

Christine A Watson

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

6,150
citations

94433

37
h-index

74163

75
g-index

100
all docs

100
docs citations

100
times ranked

6723
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Supporting wild pollinators in agricultural landscapes through targeted legume mixtures. Agriculture, Ecosystems and Environment, 2022, 323, 107648. | 5.3 | 19 |
| 2 | Agro-economic prospects for expanding soybean production beyond its current northerly limit in Europe. European Journal of Agronomy, 2022, 133, 126415. | 4.1 | 44 |
| 3 | Effects of management practices on legume productivity in smallholder farming systems in sub-Saharan Africa. Food and Energy Security, 2022, 11, . | 4.3 | 4 |
| 4 | Measuring household legume cultivation intensity in sub-Saharan Africa. International Journal of Agricultural Sustainability, 2021, 19, 319-334. | 3.5 | 5 |
| 5 | Reducing soil erosion in smallholder farming systems in east Africa through the introduction of different crop types. Experimental Agriculture, 2020, 56, 183-195. | 0.9 | 26 |
| 6 | Re-designing organic grain legume cropping systems using systems agronomy. European Journal of Agronomy, 2020, 112, 125951. | 4.1 | 32 |
| 7 | Regional land use efficiency and nutritional quality of protein production. Global Food Security, 2020, 26, 100386. | 8.1 | 2 |
| 8 | Socio-ecological factors determine crop performance in agricultural systems. Scientific Reports, 2020, 10, 4232. | 3.3 | 12 |
| 9 | Disease suppressive soils vary in resilience to stress. Applied Soil Ecology, 2020, 149, 103482. | 4.3 | 13 |
| 10 | Reviews and syntheses: Review of causes and sources of N<sub>2</sub>O emissions and NO<sub>3</sub> leaching from organic arable crop rotations. Biogeosciences, 2019, 16, 2795-2819. | 3.3 | 50 |
| 11 | Farmer perceptions of legumes and their functions in smallholder farming systems in east Africa. International Journal of Agricultural Sustainability, 2019, 17, 205-218. | 3.5 | 35 |
| 12 | Linking Arable Cropping and Livestock Production for Efficient Recycling of N& P. , 2019, , 169-188. | | 1 |
| 13 | Risks and opportunities of increasing yields in organic farming. A review. Agronomy for Sustainable Development, 2018, 38, 1. | 5.3 | 149 |
| 14 | Demographic quantification of carbon and nitrogen dynamics associated with root turnover in white clover. Plant, Cell and Environment, 2018, 41, 2045-2056. | 5.7 | 1 |
| 15 | A framework of connections between soil and people can help improve sustainability of the food system and soil functions. Ambio, 2018, 47, 269-283. | 5.5 | 34 |
| 16 | Grain legume yields are as stable as other spring crops in long-term experiments across northern Europe. Agronomy for Sustainable Development, 2018, 38, 63. | 5.3 | 55 |
| 17 | Factors influencing crop rotation strategies on organic farms with different time periods since conversion to organic production. Biological Agriculture and Horticulture, 2017, 33, 14-27. | 1.0 | 28 |
| 18 | Changes in soil C and N stocks and C:N stoichiometry 21 years after land use change on an arable mineral topsoil. Geoderma, 2017, 303, 19-26. | 5.1 | 26 |

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|----|--|-----|-----------|
| 19 | Understanding effects of multiple farm management practices on barley performance. European Journal of Agronomy, 2017, 90, 43-52. | 4.1 | 11 |
| 20 | Grain Legume Production and Use in European Agricultural Systems. Advances in Agronomy, 2017, , 235-303. | 5.2 | 176 |
| 21 | Trade-Offs between Economic and Environmental Impacts of Introducing Legumes into Cropping Systems. Frontiers in Plant Science, 2016, 7, 669. | 3.6 | 111 |
| 22 | A Comparative Nitrogen Balance and Productivity Analysis of Legume and Non-legume Supported Cropping Systems: The Potential Role of Biological Nitrogen Fixation. Frontiers in Plant Science, 2016, 7, 1700. | 3.6 | 60 |
| 23 | Predicting the effect of rotation design on N, P, K balances on organic farms using the NDICEA model. Renewable Agriculture and Food Systems, 2016, 31, 471-484. | 1.8 | 8 |
| 24 | Predicting the effect of rotation design on N, P, K balances on organic farms using the NDICEA model - CORRIGENDUM. Renewable Agriculture and Food Systems, 2016, 31, 574-574. | 1.8 | 0 |
| 25 | A cropping system assessment frameworkâ€”Evaluating effects of introducing legumes into crop rotations. European Journal of Agronomy, 2016, 76, 186-197. | 4.1 | 123 |
| 26 | Grain legume decline and potential recovery in European agriculture: a review. Agronomy for Sustainable Development, 2016, 36, 1. | 5.3 | 146 |
| 27 | Residue-C effects on denitrification vary with soil depth. Soil Biology and Biochemistry, 2016, 103, 365-375. | 8.8 | 9 |
| 28 | Quantifying annual variations in field scale element flows and balances is essential for sustainable nutrient management in farming systems. Biological Agriculture and Horticulture, 2016, 32, 110-126. | 1.0 | 2 |
| 29 | Engineering a plant community to deliver multiple ecosystem services. Ecological Applications, 2015, 25, 1034-1043. | 3.8 | 83 |
| 30 | Improving intercropping: a synthesis of research in agronomy, plant physiology and ecology. New Phytologist, 2015, 206, 107-117. | 7.3 | 805 |
| 31 | Seasonal nitrous oxide emissions from field soils under reduced tillage, compost application or organic farming. Agriculture, Ecosystems and Environment, 2014, 189, 171-180. | 5.3 | 41 |
| 32 | Soil Phosphorus Management in Organic Cropping Systems: From Current Practices to Avenues for a More Efficient Use of P Resources. , 2014, , 23-45. | | 17 |
| 33 | Investigating the Use of Silage Effluent to Improve Available Phosphorus from Gafsa Phosphate Rock. Communications in Soil Science and Plant Analysis, 2014, 45, 332-346. | 1.4 | 1 |
| 34 | Red clover increases micronutrient concentrations in forage mixtures. Field Crops Research, 2014, 169, 99-106. | 5.1 | 16 |
| 35 | Micronutrient concentrations in relation to phenological development of red clover (<i>Trifolium pratense</i> L.), perennial ryegrass (<i>Lolium perenne</i> L.) Tj ETQq1 1 0.784314 rgBT/Overlock Forage Science, 2014, 69, 276-284. | 2.9 | 12 |
| 36 | Issues and pressures facing the future of soil carbon stocks with particular emphasis on Scottish soils. Journal of Agricultural Science, 2014, 152, 699-715. | 1.3 | 4 |

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|----|--|-----|-----------|
| 37 | Micronutrient concentrations in common and novel forage species and varieties grown on two contrasting soils. <i>Grass and Forage Science</i> , 2013, 68, 427-436. | 2.9 | 29 |
| 38 | Nitrous oxide mitigation in UK agriculture. <i>Soil Science and Plant Nutrition</i> , 2013, 59, 3-15. | 1.9 | 49 |
| 39 | Modeling Biological Dinitrogen Fixation of Field Pea with a Process-Based Simulation Model. <i>Agronomy Journal</i> , 2013, 105, 670-678. | 1.8 | 13 |
| 40 | Nitrous oxide emissions from European agriculture – an analysis of variability and drivers of emissions from field experiments. <i>Biogeosciences</i> , 2013, 10, 2671-2682. | 3.3 | 108 |
| 41 | The effect of co-composted cabbage and ground phosphate rock on the early growth and P uptake of oilseed rape and perennial ryegrass. <i>Journal of Plant Nutrition and Soil Science</i> , 2012, 175, 595-603. | 1.9 | 8 |
| 42 | Legumes intercropped with spring barley contribute to increased biomass production and carry-over effects. <i>Journal of Agricultural Science</i> , 2012, 150, 584-594. | 1.3 | 33 |
| 43 | Elemental status (Cu, Mo, Co, B, S and Zn) of Scottish agricultural soils compared with a soil-based risk assessment. <i>Soil Use and Management</i> , 2012, 28, 167-176. | 4.9 | 8 |
| 44 | Using soil and plant properties and farm management practices to improve the micronutrient composition of food and feed. <i>Journal of Geochemical Exploration</i> , 2012, 121, 15-24. | 3.2 | 25 |
| 45 | Revisiting herbage sample collection and preparation procedures to minimise risks of trace element contamination. <i>European Journal of Agronomy</i> , 2012, 43, 33-39. | 4.1 | 18 |
| 46 | Models of biological nitrogen fixation of legumes. A review. <i>Agronomy for Sustainable Development</i> , 2011, 31, 155-172. | 5.3 | 129 |
| 47 | Nitrous oxide emissions and nitrate leaching in an arable rotation resulting from the presence of an intercrop. <i>Agriculture, Ecosystems and Environment</i> , 2011, 141, 153-161. | 5.3 | 86 |
| 48 | Influence of ley duration on the yield and quality of the subsequent cereal crop (spring oats) in an organically managed long-term crop rotation experiment. <i>Organic Agriculture</i> , 2011, 1, 147-159. | 2.4 | 13 |
| 49 | Revisiting the Multiple Benefits of Historical Crop Rotations within Contemporary UK Agricultural Systems. <i>Agroecology and Sustainable Food Systems</i> , 2011, 35, 163-179. | 0.9 | 15 |
| 50 | Arable plant communities as indicators of farming practice. <i>Agriculture, Ecosystems and Environment</i> , 2010, 138, 17-26. | 5.3 | 100 |
| 51 | Improving Bioavailability of Phosphate Rock for Organic Farming. <i>Sustainable Agriculture Reviews</i> , 2010, , 99-117. | 1.1 | 10 |
| 52 | Plant Nutrients in Organic Farming. , 2009, , 73-88. | | 12 |
| 53 | Biological indicators of soil quality in organic farming systems. <i>Renewable Agriculture and Food Systems</i> , 2009, 24, 308-318. | 1.8 | 33 |
| 54 | Considerations for Scottish soil monitoring in the European context. <i>European Journal of Soil Science</i> , 2009, 60, 833-843. | 3.9 | 10 |

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|----|---|-----|-----------|
| 55 | Root morphology and water transport of <i>Pistacia lentiscus</i> seedlings under contrasting water supply: A test of the pipe stem theory. <i>Environmental and Experimental Botany</i> , 2008, 62, 343-350. | 4.2 | 33 |
| 56 | Research in organic production systems—Past, present and future. <i>Journal of Agricultural Science</i> , 2008, 146, 1-19. | 1.3 | 48 |
| 57 | Estimating resource use efficiencies in organic agriculture: a review of budgeting approaches used. <i>Journal of the Science of Food and Agriculture</i> , 2007, 87, 2782-2790. | 3.5 | 23 |
| 58 | Soil physical fertility, soil structure and rooting conditions after ploughing organically managed grass/clover swards. <i>Soil Use and Management</i> , 2007, 23, 20-27. | 4.9 | 24 |
| 59 | Nitrous oxide emissions, cereal growth, N recovery and soil nitrogen status after ploughing organically managed grass/clover swards. <i>Soil Use and Management</i> , 2007, 23, 145-155. | 4.9 | 37 |
| 60 | SPACSYS: Integration of a 3D root architecture component to carbon, nitrogen and water cycling—Model description. <i>Ecological Modelling</i> , 2007, 200, 343-359. | 2.5 | 129 |
| 61 | Polysaccharides and monosaccharides in the hyphosphere of the arbuscular mycorrhizal fungi <i>Glomus E3</i> and <i>Glomus tenue</i> . <i>Soil Biology and Biochemistry</i> , 2007, 39, 680-683. | 8.8 | 40 |
| 62 | Controls on soil nitrogen cycling and microbial community composition across land use and incubation temperature. <i>Soil Biology and Biochemistry</i> , 2007, 39, 744-756. | 8.8 | 253 |
| 63 | Output and sustainability of organic ley/arable crop rotations at two sites in northern Scotland. <i>Journal of Agricultural Science</i> , 2006, 144, 435-447. | 1.3 | 21 |
| 64 | Response of organically managed grassland to available phosphorus and potassium in the soil and supplementary fertilization: field trials using grass—clover leys cut for silage. <i>Soil Use and Management</i> , 2005, 21, 370-376. | 4.9 | 11 |
| 65 | Prospects, advantages and limitations of future crop production systems dependent upon the management of soil processes. <i>Annals of Applied Biology</i> , 2005, 146, 203-215. | 2.5 | 26 |
| 66 | Influences of Root Diameter, Tree Age, Soil Depth and Season on Fine Root Survivorship in <i>Prunus avium</i> . <i>Plant and Soil</i> , 2005, 276, 15-22. | 3.7 | 119 |
| 67 | The role of crop rotations in determining soil structure and crop growth conditions. <i>Canadian Journal of Soil Science</i> , 2005, 85, 557-577. | 1.2 | 168 |
| 68 | Root development in the Mediterranean shrub <i>Pistacia lentiscus</i> as affected by nursery treatments. <i>Journal of Arid Environments</i> , 2005, 61, 1-12. | 2.4 | 19 |
| 69 | The role of plants and land management in sequestering soil carbon in temperate arable and grassland ecosystems. <i>Geoderma</i> , 2005, 128, 130-154. | 5.1 | 187 |
| 70 | Developing Existing Plant Root System Architecture Models to Meet Future Agricultural Challenges. <i>Advances in Agronomy</i> , 2005, 85, 181-219. | 5.2 | 45 |
| 71 | Functional aspects of root architecture and mycorrhizal inoculation with respect to nutrient uptake capacity. <i>Mycorrhiza</i> , 2004, 14, 177-184. | 2.8 | 68 |
| 72 | The potential role of arbuscular mycorrhizal (AM) fungi in the bioprotection of plants against soil-borne pathogens in organic and/or other sustainable farming systems. <i>Pest Management Science</i> , 2004, 60, 149-157. | 3.4 | 266 |

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|----|---|-----|-----------|
| 73 | Crop protection-what will shape the future picture?. Pest Management Science, 2004, 60, 105-112. | 3.4 | 13 |
| 74 | The Role of Uncomposted Materials, Composts, Manures, and Compost Extracts in Reducing Pest and Disease Incidence and Severity in Sustainable Temperate Agricultural and Horticultural Crop Productionâ€”A Review. Critical Reviews in Plant Sciences, 2004, 23, 453-479. | 5.7 | 213 |
| 75 | Seasonal patterns of fine-root production and mortality in Prunus avium in Scotland. Canadian Journal of Forest Research, 2004, 34, 1534-1537. | 1.7 | 9 |
| 76 | Appropriateness of nutrient budgets for environmental risk assessment: a case study of outdoor pig production. European Journal of Agronomy, 2003, 20, 117-126. | 4.1 | 31 |
| 77 | The influence of arbuscular mycorrhizal colonization and environment on root development in soil. European Journal of Soil Science, 2003, 54, 751-757. | 3.9 | 30 |
| 78 | The role of arbuscular mycorrhizal fungi in sustainable cropping systems. Advances in Agronomy, 2003, 79, 185-225. | 5.2 | 94 |
| 79 | The Importance of Root Dynamics in Cropping Systems Research. The Journal of Crop Improvement: Innovations in Practice and Research, 2003, 8, 127-155. | 0.4 | 14 |
| 80 | N, P and K budgets for crop rotations on nine organic farms in the UK. Soil Use and Management, 2003, 19, 112-118. | 4.9 | 89 |
| 81 | The Agronomic and Economic Potential of Break Crops for Ley/Arable Rotations in Temperate Organic Agriculture. Advances in Agronomy, 2002, , 369-427. | 5.2 | 82 |
| 82 | Influence of organic leyâ€”arable management and afforestation in sandy loam to clay loam soils on fluxes of N ₂ O and CH ₄ in Scotland. Agriculture, Ecosystems and Environment, 2002, 90, 305-317. | 5.3 | 36 |
| 83 | Arbuscular mycorrhizal fungi in low input agriculture. , 2002, , 211-222. | | 21 |
| 84 | A review of farm-scale nutrient budgets for organic farms as a tool for management of soil fertility. Soil Use and Management, 2002, 18, 264-273. | 4.9 | 134 |
| 85 | Managing soil fertility in organic farming systems. Soil Use and Management, 2002, 18, 239-247. | 4.9 | 324 |
| 86 | Agronomic and environmental implications of organic farming systems. Advances in Agronomy, 2001, 70, 261-327. | 5.2 | 247 |
| 87 | The fate of nitrogen from incorporated cover crop and green manure residues. Nutrient Cycling in Agroecosystems, 2000, 56, 153-163. | 2.2 | 125 |
| 88 | Environment-induced Modifications to Root Longevity in Lolium perenne and Trifolium repens. Annals of Botany, 2000, 85, 397-401. | 2.9 | 50 |
| 89 | The Beneficial Rhizosphere: a dynamic entity. Applied Soil Ecology, 2000, 15, 99-104. | 4.3 | 55 |
| 90 | Title is missing!. Nutrient Cycling in Agroecosystems, 1999, 53, 259-267. | 2.2 | 109 |

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|----|---|-----|-----------|
| 91 | Estimation of N ₂ -fixation by grass?white clover mixtures in cut or grazed swards. Soil Use and Management, 1997, 13, 165-167. | 4.9 | 8 |
| 92 | The environmental impact of intensive systems of animal production in the lowlands. Animal Science, 1996, 63, 353-361. | 1.3 | 5 |
| 93 | Purchases and Sales of N, P and K, Soil Inorganic N and Nitrate Leaching on an Organic Horticultural Holding. Biological Agriculture and Horticulture, 1994, 10, 189-195. | 1.0 | 3 |
| 94 | N, P and K on organic farms: herbage and cereal production, purchases and sales. Journal of Agricultural Science, 1993, 120, 353-360. | 1.3 | 17 |
| 95 | Soil inorganic-N and nitrate leaching on organic farms. Journal of Agricultural Science, 1993, 120, 361-369. | 1.3 | 31 |
| 96 | Influence of Different Vegetation Management Regimes on Nitrogen Partitioning Within Agriforestry Systems. , 1992, , 695-696. | | 0 |