	3.5	5
79	Ground penetrating radar as a tool to improve heritage management of wetlands. , 2014, , .		4
80	Trends in nutrients. Hydrological Processes, 1996, 10, 263-293.	2.6	4
81	Characterisation of riverine dissolved organic matter using a complementary suite of chromatographic and mass spectrometric methods. Biogeochemistry, 0, , 1.	3.5	4
82	What do changing weather and climate shocks and stresses mean for the UK food system?. Environmental Research Letters, 2022, 17, 051001.	5.2	4
83	Quantifying the non-point source contribution to nutrient loading on freshwaters in 32 UK catchments. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2000, 27, 1306-1309.	0.1	3
84	CONTRIBUTION OF NITROGEN SPECIES AND PHOSPHORUS FRACTIONS TO STREAM WATER QUALITY IN AGRICULTURAL CATCHMENTS. , 0, .		2
85	August Thienemann and Loch Lomond â€" an approach to the design of a system for monitoring the state of north-temperate standing waters. , 1994, , 1-12.		2
86	Sampling, storage and laboratory approaches for dissolved organic matter characterisation in freshwaters: Moving from nutrient fraction to molecular-scale characterisation. Science of the Total Environment, 2022, 827, 154105.	8.0	2
87	Landscape, regional and global estimates of nitrogen flux from land to sea: Errors and uncertainties. , 2002, , 429-476.		1
88	Tales from the River Bank: A Valuable Contribution. Journal of Biogeography, 1995, 22, 158.	3.0	0
89	SOIL PROCESSES AND ECOLOGICAL SERVICES IN THE KARST CRITICAL ZONE OF SW CHINA. , 2016, , .		0