Bryan M Spears

List of Publications by Year
in descending order

57 papers	4,249 citations	159585 30 h-index	144013 57 g-index
60 all docs	60 docs citations	60 times ranked	4782 citing authors

#	Article	IF	Citations
1	Phosphorus Legacy: Overcoming the Effects of Past Management Practices to Mitigate Future Water Quality Impairment. Journal of Environmental Quality, 2013, 42, 1308-1326.	2.0	706
2	Impacts of multiple stressors on freshwater biota across spatial scales and ecosystems. Nature Ecology and Evolution, 2020, 4, 1060-1068.	7.8	336
3	Protecting and restoring Europe's waters: An analysis of the future development needs of the Water Framework Directive. Science of the Total Environment, 2019, 658, 1228-1238.	8.0	295
4	Eutrophication management in surface waters using lanthanum modified bentonite: A review. Water Research, 2016, 97, 162-174.	11.3	252
5	Water Quality Remediation Faces Unprecedented Challenges from â€œLegacy Phosphorusâ€• Environmental Science & Technology, 2013, 47, 8997-8998.	10.0	228
6	Editorial â€“ A critical perspective on geo-engineering for eutrophication management in lakes. Water Research, 2016, 97, 1-10.	11.3	203
7	Sediment amendment with PhoslockÂ® in Clatto Reservoir (Dundee, UK): Investigating changes in sediment elemental composition and phosphorus fractionation. Journal of Environmental Management, 2012, 93, 185-193.	7.8	151
8	Lake responses following lanthanum-modified bentonite clay (PhoslockÂ®) application: An analysis of water column lanthanum data from 16 case study lakes. Water Research, 2013, 47, 5930-5942.	11.3	135
9	Assessing the mode of action of PhoslockÂ® in the control of phosphorus release from the bed sediments in a shallow lake (Loch Flemington, UK). Water Research, 2013, 47, 4460-4473.	11.3	128
10	Do early warning indicators consistently predict nonlinear change in longâ€term ecological data?. Journal of Applied Ecology, 2016, 53, 666-676.	4.0	104
11	A meta-analysis of water quality and aquatic macrophyte responses inÂ18 lakes treated with lanthanum modified bentonite (PhoslockÂ®). Water Research, 2016, 97, 111-121.	11.3	102
12	Comparison of phosphorus (P) removal properties of materials proposed for the control of sediment p release in UK lakes. Science of the Total Environment, 2013, 442, 103-110.	8.0	94
13	Vanadium: A Re-Emerging Environmental Hazard. Environmental Science & Technology, 2018, 52, 11973-11974.	10.0	89
14	Sediment phosphorus cycling in a large shallow lake: spatio-temporal variation in phosphorus pools and release. Hydrobiologia, 2007, 584, 37-48.	2.0	83
15	Effects of light on sediment nutrient flux and water column nutrient stoichiometry in a shallow lake. Water Research, 2008, 42, 977-986.	11.3	81
16	Community history affects the predictability of microbial ecosystem development. ISME Journal, 2014, 8, 19-30.	9.8	80
17	Highly Differentiated Populations of the Freshwater Diatom Sellaphora capitata Suggest Limited Dispersal and Opportunities for Allopatric Speciation. Protist, 2009, 160, 386-396.	1.5	76
18	Geoengineering in lakes: welcome attraction or fatal distraction?. Inland Waters, 2014, 4, 349-356.	2.2	76

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19	Geo-Engineering in Lakes: A Crisis of Confidence?. Environmental Science & Technology, 2014, 48, 9977-9979.	10.0	74
20	The ecology of freshwater epipelic algae: an update. Phycologia, 2008, 47, 437-450.	1.4	73
21	Responses in sediment phosphorus and lanthanum concentrations and composition across 10 lakes following applications of lanthanum modified bentonite. Water Research, 2016, 97, 101-110.	11.3	70
22	Human health risk associated with the management of phosphorus in freshwaters using lanthanum and aluminium. Chemosphere, 2019, 220, 286-299.	8.2	66
23	Ecological resilience in lakes and the conjunction fallacy. Nature Ecology and Evolution, 2017, 1, 1616-1624.	7.8	52
24	Geo-Engineering in Lakesâ€"A Call for Consensus. Environmental Science & Technology, 2013, 47, 3953-3954.	10.0	51
25	Global actions for a sustainable phosphorus future. Nature Food, 2021, 2, 71-74.	14.0	50
26	Spatial and historical variation in sediment phosphorus fractions and mobility in a large shallow lake. Water Research, 2006, 40, 383-391.	11.3	48
27	Microalgal sediment biostabilisation along a salinity gradient in the Eden Estuary, Scotland: unravelling a paradox. Marine and Freshwater Research, 2008, 59, 313.	1.3	44
28	FORUM: Effective management of ecological resilience â€“ are we there yet?. Journal of Applied Ecology, 2015, 52, 1311-1315.	4.0	39
29	Assessing the Legacy of Red Mud Pollution in a Shallow Freshwater Lake: Arsenic Accumulation and Speciation in Macrophytes. Environmental Science & Technology, 2016, 50, 9044-9052.	10.0	37
30	Variation in chlorophyll a to total phosphorus ratio across 94 UK and Irish lakes: Implications for lake management. Journal of Environmental Management, 2013, 115, 287-294.	7.8	35
31	Making waves. Bridging theory and practice towards multiple stressor management in freshwater ecosystems. Water Research, 2021, 196, 116981.	11.3	32
32	New Training to Meet the Global Phosphorus Challenge. Environmental Science & Technology, 2019, 53, 8479-8481.	10.0	29
33	An evaluation of methods for sampling macrophyte maximum colonisation depth in Loch Leven, Scotland. Aquatic Botany, 2009, 91, 75-81.	1.6	26
34	The long-term (1979â€“2005) effects of the North Atlantic Oscillation on wind-induced wave mixing in Loch Leven (Scotland). Hydrobiologia, 2010, 646, 49-59.	2.0	26
35	Assessment of changes in potential nutrient limitation in an impounded river after application of lanthanum-modified bentonite. Water Research, 2016, 97, 47-54.	11.3	26
36	Landscape controls on riverine export of dissolved organic carbon from Great Britain. Biogeochemistry, 2023, 164, 163-184.	3.5	26

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37	Bacterioplankton production, abundance, and nutrient limitation among lakes of the Mackenzie Delta (western Canadian arctic). Canadian Journal of Fisheries and Aquatic Sciences, 2006, 63, 845-857.	1.4	24
38	Assessing the responses of aquatic macrophytes to the application of a lanthanum modified bentonite clay, at Loch Flemington, Scotland, UK. Hydrobiologia, 2014, 737, 309-320.	2.0	18
39	Rock geochemistry induces stress and starvation responses in the bacterial proteome. Environmental Microbiology, 2016, 18, 1110-1121.	3.8	18
40	The importance of nitrogen limitation in the restoration of Llangorse Lake, Wales, UK. Journal of Environmental Monitoring, 2010, 12, 338-346.	2.1	15
41	Assessing the role of bed sediments in the persistence of red mud pollution in a shallow lake (Kinghorn Loch, UK). Water Research, 2017, 123, 569-577.	11.3	15
42	Effective restoration of aquatic ecosystems: scaling the barriers. Wiley Interdisciplinary Reviews: Water, 2017, 4, e1190.	6.5	13
43	Can reductions in water residence time be used to disrupt seasonal stratification and control internal loading in a eutrophic monomictic lake?. Journal of Environmental Management, 2022, 304, 114169.	7.8	13
44	Lake management: is prevention better than cure?. Inland Waters, 2022, 12, 173-186.	2.2	12
45	Contrasting Estuarine Processing of Dissolved Organic Matter Derived From Natural and Humanâ€Impacted Landscapes. Global Biogeochemical Cycles, 2021, 35, e2021GB007023.	4.9	12
46	Concerns about global phosphorus demand for lithium-iron-phosphate batteries in the light electric vehicle sector. Communications Materials, 2022, 3, .	6.9	12
47	Ecological Instability in Lakes: A Predictable Condition?. Environmental Science & Technology, 2016, 50, 3285-3286.	10.0	10
48	Macronutrient processing by temperate lakes: A dynamic model for long-term, large-scale application. Science of the Total Environment, 2016, 572, 1573-1585.	8.0	9
49	Annual water residence time effects on thermal structure: A potential lake restoration measure?. Journal of Environmental Management, 2022, 314, 115082.	7.8	9
50	Assessment of a novel development policy for the control of phosphorus losses from private sewage systems to the Loch Leven catchment, Scotland, UK. Environmental Science and Policy, 2014, 38, 207-216.	4.9	8
51	A modelâ€based assessment of nonâ€compliance of phosphorus standards for lakes in England and Wales. International Journal of River Basin Management, 2009, 7, 197-207.	2.7	7
52	Long-term homeostasis of filterable un-reactive phosphorus in a shallow eutrophic lake following a significant reduction in catchment load. Geoderma, 2015, 257-258, 78-85.	5.1	7
53	Assessing multiple stressor effects to inform climate change management responses in three European catchments. Inland Waters, 2022, 12, 94-106.	2.2	7
54	Intracellular Versus Extracellular Iron Accumulation in Freshwater Periphytic Mats Across a Mine Water Treatment Lagoon. Water, Air, and Soil Pollution, 2012, 223, 1519-1530.	2.4	5

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55	Lessons learned from geoengineering freshwater systems. Nature Climate Change, 2014, 4, 935-936.	18.8	4
56	Assessing the legacy of red mud pollution in a shallow freshwater lake: long-term chemical recovery in the water column. Inland Waters, 2019, 9, 453-463.	2.2	3
57	Mustering the troops toward preventative management in lakes. Inland Waters, 2022, 12, 1-7.	2.2	2