# Graham K Macdonald

## List of Publications by Year in Descending Order



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| 46 papers | 4,220 citations | 24 h-index | 59 g-index |
| 59 ext. papers | 5,482 ext. citations | 9.1 avg, IF | 5.64 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 46 | Food system resilience to phosphorus shortages on a telecoupled planet. *Nature Sustainability*, **2022**, 5, 114-122 | 22.1 | 2 |
| 45 | The persistent threat of emerging plant disease pandemics to global food security. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118, | 11.5 | 41 |
| 44 | The influence of crop and chemical fertilizer combinations on greenhouse gas emissions: A partial life-cycle assessment of fertilizer production and use in China. *Resources, Conservation and Recycling*, **2021**, 168, 105303 | 11.9 | 11 |
| 43 | Growing pains: Small-scale farmer responses to an urban rooftop farming and online marketplace enterprise in Montréal, Canada. *Agriculture and Human Values*, **2021**, 38, 677-692 | 2.7 | 3 |
| 42 | Quantifying the foodshed: a systematic review of urban food flow and local food self-sufficiency research. *Environmental Research Letters*, **2021**, 16, 023003 | 6.2 | 12 |
| 41 | Provincial nitrogen footprints highlight variability in drivers of reactive nitrogen emissions in Canada. *Environmental Research Letters*, **2021**, 16, 095007 | 6.2 | 2 |
| 40 | Geographic versus institutional drivers of nitrogen footprints: a comparison of two urban universities. *Environmental Research Letters*, **2020**, 15, 045008 | 6.2 | 1 |
| 39 | Co-benefits and Trade-Offs From Agro-Food System Redesign for Circularity: A Case Study With the FAN Agent-Based Model. *Frontiers in Sustainable Food Systems*, **2020**, 4, | 4.8 | 8 |
| 38 | The U.S. consumer phosphorus footprint: where do nitrogen and phosphorus diverge?. *Environmental Research Letters*, **2020**, 15, 105022 | 6.2 | 9 |
| 37 | Rural-urban connectivity and agricultural land management across the Global South. *Global Environmental Change*, **2020**, 60, 101982 | 10.1 | 12 |
| 36 | Flows in Agro-food Networks (FAN): An agent-based model to simulate local agricultural material flows. *Agricultural Systems*, **2020**, 180, 102718 | 6.1 | 15 |
| 35 | Global Opportunities to Increase Agricultural Independence Through Phosphorus Recycling. *Earth's Future*, **2019**, 7, 370-383 | 7.9 | 35 |
| 34 | Leveraging total factor productivity growth for sustainable and resilient farming. *Nature Sustainability*, **2019**, 2, 22-28 | 22.1 | 47 |
| 33 | Social-ecological and technological factors moderate the value of urban nature. *Nature Sustainability*, **2019**, 2, 29-38 | 22.1 | 163 |
| 32 | Watershed Buffering of Legacy Phosphorus Pressure at a Regional Scale: A Comparison Across Space and Time. *Ecosystems*, **2019**, 22, 91-109 | 3.9 | 21 |
| 31 | The Global Food-Energy-Water Nexus. *Reviews of Geophysics*, **2018**, 56, 456-531 | 23.1 | 265 |
| 30 | Socio-environmental consideration of phosphorus flows in the urban sanitation chain of contrasting cities. *Regional Environmental Change*, **2018**, 18, 1387-1401 | 4.3 | 14 |

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| 29 | Progress towards sustainable intensification in China challenged by land-use change. *Nature Sustainability*, **2018**, 1, 304-313 | 22.1 | 71 |
| 28 | Food, trade, and the environment. *Environmental Research Letters*, **2018**, 13, 100201 | 6.2 | 4 |
| 27 | Geospatial Land Price Data: A Public Good for Global Change Science and Policy. *BioScience*, **2018**, 68, 481-484 | 5.7 | 10 |
| 26 | Creating space for sustainability literacy: the case of student-centered symposia. *International Journal of Sustainability in Higher Education*, **2018**, 19, 839-855 | 3.9 | 5 |
| 25 | Reply to Comment on An index-based framework for assessing patterns and trends in river fragmentation and flow regulation by global dams at multiple scales *Environmental Research Letters*, **2017**, 12, 038002 | 6.2 | 3 |
| 24 | Greenhouse gas emissions intensity of global croplands. *Nature Climate Change*, **2017**, 7, 63-68 | 21.4 | 229 |
| 23 | Extrinsic vs. Intrinsic Regimes Shifts in Shallow Lakes: Long-Term Response of Cyanobacterial Blooms to Historical Catchment Phosphorus Loading and Climate Warming. *Frontiers in Ecology and Evolution*, **2017**, 5, | 3.7 | 6 |
| 22 | Integrating legacy soil phosphorus into sustainable nutrient management strategies for future food, bioenergy and water security. *Nutrient Cycling in Agroecosystems*, **2016**, 104, 393-412 | 3.3 | 140 |
| 21 | Pathways to sustainable intensification through crop water management. *Environmental Research Letters*, **2016**, 11, 091001 | 6.2 | 10 |
| 20 | Environmental health impacts of feeding crops to farmed fish. *Environment International*, **2016**, 91, 201-14 | 11.9 | 84 |
| 19 | Feeding the Corn Belt: Opportunities for phosphorus recycling in U.S. agriculture. *Science of the Total Environment*, **2016**, 542, 1117-26 | 10.2 | 58 |
| 18 | Guiding phosphorus stewardship for multiple ecosystem services. *Ecosystem Health and Sustainability*, **2016**, 2, e01251 | 3.7 | 23 |
| 17 | Realizing Resilient Food Systems. *BioScience*, **2016**, 66, 600-610 | 5.7 | 109 |
| 16 | Opinion: Big data has big potential for applications to climate change adaptation. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 10729-32 | 11.5 | 62 |
| 15 | Rethinking Agricultural Trade Relationships in an Era of Globalization. *BioScience*, **2015**, 65, 275-289 | 5.7 | 142 |
| 14 | Climate variation explains a third of global crop yield variability. *Nature Communications*, **2015**, 6, 5989 | 17.4 | 745 |
| 13 | An index-based framework for assessing patterns and trends in river fragmentation and flow regulation by global dams at multiple scales. *Environmental Research Letters*, **2015**, 10, 015001 | 6.2 | 301 |
| 12 | Leverage points for improving global food security and the environment. *Science*, **2014**, 345, 325-8 | 33.3 | 420 |

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| 11 | A tradeoff frontier for global nitrogen use and cereal production. *Environmental Research Letters*, **2014**, 9, 054002 | 6.2 | 80 |
| 10 | Variability in ecosystem service measurement: a pollination service case study. *Frontiers in Ecology and the Environment*, **2013**, 11, 414-422 | 5.5 | 34 |
| 9 | Eating on an interconnected planet. *Environmental Research Letters*, **2013**, 8, 021002 | 6.2 | 17 |
| 8 | The influence of time, soil characteristics, and land-use history on soil phosphorus legacies: a global meta-analysis. *Global Change Biology*, **2012**, 18, 1904-1917 | 11.4 | 78 |
| 7 | Embodied phosphorus and the global connections of United States agriculture. *Environmental Research Letters*, **2012**, 7, 044024 | 6.2 | 48 |
| 6 | Land-use legacies are important determinants of lake eutrophication in the anthropocene. *PLoS ONE*, **2011**, 6, e15913 | 3.7 | 36 |
| 5 | Agronomic phosphorus imbalances across the world's croplands. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 3086-91 | 11.5 | 487 |
| 4 | Untangling the Environmentalist's Paradox: Why Is Human Well-being Increasing as Ecosystem Services Degrade?. *BioScience*, **2010**, 60, 576-589 | 5.7 | 287 |
| 3 | Phosphorus and land-use changes are significant drivers of cladoceran community composition and diversity: an analysis over spatial and temporal scales. *Canadian Journal of Fisheries and Aquatic Sciences*, **2010**, 67, 1262-1273 | 2.4 | 13 |
| 2 | The Legacy of Agricultural Reclamation on Channel and Pool Networks of Bay of Fundy Salt Marshes. *Estuaries and Coasts*, **2010**, 33, 151-160 | 2.8 | 17 |
| 1 | Phosphorus Accumulation in Saint Lawrence River Watershed Soils: A Century-Long Perspective. *Ecosystems*, **2009**, 12, 621-635 | 3.9 | 40 |