

Stan D Wullschleger

List of Publications by Year in descending order

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Version: 2024-02-01

229
papers

16,683
citations

12303

69
h-index

18075

120
g-index

232
all docs

232
docs citations

232
times ranked

16022
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | In search of the missing carbon sink: a model of terrestrial biospheric response to land-use change and atmospheric CO ₂ . <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 47, 501. | 0.8 | 23 |
| 2 | Unravelling biogeochemical drivers of methylmercury production in an Arctic fen soil and a bog soil. <i>Environmental Pollution</i> , 2022, 299, 118878. | 3.7 | 8 |
| 3 | Range shifts in a foundation sedge potentially induce large Arctic ecosystem carbon losses and gains. <i>Environmental Research Letters</i> , 2022, 17, 045024. | 2.2 | 5 |
| 4 | High nitrate variability on an Alaskan permafrost hillslope dominated by alder shrubs. <i>Cryosphere</i> , 2022, 16, 1889-1901. | 1.5 | 3 |
| 5 | Increased Arctic NO ₃ ⁻ Availability as a Hydrogeomorphic Consequence of Permafrost Degradation and Landscape Drying. <i>Nitrogen</i> , 2022, 3, 314-332. | 0.6 | 1 |
| 6 | Quantifying pH buffering capacity in acidic, organic-rich Arctic soils: Measurable proxies and implications for soil carbon degradation. <i>Geoderma</i> , 2022, 424, 116003. | 2.3 | 7 |
| 7 | Untargeted Exometabolomics Provides a Powerful Approach to Investigate Biogeochemical Hotspots with Vegetation and Polygon Type in Arctic Tundra Soils. <i>Soil Systems</i> , 2021, 5, 10. | 1.0 | 1 |
| 8 | Divergent species-specific impacts of whole ecosystem warming and elevated CO ₂ on vegetation water relations in an ombrotrophic peatland. <i>Global Change Biology</i> , 2021, 27, 1820-1835. | 4.2 | 10 |
| 9 | A reporting format for leaf-level gas exchange data and metadata. <i>Ecological Informatics</i> , 2021, 61, 101232. | 2.3 | 22 |
| 10 | Warming induces divergent stomatal dynamics in co-occurring boreal trees. <i>Global Change Biology</i> , 2021, 27, 3079-3094. | 4.2 | 9 |
| 11 | Global transpiration data from sap flow measurements: the SAPFLUXNET database. <i>Earth System Science Data</i> , 2021, 13, 2607-2649. | 3.7 | 65 |
| 12 | Development of observation-based global multilayer soil moisture products for 1970 to 2016. <i>Earth System Science Data</i> , 2021, 13, 4385-4405. | 3.7 | 9 |
| 13 | Biological Parts for Plant Biodesign to Enhance Land-Based Carbon Dioxide Removal. <i>Biodesign Research</i> , 2021, 2021, . | 0.8 | 5 |
| 14 | Anaerobic respiration pathways and response to increased substrate availability of Arctic wetland soils. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 2070-2083. | 1.7 | 6 |
| 15 | Influences of Hillslope Biogeochemistry on Anaerobic Soil Organic Matter Decomposition in a Tundra Watershed. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005512. | 1.3 | 4 |
| 16 | Understanding the relative importance of vertical and horizontal flow in ice-wedge polygons. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1109-1129. | 1.9 | 9 |
| 17 | Temporal, Spatial, and Temperature Controls on Organic Carbon Mineralization and Methanogenesis in Arctic High-Centered Polygon Soils. <i>Frontiers in Microbiology</i> , 2020, 11, 616518. | 1.5 | 3 |
| 18 | Iron and iron-bound phosphate accumulate in surface soils of ice-wedge polygons in arctic tundra. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 1475-1490. | 1.7 | 8 |

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|----|--|-----|-----------|
| 19 | The Role of Synthetic Biology in Atmospheric Greenhouse Gas Reduction: Prospects and Challenges. <i>Biodesign Research</i> , 2020, 2020, . | 0.8 | 24 |
| 20 | Plant Biosystems Design for a Carbon-Neutral Bioeconomy. <i>Biodesign Research</i> , 2020, 2020, . | 0.8 | 5 |
| 21 | Plant Biosystems Design Research Roadmap 1.0. <i>Biodesign Research</i> , 2020, 2020, . | 0.8 | 16 |
| 22 | Temperature sensitivity of mineral-enzyme interactions on the hydrolysis of cellobiose and indican by β -glucosidase. <i>Science of the Total Environment</i> , 2019, 686, 1194-1201. | 3.9 | 20 |
| 23 | Alder Distribution and Expansion Across a Tundra Hillslope: Implications for Local N Cycling. <i>Frontiers in Plant Science</i> , 2019, 10, 1099. | 1.7 | 37 |
| 24 | Iron (Oxyhydr)Oxides Serve as Phosphate Traps in Tundra and Boreal Peat Soils. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 227-246. | 1.3 | 38 |
| 25 | Simulated projections of boreal forest peatland ecosystem productivity are sensitive to observed seasonality in leaf physiology. <i>Tree Physiology</i> , 2019, 39, 556-572. | 1.4 | 8 |
| 26 | Evaluation of an untargeted nano-liquid chromatography-mass spectrometry approach to expand coverage of low molecular weight dissolved organic matter in Arctic soil. <i>Scientific Reports</i> , 2019, 9, 5810. | 1.6 | 16 |
| 27 | Terrestrial biosphere models may overestimate Arctic CO_2 assimilation if they do not account for decreased quantum yield and convexity at low temperature. <i>New Phytologist</i> , 2019, 223, 167-179. | 3.5 | 14 |
| 28 | Influences of nitrogen fertilization and climate regime on the above-ground biomass yields of miscanthus and switchgrass: A meta-analysis. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 108, 303-311. | 8.2 | 31 |
| 29 | Modeling anaerobic soil organic carbon decomposition in Arctic polygon tundra: insights into soil geochemical influences on carbon mineralization. <i>Biogeosciences</i> , 2019, 16, 663-680. | 1.3 | 21 |
| 30 | Mechanistic Modeling of Microtopographic Impacts on CO_2 and CH_4 Fluxes in an Alaskan Tundra Ecosystem Using the CLM-Microbe Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4288-4304. | 1.3 | 22 |
| 31 | Photosynthetic and Respiratory Responses of Two Bog Shrub Species to Whole Ecosystem Warming and Elevated CO_2 at the Boreal-Temperate Ecotone. <i>Frontiers in Forests and Global Change</i> , 2019, 2, . | 1.0 | 9 |
| 32 | Stimulation of anaerobic organic matter decomposition by subsurface organic N addition in tundra soils. <i>Soil Biology and Biochemistry</i> , 2019, 130, 195-204. | 4.2 | 13 |
| 33 | Characterization of iron oxide nanoparticle films at the air-water interface in Arctic tundra waters. <i>Science of the Total Environment</i> , 2018, 633, 1460-1468. | 3.9 | 8 |
| 34 | Missing pieces to modeling the Arctic-Boreal puzzle. <i>Environmental Research Letters</i> , 2018, 13, 020202. | 2.2 | 61 |
| 35 | Molecular Insights into Arctic Soil Organic Matter Degradation under Warming. <i>Environmental Science & Technology</i> , 2018, 52, 4555-4564. | 4.6 | 74 |
| 36 | Impacts of temperature and soil characteristics on methane production and oxidation in Arctic tundra. <i>Biogeosciences</i> , 2018, 15, 6621-6635. | 1.3 | 33 |

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|----|---|-----|-----------|
| 37 | Guidelines and considerations for designing field experiments simulating precipitation extremes in forest ecosystems. <i>Methods in Ecology and Evolution</i> , 2018, 9, 2310-2325. | 2.2 | 24 |
| 38 | Diel rewiring and positive selection of ancient plant proteins enabled evolution of CAM photosynthesis in <i>Agave</i> . <i>BMC Genomics</i> , 2018, 19, 588. | 1.2 | 64 |
| 39 | Evaporation dominates evapotranspiration on Alaska's Arctic Coastal Plain. <i>Arctic, Antarctic, and Alpine Research</i> , 2018, 50, . | 0.4 | 13 |
| 40 | Biophysical drivers of seasonal variability in <i>Sphagnum</i> gross primary production in a northern temperate bog. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1078-1097. | 1.3 | 22 |
| 41 | Large CO ₂ and CH ₄ emissions from polygonal tundra during spring thaw in northern Alaska. <i>Geophysical Research Letters</i> , 2017, 44, 504-513. | 1.5 | 53 |
| 42 | Evapotranspiration across plant types and geomorphological units in polygonal Arctic tundra. <i>Journal of Hydrology</i> , 2017, 553, 816-825. | 2.3 | 15 |
| 43 | Terrestrial biosphere models underestimate photosynthetic capacity and CO ₂ assimilation in the Arctic. <i>New Phytologist</i> , 2017, 216, 1090-1103. | 3.5 | 59 |
| 44 | Trait covariance: the functional warp of plant diversity?. <i>New Phytologist</i> , 2017, 216, 976-980. | 3.5 | 22 |
| 45 | Microbial Community and Functional Gene Changes in Arctic Tundra Soils in a Microcosm Warming Experiment. <i>Frontiers in Microbiology</i> , 2017, 8, 1741. | 1.5 | 26 |
| 46 | Reviews and syntheses: Four decades of modeling methane cycling in terrestrial ecosystems. <i>Biogeosciences</i> , 2016, 13, 3735-3755. | 1.3 | 102 |
| 47 | Mapping Arctic Plant Functional Type Distributions in the Barrow Environmental Observatory Using WorldView-2 and LiDAR Datasets. <i>Remote Sensing</i> , 2016, 8, 733. | 1.8 | 34 |
| 48 | A global scale mechanistic model of photosynthetic capacity (LUNA V1.0). <i>Geoscientific Model Development</i> , 2016, 9, 587-606. | 1.3 | 88 |
| 49 | Warming increases methylmercury production in an Arctic soil. <i>Environmental Pollution</i> , 2016, 214, 504-509. | 3.7 | 60 |
| 50 | Active layer hydrology in an arctic tundra ecosystem: quantifying water sources and cycling using water stable isotopes. <i>Hydrological Processes</i> , 2016, 30, 4972-4986. | 1.1 | 68 |
| 51 | Effects of warming on the degradation and production of low-molecular-weight labile organic carbon in an Arctic tundra soil. <i>Soil Biology and Biochemistry</i> , 2016, 95, 202-211. | 4.2 | 57 |
| 52 | Interdisciplinary research in climate and energy sciences. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2016, 5, 49-56. | 1.9 | 18 |
| 53 | Scaling nitrogen and carbon interactions: what are the consequences of biological buffering?. <i>Ecology and Evolution</i> , 2015, 5, 2839-2850. | 0.8 | 4 |
| 54 | A roadmap for research on crassulacean acid metabolism (CAM) to enhance sustainable food and bioenergy production in a hotter, drier world. <i>New Phytologist</i> , 2015, 207, 491-504. | 3.5 | 211 |

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|----|--|-----|-----------|
| 55 | Pathways of anaerobic organic matter decomposition in tundra soils from Barrow, Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 2345-2359. | 1.3 | 41 |
| 56 | Pathways and transformations of dissolved methane and dissolved inorganic carbon in Arctic tundra watersheds: Evidence from analysis of stable isotopes. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1893-1910. | 1.9 | 30 |
| 57 | A microbial functional group-based module for simulating methane production and consumption: Application to an incubated permafrost soil. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1315-1333. | 1.3 | 56 |
| 58 | Geochemical drivers of organic matter decomposition in arctic tundra soils. <i>Biogeochemistry</i> , 2015, 126, 397-414. | 1.7 | 53 |
| 59 | Measuring diurnal cycles of evapotranspiration in the Arctic with an automated chamber system. <i>Ecohydrology</i> , 2015, 8, 652-659. | 1.1 | 7 |
| 60 | Microtopographic and depth controls on active layer chemistry in Arctic polygonal ground. <i>Geophysical Research Letters</i> , 2015, 42, 1808-1817. | 1.5 | 44 |
| 61 | Isotopic identification of soil and permafrost nitrate sources in an Arctic tundra ecosystem. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1000-1017. | 1.3 | 22 |
| 62 | Application of genomics-assisted breeding for generation of climate resilient crops: progress and prospects. <i>Frontiers in Plant Science</i> , 2015, 6, 563. | 1.7 | 243 |
| 63 | Use of a metadata documentation and search tool for large data volumes: The NCEE arctic example. , 2015, , . | | 0 |
| 64 | Development of mpi_EPIC model for global agroecosystem modeling. <i>Computers and Electronics in Agriculture</i> , 2015, 111, 48-54. | 3.7 | 6 |
| 65 | Stoichiometry and temperature sensitivity of methanogenesis and CO_2 production from saturated polygonal tundra in Barrow, Alaska. <i>Global Change Biology</i> , 2015, 21, 722-737. | 4.2 | 68 |
| 66 | The unseen iceberg: plant roots in arctic tundra. <i>New Phytologist</i> , 2015, 205, 34-58. | 3.5 | 260 |
| 67 | Global-scale environmental control of plant photosynthetic capacity. <i>Ecological Applications</i> , 2015, 25, 2349-2365. | 1.8 | 95 |
| 68 | Genomics in a changing arctic: critical questions await the molecular ecologist. <i>Molecular Ecology</i> , 2015, 24, 2301-2309. | 2.0 | 10 |
| 69 | Leaf respiration (<i>GlobResp</i>) – global trait database supports Earth System Models. <i>New Phytologist</i> , 2015, 206, 483-485. | 3.5 | 3 |
| 70 | Needle age and season influence photosynthetic temperature response and total annual carbon uptake in mature <i>Picea mariana</i> trees. <i>Annals of Botany</i> , 2015, 116, 821-832. | 1.4 | 33 |
| 71 | Climate-resilient agroforestry: physiological responses to climate change and engineering of crassulacean acid metabolism (CAM) as a mitigation strategy. <i>Plant, Cell and Environment</i> , 2015, 38, 1833-1849. | 2.8 | 59 |
| 72 | Root structural and functional dynamics in terrestrial biosphere models – evaluation and recommendations. <i>New Phytologist</i> , 2015, 205, 59-78. | 3.5 | 214 |

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|----|--|-----|-----------|
| 73 | <sc><i>S</i></sc><i> phagnum</i> physiology in the context of changing climate: emergent influences of genomics, modelling and hostâ€“microbiome interactions on understanding ecosystem function. <i>Plant, Cell and Environment</i> , 2015, 38, 1737-1751. | 2.8 | 60 |
| 74 | Indexing Permafrost Soil Organic Matter Degradation Using High-Resolution Mass Spectrometry. <i>PLoS ONE</i> , 2015, 10, e0130557. | 1.1 | 78 |
| 75 | The impacts of recent permafrost thaw on landâ€“atmosphere greenhouse gas exchange. <i>Environmental Research Letters</i> , 2014, 9, 045005. | 2.2 | 74 |
| 76 | Global simulation of bioenergy crop productivity: analytical framework and case study for switchgrass. <i>GCB Bioenergy</i> , 2014, 6, 14-25. | 2.5 | 22 |
| 77 | The relationship of leaf photosynthetic traits â€“ <i>V</i>_{max} and <i>J</i>_{max} â€“ to leaf nitrogen, leaf phosphorus, and specific leaf area: a metaâ€“analysis and modeling study. <i>Ecology and Evolution</i> , 2014, 4, 3218-3235. | 0.8 | 338 |
| 78 | Differential priming of soil carbon driven by soil depth and root impacts on carbon availability. <i>Soil Biology and Biochemistry</i> , 2014, 69, 147-156. | 4.2 | 105 |
| 79 | Functional Genomics of Drought Tolerance in Bioenergy Crops. <i>Critical Reviews in Plant Sciences</i> , 2014, 33, 205-224. | 2.7 | 25 |
| 80 | Plant functional types in Earth system models: past experiences and future directions for application of dynamic vegetation models in high-latitude ecosystems. <i>Annals of Botany</i> , 2014, 114, 1-16. | 1.4 | 240 |
| 81 | Extrapolating active layer thickness measurements across Arctic polygonal terrain using LiDAR and <i>NDVI</i> data sets. <i>Water Resources Research</i> , 2014, 50, 6339-6357. | 1.7 | 51 |
| 82 | Investigation of laser-induced breakdown spectroscopy and multivariate analysis for differentiating inorganic and organic C in a variety of soils. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 87, 100-107. | 1.5 | 32 |
| 83 | Carbon sequestration via wood harvest and storage: An assessment of its harvest potential. <i>Climatic Change</i> , 2013, 118, 245-257. | 1.7 | 24 |
| 84 | Extending the Arabidopsis flowering paradigm to a mass flowering phenomenon in the tropics. <i>Molecular Ecology</i> , 2013, 22, 4603-4605. | 2.0 | 1 |
| 85 | Variation in root architecture among switchgrass cultivars impacts root decomposition rates. <i>Soil Biology and Biochemistry</i> , 2013, 58, 198-206. | 4.2 | 77 |
| 86 | Quantifying and relating land-surface and subsurface variability in permafrost environments using LiDAR and surface geophysical datasets. <i>Hydrogeology Journal</i> , 2013, 21, 149-169. | 0.9 | 127 |
| 87 | Revisiting the sequencing of the first tree genome: <i>Populus trichocarpa</i> . <i>Tree Physiology</i> , 2013, 33, 357-364. | 1.4 | 61 |
| 88 | Remote Monitoring of Freezeâ€“Thaw Transitions in Arctic Soils Using the Complex Resistivity Method. <i>Vadose Zone Journal</i> , 2013, 12, 1-13. | 1.3 | 18 |
| 89 | Carbon Sequestration. , 2013, , 415-455. | | 3 |
| 90 | From systems biology to photosynthesis and whole-plant physiology. <i>Plant Signaling and Behavior</i> , 2012, 7, 260-262. | 1.2 | 13 |

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|-----|---|------|-----------|
| 91 | Initial characterization of shade avoidance response suggests functional diversity between <i>Populus</i> phytochrome B genes. <i>New Phytologist</i> , 2012, 196, 726-737. | 3.5 | 25 |
| 92 | Modeling the molecular and climatic controls on flowering. <i>New Phytologist</i> , 2012, 194, 599-601. | 3.5 | 6 |
| 93 | Integrating empirical modeling approaches to improve understanding of terrestrial ecology processes. <i>New Phytologist</i> , 2012, 195, 523-525. | 3.5 | 6 |
| 94 | Microbes in thawing permafrost: the unknown variable in the climate change equation. <i>ISME Journal</i> , 2012, 6, 709-712. | 4.4 | 153 |
| 95 | Toward a Mechanistic Modeling of Nitrogen Limitation on Vegetation Dynamics. <i>PLoS ONE</i> , 2012, 7, e37914. | 1.1 | 99 |
| 96 | Bioenergy crop models: descriptions, data requirements, and future challenges. <i>GCB Bioenergy</i> , 2012, 4, 620-633. | 2.5 | 79 |
| 97 | Crop Physiology. <i>Green Energy and Technology</i> , 2012, , 55-86. | 0.4 | 12 |
| 98 | Planning the Next Generation of Arctic Ecosystem Experiments. <i>Eos</i> , 2011, 92, 145-145. | 0.1 | 10 |
| 99 | Comparative physiology and transcriptional networks underlying the heat shock response in <i>Populus trichocarpa</i> , <i>Arabidopsis thaliana</i> and <i>Glycine max</i> . <i>Plant, Cell and Environment</i> , 2011, 34, 1488-1506. | 2.8 | 71 |
| 100 | A method for experimental heating of intact soil profiles for application to climate change experiments. <i>Global Change Biology</i> , 2011, 17, 1083-1096. | 4.2 | 42 |
| 101 | Importance of feedback loops between soil inorganic nitrogen and microbial communities in the heterotrophic soil respiration response to global warming. <i>Nature Reviews Microbiology</i> , 2011, 9, 222-222. | 13.6 | 13 |
| 102 | Response of <i>Alamo</i> switchgrass tissue chemistry and biomass to nitrogen fertilization in West Tennessee, USA. <i>Agriculture, Ecosystems and Environment</i> , 2011, 140, 289-297. | 2.5 | 42 |
| 103 | Genomic aspects of research involving polyploid plants. <i>Plant Cell, Tissue and Organ Culture</i> , 2011, 104, 387-397. | 1.2 | 45 |
| 104 | Ecohydrologic impact of reduced stomatal conductance in forests exposed to elevated CO ₂ . <i>Ecohydrology</i> , 2011, 4, 196-210. | 1.1 | 96 |
| 105 | Review and model-based analysis of factors influencing soil carbon sequestration under hybrid poplar. <i>Biomass and Bioenergy</i> , 2011, 35, 214-226. | 2.9 | 48 |
| 106 | A model of heat transfer in sapwood and implications for sap flux density measurements using thermal dissipation probes. <i>Tree Physiology</i> , 2011, 31, 669-679. | 1.4 | 60 |
| 107 | Elevated CO ₂ enhances leaf senescence during extreme drought in a temperate forest. <i>Tree Physiology</i> , 2011, 31, 117-130. | 1.4 | 152 |
| 108 | Environmental controls on water use efficiency during severe drought in an Ozark Forest in Missouri, USA. <i>Global Change Biology</i> , 2010, 16, 2252-2271. | 4.2 | 71 |

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|-----|--|-----|-----------|
| 109 | An Improved Approach for Mapping Quantitative Trait Loci in a Pseudo-Testcross: Revisiting a Poplar Mapping Study. <i>Bioinformatics and Biology Insights</i> , 2010, 4, BBI.S4153. | 1.0 | 18 |
| 110 | Intra-annual changes in biomass, carbon, and nitrogen dynamics at 4-year old switchgrass field trials in west Tennessee, USA†. <i>Agriculture, Ecosystems and Environment</i> , 2010, 136, 177-184. | 2.5 | 72 |
| 111 | Reliable estimation of biochemical parameters from C ₃ leaf photosynthesis intercellular carbon dioxide response curves. <i>Plant, Cell and Environment</i> , 2010, 33, 1852-1874. | 2.8 | 180 |
| 112 | Climate Change: A Controlled Experiment. <i>Scientific American</i> , 2010, 302, 78-83. | 1.0 | 7 |
| 113 | Differential Detection of Genetic Loci Underlying Stem and Root Lignin Content in Populus. <i>PLoS ONE</i> , 2010, 5, e14021. | 1.1 | 20 |
| 114 | Biomass Production in Switchgrass across the United States: Database Description and Determinants of Yield. <i>Agronomy Journal</i> , 2010, 102, 1158-1168. | 0.9 | 232 |
| 115 | Novel Multivariate Analysis for Soil Carbon Measurements Using Laser-Induced Breakdown Spectroscopy. <i>Soil Science Society of America Journal</i> , 2010, 74, 87-93. | 1.2 | 67 |
| 116 | Phytosequestration: Carbon Biosequestration by Plants and the Prospects of Genetic Engineering. <i>BioScience</i> , 2010, 60, 685-696. | 2.2 | 149 |
| 117 | A comment on “Appropriate experimental ecosystem warming methods by ecosystem, objective, and practicality” by Aronson and McNulty. <i>Agricultural and Forest Meteorology</i> , 2010, 150, 497-498. | 1.9 | 56 |
| 118 | Empirical geographic modeling of switchgrass yields in the United States. <i>GCB Bioenergy</i> , 2010, 2, 248-257. | 2.5 | 63 |
| 119 | <i>Populus</i> Responses to Edaphic and Climatic Cues: Emerging Evidence from Systems Biology Research. <i>Critical Reviews in Plant Sciences</i> , 2009, 28, 368-374. | 2.7 | 14 |
| 120 | Gene expression profiling: opening the black box of plant ecosystem responses to global change. <i>Global Change Biology</i> , 2009, 15, 1201-1213. | 4.2 | 35 |
| 121 | Microsatellite primer resource for <i>Populus</i> developed from the mapped sequence scaffolds of the Nisqually genome. <i>New Phytologist</i> , 2009, 181, 498-503. | 3.5 | 34 |
| 122 | Poplar Genomics: State of the Science. <i>Critical Reviews in Plant Sciences</i> , 2009, 28, 285-308. | 2.7 | 42 |
| 123 | Connecting genes, coexpression modules, and molecular signatures to environmental stress phenotypes in plants. <i>BMC Systems Biology</i> , 2008, 2, 16. | 3.0 | 102 |
| 124 | Effects of harvest management practices on forest biomass and soil carbon in eucalypt forests in New South Wales, Australia: Simulations with the forest succession model LINKAGES. <i>Forest Ecology and Management</i> , 2008, 255, 2407-2415. | 1.4 | 20 |
| 125 | Influences of biomass heat and biochemical energy storages on the land surface fluxes and radiative temperature. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 45 |
| 126 | Biases of CO ₂ storage in eddy flux measurements in a forest pertinent to vertical configurations of a profile system and CO ₂ density averaging. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 34 |

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|-----|---|-----|-----------|
| 127 | Soil carbon, after 3 years, under short-rotation woody crops grown under varying nutrient and water availability. <i>Biomass and Bioenergy</i> , 2007, 31, 793-801. | 2.9 | 21 |
| 128 | High resolution applications of laser-induced breakdown spectroscopy for environmental and forensic applications. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1426-1432. | 1.5 | 91 |
| 129 | Interactive effects of ozone and climate on water use, soil moisture content and streamflow in a southern Appalachian forest in the USA. <i>New Phytologist</i> , 2007, 174, 125-136. | 3.5 | 86 |
| 130 | Interactive effects of ozone and climate on tree growth and water use in a southern Appalachian forest in the USA. <i>New Phytologist</i> , 2007, 174, 109-124. | 3.5 | 109 |
| 131 | Functional genomics and ecology – a tale of two scales. <i>New Phytologist</i> , 2007, 176, 735-739. | 3.5 | 8 |
| 132 | Direct and indirect effects of atmospheric conditions and soil moisture on surface energy partitioning revealed by a prolonged drought at a temperate forest site. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 191 |
| 133 | Belowground Responses to Atmospheric Carbon Dioxide in Forests. , 2006, , 397-418. | | 11 |
| 134 | Sensitivity of canopy transpiration to altered precipitation in an upland oak forest: evidence from a long-term field manipulation study. <i>Global Change Biology</i> , 2006, 12, 97-109. | 4.2 | 87 |
| 135 | ATMOSPHERE: Plant Respiration in a Warmer World. <i>Science</i> , 2006, 312, 536-537. | 6.0 | 137 |
| 136 | Importance of changing CO ₂ , temperature, precipitation, and ozone on carbon and water cycles of an upland-oak forest: incorporating experimental results into model simulations. <i>Global Change Biology</i> , 2005, 11, 1402-1423. | 4.2 | 83 |
| 137 | Analysis of preservative-treated wood by multivariate analysis of laser-induced breakdown spectroscopy spectra. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 1179-1185. | 1.5 | 139 |
| 138 | Phenotypic variation in growth and biomass distribution for two advanced-generation pedigrees of hybrid poplar. <i>Canadian Journal of Forest Research</i> , 2005, 35, 1779-1789. | 0.8 | 134 |
| 139 | Elemental Analysis of Environmental and Biological Samples Using Laser-Induced Breakdown Spectroscopy and Pulsed Raman Spectroscopy. <i>Journal of Dispersion Science and Technology</i> , 2005, 25, 687-694. | 1.3 | 23 |
| 140 | Modern and Future Forests in a Changing Atmosphere. , 2005, , 394-414. | | 3 |
| 141 | OAK FOREST CARBON AND WATER SIMULATIONS: MODEL INTERCOMPARISONS AND EVALUATIONS AGAINST INDEPENDENT DATA. <i>Ecological Monographs</i> , 2004, 74, 443-489. | 2.4 | 225 |
| 142 | Application of Emerging Tools and Techniques for Measuring Carbon and Microbial Communities in Reclaimed Mine Soils. <i>Environmental Management</i> , 2004, 33, S518. | 1.2 | 6 |
| 143 | High-resolution analysis of stem increment and sap flow for loblolly pine trees attacked by southern pine beetle. <i>Canadian Journal of Forest Research</i> , 2004, 34, 2387-2393. | 0.8 | 32 |
| 144 | Prospects for enhancing carbon sequestration and reclamation of degraded lands with fossil-fuel combustion by-products. <i>Journal of Environmental Management</i> , 2004, 8, 425-438. | 1.7 | 72 |

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|-----|--|-----|-----------|
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