# Christoph Ammann

List of Publications by Year
in descending order



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|---|---|---|---|
| 54 papers | 4,650 citations | 186265 28 h-index | 161849 54 g-index |
| 71 all docs | 71 docs citations | 71 times ranked | 6616 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225. | 5.3 | 646 |
| 2 | Contrasting response of European forest and grassland energy exchange to heatwaves. Nature Geoscience, 2010, 3, 722-727. | 12.9 | 491 |
| 3 | Global Convergence in the Temperature Sensitivity of Respiration at Ecosystem Level. Science, 2010, 329, 838-840. | 12.6 | 446 |
| 4 | Soil Respiration in European Grasslands in Relation to Climate and Assimilate Supply. Ecosystems, 2008, 11, 1352-1367. | 3.4 | 276 |
| 5 | Joint control of terrestrial gross primary productivity by plant phenology and physiology. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2788-2793. | 7.1 | 265 |
| 6 | The energy balance over land and oceans: an assessment based on direct observations and CMIP5 climate models. Climate Dynamics, 2015, 44, 3393-3429. | 3.8 | 239 |
| 7 | How is water-use efficiency of terrestrial ecosystems distributed and changing on Earth?. Scientific Reports, 2014, 4, 7483. | 3.3 | 181 |
| 8 | Bi-directional soil/atmosphere N2O exchange over two mown grassland systems with contrasting management practices. Global Change Biology, 2005, 11, 2114-2127. | 9.5 | 172 |
| 9 | Assessment of the nitrogen and carbon budget of two managed temperate grassland fields. Agriculture, Ecosystems and Environment, 2009, 133, 150-162. | 5.3 | 148 |
| 10 | Climate control of terrestrial carbon exchange across biomes and continents. Environmental Research Letters, 2010, 5, 034007. | 5.2 | 137 |
| 11 | On the temporal upscaling of evapotranspiration from instantaneous remote sensing measurements to 8-day mean daily-sums. Agricultural and Forest Meteorology, 2012, 152, 212-222. | 4.8 | 121 |
| 12 | Application and test of a simple tool for operational footprint evaluations. Environmental Pollution, 2008, 152, 644-652. | 7.5 | 116 |
| 13 | Global maps of soil temperature. Global Change Biology, 2022, 28, 3110-3144. | 9.5 | 113 |
| 14 | Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. New Phytologist, 2012, 194, 775-783. | 7.3 | 111 |
| 15 | Contrasting response of grassland versus forest carbon and water fluxes to spring drought in Switzerland. Environmental Research Letters, 2013, 8, 035007. | 5.2 | 108 |
| 16 | N2O exchange over managed grassland: Application of a quantum cascade laser spectrometer for micrometeorological flux measurements. Agricultural and Forest Meteorology, 2010, 150, 775-785. | 4.8 | 87 |
| 17 | Experimental assessment of N2O background fluxes in grassland systems. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, 470-482. | 1.6 | 83 |
| 18 | Linking flux network measurements to continental scale simulations: ecosystem carbon dioxide exchange capacity under nonâ€waterâ€stressed conditions. Global Change Biology, 2007, 13, 734-760. | 9.5 | 81 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Eddy-covariance data with low signal-to-noise ratio: time-lag determination, uncertainties and limit of detection. Atmospheric Measurement Techniques, 2015, 8, 4197-4213. | 3.1 | 80 |
| 20 | Management effects on European cropland respiration. Agriculture, Ecosystems and Environment, 2010, 139, 346-362. | 5.3 | 58 |
| 21 | A modeling study on mitigation of N2O emissions and NO3 leaching at different agricultural sites across Europe using LandscapeDNDC. Science of the Total Environment, 2016, 553, 128-140. | 8.0 | 52 |
| 22 | Canopy photosynthesis of six major arable crops is enhanced under diffuse light due to canopy architecture. Global Change Biology, 2020, 26, 5164-5177. | 9.5 | 48 |
| 23 | Eddy covariance methane flux measurements over a grazed pasture: effect of cows as moving point sources. Biogeosciences, 2015, 12, 3925-3940. | 3.3 | 43 |
| 24 | Surfaceâ€“atmosphere exchange of ammonia over peatland using QCL-based eddy-covariance measurements and inferential modeling. Atmospheric Chemistry and Physics, 2016, 16, 11283-11299. | 4.9 | 37 |
| 25 | Estimating the greenhouse gas fluxes of European grasslands with a process-based model: 1. Model evaluation from in situ measurements. Global Biogeochemical Cycles, 2007, 21, . | 4.9 | 36 |
| 26 | Dispersion of carbon dioxide plumes in African woodland: implications for host-finding by tsetse flies. Physiological Entomology, 2004, 29, 381-394. | 1.5 | 33 |
| 27 | A comparison of repeated soil inventory and carbon flux budget to detect soil carbon stock changes after conversion from cropland to grasslands. Global Change Biology, 2011, 17, 3366-3375. | 9.5 | 33 |
| 28 | Effect of management and weather variations on the greenhouse gas budget of two grasslands during a 10-year experiment. Agriculture, Ecosystems and Environment, 2020, 292, 106814. | 5.3 | 28 |
| 29 | Determination of the carbon budget of a pasture: effect of system boundaries and flux uncertainties. Biogeosciences, 2016, 13, 2959-2969. | 3.3 | 27 |
| 30 | Measurements of nitrogen oxides and ozone fluxes by eddy covariance at a meadow: evidence for an internal leaf resistance to NO<sub>2</sub>. Biogeosciences, 2013, 10, 5997-6017. | 3.3 | 24 |
| 31 | Integrated management of a Swiss cropland is not sufficient to preserve its soil carbon pool in the long term. Biogeosciences, 2018, 15, 5377-5393. | 3.3 | 24 |
| 32 | Modeling the impacts of diffuse light fraction on photosynthesis in ORCHIDEE (v5453) land surface model. Geoscientific Model Development, 2020, 13, 5401-5423. | 3.6 | 23 |
| 33 | Importance of soil NO emissions for the total atmospheric NOx budget of Saxony, Germany. Atmospheric Environment, 2017, 152, 61-76. | 4.1 | 21 |
| 34 | Ammonia emission measurements of an intensively grazed pasture. Biogeosciences, 2018, 15, 4593-4608. | 3.3 | 21 |
| 35 | Grazing-related nitrous oxide emissions: from patch scale to field scale. Biogeosciences, 2019, 16, 1685-1703. | 3.3 | 21 |
| 36 | Fluxes of total reactive atmospheric nitrogen (ÎŁNr) using eddy covariance above arable land. Tellus, Series B: Chemical and Physical Meteorology, 2013, 65, 19770. | 1.6 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Discerning the cows from the pasture: Quantifying and partitioning the NEE of a grazed pasture using animal position data. Agricultural and Forest Meteorology, 2016, 216, 37-47. | 4.8 | 18 |
| 38 | High tolerance of subalpine grassland to long-term ozone exposure is independent of N input and climatic drivers. Environmental Pollution, 2014, 189, 161-168. | 7.5 | 17 |
| 39 | Design and field application of an automated cartridge sampler for VOC concentration and flux measurements. Journal of Environmental Monitoring, 2005, 7, 568. | 2.1 | 15 |
| 40 | Disjunct Eddy Covariance Method. , 2012, , 291-307. | | 15 |
| 41 | Soil greenhouse gas budget of two intensively managed grazing systems. Agricultural and Forest Meteorology, 2020, 287, 107960. | 4.8 | 13 |
| 42 | High-resolution modelling of AOT40 and stomatal ozone uptake in wheat and grassland: A comparison between 2000 and the hot summer of 2003 in Switzerland. Environmental Pollution, 2007, 146, 671-677. | 7.5 | 11 |
| 43 | Correcting high-frequency losses of reactive nitrogen flux measurements. Atmospheric Measurement Techniques, 2020, 13, 2923-2948. | 3.1 | 11 |
| 44 | Response to Comment on â€œGlobal Convergence in the Temperature Sensitivity of Respiration at Ecosystem Levelâ€• Science, 2011, 331, 1265-1265. | 12.6 | 9 |
| 45 | Assessment of the inverse dispersion method for the determination of methane emissions from a dairy housing. Agricultural and Forest Meteorology, 2021, 307, 108501. | 4.8 | 9 |
| 46 | Performance of open-path GasFinder3 devices for CH<sub>4</sub> concentration measurements close to ambient levels. Atmospheric Measurement Techniques, 2021, 14, 1733-1741. | 3.1 | 5 |
| 47 | Using the inverse dispersion method to determine methane emissions from biogas plants and wastewater treatment plants with complex source configurations. Atmospheric Environment: X, 2022, 13, 100161. | 1.4 | 4 |
| 48 | Experimental assessment of N2O background fluxes in grassland systems. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, . | 1.6 | 3 |
| 49 | Eddy Covariance Flux Measurements of NH<sub>3</sub> and NO<sub>y</sub> with a Dual-Channel Thermal Converter. , 2019, , . | | 2 |
| 50 | Large regional differences of soil water limitation effect on ozone induced yield loss for wheat and potato in Switzerland. Science of the Total Environment, 2020, 718, 135257. | 8.0 | 2 |
| 51 | Carbon budget response of an agriculturally used fen to different soil moisture conditions. Agricultural and Forest Meteorology, 2021, 300, 108319. | 4.8 | 2 |
| 52 | Immission and Dry Deposition. Springer Handbooks, 2021, , 1445-1471. | 0.6 | 2 |
| 53 | Reactive nitrogen fluxes over peatland and forest ecosystems using micrometeorological measurement techniques. Earth System Science Data, 2022, 14, 743-761. | 9.9 | 2 |
| 54 | Linking flux network measurements to continental scale simulations: ecosystem carbon dioxide exchange capacity under non-water-stressed conditions. Global Change Biology, 2007, . | 9.5 | 0 |