

Modeling the Terrestrial Biosphere

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Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The role of residence time in diagnostic models of global carbon storage capacity: model decomposition based on a traceable scheme. Scientific Reports, 2015, 5, 16155. | 3.3 | 17 |
| 2 | Toward “optimal” integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428. | 4.0 | 48 |
| 3 | An analytical model for relating global terrestrial carbon assimilation with climate and surface conditions using a rate limitation framework. Geophysical Research Letters, 2015, 42, 9825-9835. | 4.0 | 45 |
| 4 | A sub-canopy structure for simulating oil palm in the Community Land Model (CLM-Palm): phenology, allocation and yield. Geoscientific Model Development, 2015, 8, 3785-3800. | 3.6 | 37 |
| 5 | Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636. | 7.3 | 350 |
| 6 | The role of remote sensing in process-scaling studies of managed forest ecosystems. Forest Ecology and Management, 2015, 355, 109-123. | 3.2 | 101 |
| 7 | Efficacy of generic allometric equations for estimating biomass: a test in Japanese natural forests. Ecological Applications, 2015, 25, 1433-1446. | 3.8 | 56 |
| 8 | Geochemistry Articles “ October 2014. Organic Geochemistry, 2015, 78, e1-e32. | 1.8 | 0 |
| 9 | Observing terrestrial ecosystems and the carbon cycle from space. Global Change Biology, 2015, 21, 1762-1776. | 9.5 | 339 |
| 10 | Technical note: 3-hourly temporal downscaling of monthly global terrestrial biosphere model net ecosystem exchange. Biogeosciences, 2016, 13, 4271-4277. | 3.3 | 12 |
| 12 | Tree–mycorrhizal associations detected remotely from canopy spectral properties. Global Change Biology, 2016, 22, 2596-2607. | 9.5 | 45 |
| 13 | Modeling plant–water interactions: an ecohydrological overview from the cell to the global scale. Wiley Interdisciplinary Reviews: Water, 2016, 3, 327-368. | 6.5 | 163 |
| 14 | Carbon cost of plant nitrogen acquisition: global carbon cycle impact from an improved plant nitrogen cycle in the Community Land Model. Global Change Biology, 2016, 22, 1299-1314. | 9.5 | 137 |
| 15 | Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901–2005. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1372-1393. | 3.0 | 35 |
| 16 | Short-term favorable weather conditions are an important control of interannual variability in carbon and water fluxes. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2186-2198. | 3.0 | 60 |
| 17 | Modeling Soil Processes: Review, Key Challenges, and New Perspectives. Vadose Zone Journal, 2016, 15, 1-57. | 2.2 | 445 |
| 18 | A model and measurement comparison of diurnal cycles of sun-induced chlorophyll fluorescence of crops. Remote Sensing of Environment, 2016, 186, 663-677. | 11.0 | 80 |
| 19 | The impact of standard and hard-coded parameters on the hydrologic fluxes in the Noah–MP land surface model. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,676. | 3.3 | 101 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 20 | Estimation of future carbon budget with climate change and reforestation scenario in North Korea. <i>Advances in Space Research</i> , 2016, 58, 1002-1016. | 2.6 | 19 |
| 21 | A belowground perspective on the drought sensitivity of forests: Towards improved understanding and simulation. <i>Forest Ecology and Management</i> , 2016, 380, 309-320. | 3.2 | 92 |
| 22 | Isentropic transport and the seasonal cycle amplitude of CO ₂ . <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 8106-8124. | 3.3 | 30 |
| 23 | Drivers and patterns of land biosphere carbon balance reversal. <i>Environmental Research Letters</i> , 2016, 11, 044002. | 5.2 | 38 |
| 24 | Regional atmospheric cooling and wetting effect of permafrost thaw-induced boreal forest loss. <i>Global Change Biology</i> , 2016, 22, 4048-4066. | 9.5 | 60 |
| 25 | Evolution and challenges of dynamic global vegetation models for some aspects of plant physiology and elevated atmospheric CO ₂ . <i>International Journal of Biometeorology</i> , 2016, 60, 945-955. | 3.0 | 9 |
| 26 | Simulation of terrestrial carbon equilibrium state by using a detachable carbon cycle scheme. <i>Ecological Indicators</i> , 2017, 75, 82-94. | 6.3 | 13 |
| 27 | Response to Comment on "Mycorrhizal association as a primary control of the CO ₂ fertilization effect". <i>Science</i> , 2017, 355, 358-358. | 12.6 | 4 |
| 28 | 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. | 3.0 | 22 |
| 29 | ISS observations offer insights into plant function. <i>Nature Ecology and Evolution</i> , 2017, 1, 194. | 7.8 | 94 |
| 30 | Assessing climate change impacts, benefits of mitigation, and uncertainties on major global forest regions under multiple socioeconomic and emissions scenarios. <i>Environmental Research Letters</i> , 2017, 12, 045001. | 5.2 | 38 |
| 31 | Integrating Mycorrhizas Into Global Scale Models. , 2017, , 479-499. | | 10 |
| 32 | Biotic disturbances in Northern Hemisphere forests – a synthesis of recent data, uncertainties and implications for forest monitoring and modelling. <i>Global Ecology and Biogeography</i> , 2017, 26, 533-552. | 5.8 | 140 |
| 33 | Application of satellite solar-induced chlorophyll fluorescence to understanding large-scale variations in vegetation phenology and function over northern high latitude forests. <i>Remote Sensing of Environment</i> , 2017, 190, 178-187. | 11.0 | 175 |
| 34 | Predicting the abundance of forest types across the eastern United States through inverse modelling of tree demography. <i>Ecological Applications</i> , 2017, 27, 2128-2141. | 3.8 | 4 |
| 35 | An individual-based forest model to jointly simulate carbon and tree diversity in Amazonia: description and applications. <i>Ecological Monographs</i> , 2017, 87, 632-664. | 5.4 | 40 |
| 36 | Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. <i>Scientific Reports</i> , 2017, 7, 4765. | 3.3 | 156 |
| 37 | Complex terrain influences ecosystem carbon responses to temperature and precipitation. <i>Global Biogeochemical Cycles</i> , 2017, 31, 1306-1317. | 4.9 | 15 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 38 | Transient Traceability Analysis of Land Carbon Storage Dynamics: Procedures and Its Application to Two Forest Ecosystems. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 2822-2835. | 3.8 | 13 |
| 39 | Modeling forest landscapes in a changing climate: theory and application. <i>Landscape Ecology</i> , 2017, 32, 1299-1305. | 4.2 | 17 |
| 40 | Carbon futures: a valiant attempt to bring scientific order from modeling chaos. <i>Environmental Research Letters</i> , 2017, 12, 101001. | 5.2 | 0 |
| 41 | Leaf Respiration in Terrestrial Biosphere Models. <i>Advances in Photosynthesis and Respiration</i> , 2017, , 107-142. | 1.0 | 25 |
| 42 | Toward seamless hydrologic predictions across spatial scales. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 4323-4346. | 4.9 | 81 |
| 43 | Current challenges of implementing anthropogenic land-use and land-cover change in models contributing to climate change assessments. <i>Earth System Dynamics</i> , 2017, 8, 369-386. | 7.1 | 69 |
| 44 | Simple process-led algorithms for simulating habitats (SPLASH v.1.0): robust indices of radiation, evapotranspiration and plant-available moisture. <i>Geoscientific Model Development</i> , 2017, 10, 689-708. | 3.6 | 64 |
| 45 | Plant responses to stress impacts: the C we do not see. <i>Tree Physiology</i> , 2017, 37, 151-153. | 3.1 | 9 |
| 46 | Satellite Chlorophyll Fluorescence and Soil Moisture Observations Lead to Advances in the Predictive Understanding of Global Terrestrial Coupled Carbon-Water Cycles. <i>Global Biogeochemical Cycles</i> , 2018, 32, 360-375. | 4.9 | 42 |
| 47 | Climate Change Impacts on Net Ecosystem Productivity in a Subtropical Shrubland of Northwestern MÃ©xico. <i>Journal of Geophysical Research C: Biogeosciences</i> , 2018, 123, 688-711. | 3.0 | 13 |
| 48 | Inferring forest fate from demographic data: from vital rates to population dynamic models. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2018, 285, 20172050. | 2.6 | 31 |
| 49 | Sources of Uncertainty in Modeled Land Carbon Storage within and across Three MIPs: Diagnosis with Three New Techniques. <i>Journal of Climate</i> , 2018, 31, 2833-2851. | 3.2 | 24 |
| 50 | Missing pieces to modeling the Arctic-Boreal puzzle. <i>Environmental Research Letters</i> , 2018, 13, 020202. | 5.2 | 61 |
| 51 | Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. <i>Science of the Total Environment</i> , 2018, 622-623, 954-973. | 8.0 | 12 |
| 52 | A lake classification concept for a more accurate global estimate of the dissolved inorganic carbon export from terrestrial ecosystems to inland waters. <i>Die Naturwissenschaften</i> , 2018, 105, 25. | 1.6 | 13 |
| 53 | Simulating the recent impacts of multiple biotic disturbances on forest carbon cycling across the United States. <i>Global Change Biology</i> , 2018, 24, 2079-2092. | 9.5 | 26 |
| 54 | Models meet data: Challenges and opportunities in implementing land management in Earth system models. <i>Global Change Biology</i> , 2018, 24, 1470-1487. | 9.5 | 86 |
| 55 | Linking big models to big data: efficient ecosystem model calibration through Bayesian model emulation. <i>Biogeosciences</i> , 2018, 15, 5801-5830. | 3.3 | 71 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 56 | The Experimental Basis for the Inclusion of Nitrogen Within Terrestrial Biosphere Modeling Framework. , 2018, , . | | 0 |
| 57 | The Terrestrial Carbon Sink. Annual Review of Environment and Resources, 2018, 43, 219-243. | 13.4 | 200 |
| 58 | Using a spatially-distributed hydrologic biogeochemistry model with a nitrogen transport module to study the spatial variation of carbon processes in a Critical Zone Observatory. Ecological Modelling, 2018, 380, 8-21. | 2.5 | 23 |
| 59 | Simulating vegetation response to climate change in the Blue Mountains with MC2 dynamic global vegetation model. Climate Services, 2018, 10, 20-32. | 2.5 | 27 |
| 60 | Vegetation distribution and terrestrial carbon cycle in a carbon cycle configuration of JULES4.6 with new plant functional types. Geoscientific Model Development, 2018, 11, 2857-2873. | 3.6 | 49 |
| 61 | Matrix-Based Sensitivity Assessment of Soil Organic Carbon Storage: A Case Study from the ORCHIDEE-MICT Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 1790-1808. | 3.8 | 17 |
| 62 | Vegetation Primary Productivity. , 2018, , 163-189. | | 7 |
| 63 | Drought-Induced changes in root biomass largely result from altered root morphological traits: Evidence from a synthesis of global field trials. Plant, Cell and Environment, 2018, 41, 2589-2599. | 5.7 | 112 |
| 64 | The influence of two land-surface hydrology schemes on the regional climate of Africa using the RegCM4 model. Theoretical and Applied Climatology, 2019, 136, 1535-1548. | 2.8 | 22 |
| 65 | The Arctic-Boreal vulnerability experiment model benchmarking system. Environmental Research Letters, 2019, 14, 055002. | 5.2 | 9 |
| 66 | From the Arctic to the tropics: multibiome prediction of leaf mass per area using leaf reflectance. New Phytologist, 2019, 224, 1557-1568. | 7.3 | 86 |
| 67 | Allometric Models to Estimate Leaf Area for Tropical African Broadleaved Forests. Geophysical Research Letters, 2019, 46, 8985-8994. | 4.0 | 5 |
| 68 | Plant phylogenetic diversity stabilizes large-scale ecosystem productivity. Global Ecology and Biogeography, 2019, 28, 1430-1439. | 5.8 | 34 |
| 69 | Cryptic phenology in plants: Case studies, implications, and recommendations. Global Change Biology, 2019, 25, 3591-3608. | 9.5 | 26 |
| 70 | The biophysics, ecology, and biogeochemistry of functionally diverse, vertically and horizontally heterogeneous ecosystems: the Ecosystem Demography model, version 2.2 – Part 1: Model description. Geoscientific Model Development, 2019, 12, 4309-4346. | 3.6 | 62 |
| 71 | Global mycorrhizal plant distribution linked to terrestrial carbon stocks. Nature Communications, 2019, 10, 5077. | 12.8 | 170 |
| 72 | Where the Ecological Gaps Remain, a Modelers' Perspective. Frontiers in Ecology and Evolution, 2019, 7, . | 2.2 | 27 |
| 73 | Remote sensing and modeling fusion for investigating the ecosystem water-carbon coupling processes. Science of the Total Environment, 2019, 697, 134064. | 8.0 | 43 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 74 | Annual and seasonal variations in gross primary productivity across the agro-climatic regions in India. Environmental Monitoring and Assessment, 2019, 191, 631. | 2.7 | 6 |
| 75 | Simulating emission and scattering of solar-induced chlorophyll fluorescence at far-red band in global vegetation with different canopy structures. Remote Sensing of Environment, 2019, 233, 111373. | 11.0 | 36 |
| 76 | Neglecting plant-microbe symbioses leads to underestimation of modeled climate impacts. Biogeosciences, 2019, 16, 457-465. | 3.3 | 20 |
| 77 | Urban-rural gradients reveal joint control of elevated CO ₂ and temperature on extended photosynthetic seasons. Nature Ecology and Evolution, 2019, 3, 1076-1085. | 7.8 | 98 |
| 78 | A Forest Model Intercomparison Framework and Application at Two Temperate Forests Along the East Coast of the United States. Forests, 2019, 10, 180. | 2.1 | 5 |
| 79 | Imaging spectrometry-derived estimates of regional ecosystem composition for the Sierra Nevada, California. Remote Sensing of Environment, 2019, 228, 14-30. | 11.0 | 19 |
| 80 | A Carbon Flux Assessment Driven by Environmental Factors Over the Tibetan Plateau and Various Permafrost Regions. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1132-1147. | 3.0 | 12 |
| 81 | Estimating of terrestrial carbon storage and its internal carbon exchange under equilibrium state. Ecological Modelling, 2019, 401, 94-110. | 2.5 | 12 |
| 82 | Forest age improves understanding of the global carbon sink. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3962-3964. | 7.1 | 36 |
| 84 | Terrestrial Biosphere Models. , 2019, , 1-24. | | 4 |
| 85 | Quantitative Description of Ecosystems. , 2019, , 25-39. | | 0 |
| 86 | Fundamentals of Energy and Mass Transfer. , 2019, , 40-52. | | 0 |
| 87 | Mathematical Formulation of Biological Flux Rates. , 2019, , 53-63. | | 0 |
| 88 | Soil Temperature. , 2019, , 64-79. | | 1 |
| 89 | Turbulent Fluxes and Scalar Profiles in the Surface Layer. , 2019, , 80-100. | | 2 |
| 90 | Surface Energy Fluxes. , 2019, , 101-114. | | 1 |
| 91 | Soil Moisture. , 2019, , 115-133. | | 0 |
| 92 | Hydrologic Scaling and Spatial Heterogeneity. , 2019, , 134-151. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 93 | Leaf Temperature and Energy Fluxes. , 2019, , 152-166. | | 0 |
| 94 | Leaf Photosynthesis. , 2019, , 167-188. | | 2 |
| 95 | Stomatal Conductance. , 2019, , 189-212. | | 1 |
| 96 | Plant Hydraulics. , 2019, , 213-227. | | 2 |
| 97 | Radiative Transfer. , 2019, , 228-259. | | 1 |
| 98 | Plant Canopies. , 2019, , 260-279. | | 0 |
| 99 | Scalar Canopy Profiles. , 2019, , 280-300. | | 0 |
| 100 | Biogeochemical Models. , 2019, , 301-321. | | 0 |
| 101 | Soil Biogeochemistry. , 2019, , 322-343. | | 0 |
| 102 | Vegetation Demography. , 2019, , 344-364. | | 1 |
| 103 | Canopy Chemistry. , 2019, , 365-380. | | 0 |
| 107 | Modelled net carbon gain responses to climate change in boreal trees: Impacts of photosynthetic parameter selection and acclimation. Global Change Biology, 2019, 25, 1445-1465. | 9.5 | 9 |
| 108 | Increased high-latitude photosynthetic carbon gain offset by respiration carbon loss during an anomalous warm winter to spring transition. Global Change Biology, 2020, 26, 682-696. | 9.5 | 41 |
| 109 | Sensitivity analysis and estimation using a hierarchical Bayesian method for the parameters of the FvCB biochemical photosynthetic model. Photosynthesis Research, 2020, 143, 45-66. | 2.9 | 6 |
| 110 | Evaluation of simulated soil carbon dynamics in Arctic-Boreal ecosystems. Environmental Research Letters, 2020, 15, 025005. | 5.2 | 19 |
| 111 | Assessing differences in the response of forest aboveground biomass and composition under climate change in subtropical forest transition zone. Science of the Total Environment, 2020, 706, 135746. | 8.0 | 19 |
| 112 | Modeling suggests fossil fuel emissions have been driving increased land carbon uptake since the turn of the 20th Century. Scientific Reports, 2020, 10, 9059. | 3.3 | 11 |
| 113 | An optimality-based model explains seasonal variation in C3 plant photosynthetic capacity. Global Change Biology, 2020, 26, 6493-6510. | 9.5 | 29 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 114 | Climate-Driven Variability and Trends in Plant Productivity Over Recent Decades Based on Three Global Products. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2020GB006613. | 4.9 | 36 |
| 115 | Global evidence for the acclimation of ecosystem photosynthesis to light. <i>Nature Ecology and Evolution</i> , 2020, 4, 1351-1357. | 7.8 | 19 |
| 116 | Importance of nutrient loading and irrigation in gross primary productivity trends in India. <i>Journal of Hydrology</i> , 2020, 588, 125047. | 5.4 | 8 |
| 117 | Organizing principles for vegetation dynamics. <i>Nature Plants</i> , 2020, 6, 444-453. | 9.3 | 95 |
| 118 | Can light-saturated photosynthesis in lowland tropical forests be estimated by one light level?. <i>Biotropica</i> , 2020, 52, 1183-1193. | 1.6 | 2 |
| 119 | Weather, pollution and biotic factors drive net forest - atmosphere exchange of CO ₂ at different temporal scales in a temperate-zone mixed forest. <i>Agricultural and Forest Meteorology</i> , 2020, 291, 108059. | 4.8 | 7 |
| 120 | Carbon Flux Variability From a Relatively Simple Ecosystem Model With Assimilated Data Is Consistent With Terrestrial Biosphere Model Estimates. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001889. | 3.8 | 22 |
| 121 | Competing effects of soil fertility and toxicity on tropical greening. <i>Scientific Reports</i> , 2020, 10, 6725. | 3.3 | 6 |
| 122 | Beyond ecosystem modeling: A roadmap to community cyberinfrastructure for ecological data-model integration. <i>Global Change Biology</i> , 2021, 27, 13-26. | 9.5 | 44 |
| 123 | Understanding water and energy fluxes in the Amazonia: Lessons from an observation-model intercomparison. <i>Global Change Biology</i> , 2021, 27, 1802-1819. | 9.5 | 6 |
| 124 | Optimal model complexity for terrestrial carbon cycle prediction. <i>Biogeosciences</i> , 2021, 18, 2727-2754. | 3.3 | 24 |
| 125 | Midwest US Croplands Determine Model Divergence in North American Carbon Fluxes. <i>AGU Advances</i> , 2021, 2, e2020AV000310. | 5.4 | 7 |
| 127 | On the seasonal relation of sun-induced chlorophyll fluorescence and transpiration in a temperate mixed forest. <i>Agricultural and Forest Meteorology</i> , 2021, 304-305, 108386. | 4.8 | 10 |
| 128 | A RCM investigation of the influence of vegetation status and runoff scheme on the summer gross primary production of Tropical Africa. <i>Theoretical and Applied Climatology</i> , 2021, 145, 1407-1420. | 2.8 | 10 |
| 129 | Oil palm modelling in the global land surface model ORCHIDEE-MICT. <i>Geoscientific Model Development</i> , 2021, 14, 4573-4592. | 3.6 | 1 |
| 130 | Eco-evolutionary optimality as a means to improve vegetation and land-surface models. <i>New Phytologist</i> , 2021, 231, 2125-2141. | 7.3 | 71 |
| 131 | Accurate Simulation of Both Sensitivity and Variability for Amazonian Photosynthesis: Is It Too Much to Ask?. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002555. | 3.8 | 3 |
| 132 | Global hunter-gatherer population densities constrained by influence of seasonality on diet composition. <i>Nature Ecology and Evolution</i> , 2021, 5, 1536-1545. | 7.8 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 133 | The Atmospheric Carbon and Transport (ACT)-America Mission. Bulletin of the American Meteorological Society, 2021, 102, E1714-E1734. | 3.3 | 17 |
| 135 | The role of vadose zone physics in the ecohydrological response of a Tibetan meadow to freeze–thaw cycles. Cryosphere, 2020, 14, 4653-4673. | 3.9 | 13 |
| 136 | Reducing model uncertainty of climate change impacts on high latitude carbon assimilation. Global Change Biology, 2022, 28, 1222-1247. | 9.5 | 6 |
| 137 | Temperature acclimation of leaf respiration differs between marsh and mangrove vegetation in a coastal wetland ecotone. Global Change Biology, 2022, 28, 612-629. | 9.5 | 11 |
| 138 | Liana optical traits increase tropical forest albedo and reduce ecosystem productivity. Global Change Biology, 2022, 28, 227-244. | 9.5 | 10 |
| 140 | Improvement of predicting ecosystem productivity by modifying carbon–water–nitrogen coupling processes in a temperate grassland. Journal of Plant Ecology, 2021, 14, 10-21. | 2.3 | 9 |
| 141 | Impacts of the 2012–2015 Californian Drought on Carbon, Water and Energy Fluxes in Californian Sierras: Results from an Imaging Spectrometry–Constrained Terrestrial Biosphere Model. Global Change Biology, 2021, , . | 9.5 | 4 |
| 142 | A Modified Vegetation Photosynthesis and Respiration Model (VPRM) for the Eastern USA and Canada, Evaluated With Comparison to Atmospheric Observations and Other Biospheric Models. Journal of Geophysical Research G: Biogeosciences, 2022, 127, e2021JG006290. | 3.0 | 13 |
| 143 | The Terrestrial Biosphere Model Farm. Journal of Advances in Modeling Earth Systems, 2022, 14, . | 3.8 | 5 |
| 144 | Unlocking Drought-Induced Tree Mortality: Physiological Mechanisms to Modeling. Frontiers in Plant Science, 2022, 13, 835921. | 3.6 | 6 |
| 145 | How Well Do We Understand the Land–Ocean–Atmosphere Carbon Cycle?. Reviews of Geophysics, 2022, 60, . | 23.0 | 38 |
| 146 | RETRACTED ARTICLE: A constraint on historic growth in global photosynthesis due to increasing CO ₂ . Nature, 2021, 600, 253-258. | 27.8 | 50 |
| 147 | Nutrient Limitations Lead to a Reduced Magnitude of Disequilibrium in the Global Terrestrial Carbon Cycle. Journal of Geophysical Research G: Biogeosciences, 2022, 127, . | 3.0 | 4 |
| 148 | Boreal forests. , 2022, , 203-236. | | 1 |
| 149 | Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods. , 2022, , 59-85. | | 0 |
| 150 | Seasonal and interannual variations of ecosystem photosynthetic characteristics in a semi-arid grassland of Northern China. Journal of Plant Ecology, 2022, 15, 961-976. | 2.3 | 7 |
| 151 | On the Uncertainty Induced by Pedotransfer Functions in Terrestrial Biosphere Modeling. Water Resources Research, 2022, 58, . | 4.2 | 10 |
| 152 | Incorporating dynamic crop growth processes and management practices into a terrestrial biosphere model for simulating crop production in the United States: Toward a unified modeling framework. Agricultural and Forest Meteorology, 2022, 325, 109144. | 4.8 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 153 | Long-term hydrological response emerges from forest self-thinning behaviour and tree sapwood allometry. <i>Science of the Total Environment</i> , 2022, 852, 158410. | 8.0 | 5 |
| 154 | Simulating Ecological Functions of Vegetation Using a Dynamic Vegetation Model. <i>Forests</i> , 2022, 13, 1464. | 2.1 | 0 |
| 155 | Patterns and controls of aboveground litter inputs to temperate forests. <i>Biogeochemistry</i> , 2022, 161, 335-352. | 3.5 | 5 |
| 156 | Environmental controls on the light use efficiency of terrestrial gross primary production. <i>Global Change Biology</i> , 2023, 29, 1037-1053. | 9.5 | 6 |
| 157 | Typical Mathematical and Statistical Methods in the Cycle of Carbon and Nitrogen in Forest Soil. <i>Handbook of Environmental Chemistry</i> , 2022, , . | 0.4 | 0 |
| 158 | Global photosynthetic capacity of C3 biomes retrieved from solar-induced chlorophyll fluorescence and leaf chlorophyll content. <i>Remote Sensing of Environment</i> , 2023, 287, 113457. | 11.0 | 4 |
| 159 | Machine learning for accelerating process-based computation of land biogeochemical cycles. <i>Global Change Biology</i> , 2023, 29, 3221-3234. | 9.5 | 4 |
| 160 | Examining the commonalities and knowledge gaps in coastal zone vegetation simulation models. <i>Earth Surface Processes and Landforms</i> , 2024, 49, 24-48. | 2.5 | 2 |
| 161 | On Transient Semi-Arid Ecosystem Dynamics Using Landlab: Vegetation Shifts, Topographic Refugia, and Response to Climate. <i>Water Resources Research</i> , 2023, 59, . | 4.2 | 0 |
| 162 | It's only natural: Plant respiration in unmanaged systems. <i>Plant Physiology</i> , 2023, 192, 710-727. | 4.8 | 3 |
| 163 | Remotely sensed terrestrial open water evaporation. <i>Scientific Reports</i> , 2023, 13, . | 3.3 | 2 |
| 164 | Improving E3SM Land Model Photosynthesis Parameterization via Satellite SIF, Machine Learning, and Surrogate Modeling. <i>Journal of Advances in Modeling Earth Systems</i> , 2023, 15, . | 3.8 | 1 |
| 165 | Comparing simulated tree biomass from daily, monthly, and seasonal climate input of terrestrial ecosystem model. <i>Ecological Modelling</i> , 2023, 483, 110420. | 2.5 | 0 |
| 166 | Biome-scale temperature sensitivity of ecosystem respiration revealed by atmospheric CO2 observations. <i>Nature Ecology and Evolution</i> , 2023, 7, 1199-1210. | 7.8 | 1 |
| 167 | A boreal forest model benchmarking dataset for North America: a case study with the Canadian Land Surface Scheme Including Biogeochemical Cycles (CLASSIC). <i>Environmental Research Letters</i> , 2023, 18, 085002. | 5.2 | 0 |
| 168 | Terrestrial Phosphorus Cycling: Responses to Climatic Change. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2023, 54, 429-449. | 8.3 | 1 |
| 169 | Wood density has no effect on stomatal control of leaf-level water use efficiency in an Amazonian forest. <i>Plant, Cell and Environment</i> , 2023, 46, 3806-3821. | 5.7 | 0 |
| 170 | Global termite methane emissions have been affected by climate and land-use changes. <i>Scientific Reports</i> , 2023, 13, . | 3.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 171 | Mapping canopy traits over Québec using airborne and spaceborne imaging spectroscopy. Scientific Reports, 2023, 13, . | 3.3 | 2 |
| 172 | Ecosystem groundwater use enhances carbon assimilation and tree growth in a semi-arid Oak Savanna. Agricultural and Forest Meteorology, 2023, 342, 109725. | 4.8 | 1 |
| 173 | Spatial patterns of light response parameters and their regulation on gross primary productivity in China. Agricultural and Forest Meteorology, 2024, 345, 109833. | 4.8 | 1 |
| 174 | Climate change and variability overview. , 2024, , 7-48. | | 1 |
| 175 | Increased photosynthesis during spring drought in energy-limited ecosystems. Nature Communications, 2023, 14, . | 12.8 | 2 |
| 176 | A constraint on historic growth in global photosynthesis due to rising CO ₂ . Nature Climate Change, 2023, 13, 1376-1381. | 18.8 | 5 |
| 177 | Emerging sensing, imaging, and computational technologies to scale nano-to macroscale rhizosphere dynamics – Review and research perspectives. Soil Biology and Biochemistry, 2024, 189, 109253. | 8.8 | 1 |
| 178 | Assessment of the Sensitivity of Daily Maximum and Minimum Air Temperatures of Egypt to Soil Moisture Status and Land Surface Parameterization Using RegCM4. , 0, , . | | 0 |
| 179 | Effects of atmospheric nitrogen deposition on carbon allocation and vegetation carbon turnover time of forest ecosystems in China. Agricultural and Forest Meteorology, 2024, 345, 109853. | 4.8 | 1 |
| 180 | Net greenhouse gas balance in U.S. croplands: How can soils be part of the climate solution?. Global Change Biology, 2024, 30, . | 9.5 | 3 |
| 181 | Understanding the effects of revegetated shrubs on fluxes of energy, water, and gross primary productivity in a desert steppe ecosystem using the STEMMUS – SCOPE model. Biogeosciences, 2024, 21, 893-909. | 3.3 | 0 |