

Per Lennart Ambus
Professor
Geografi 1
Postadresse:
Øster Voldgade 10
1350
København K
E-mail: peam@ign.ku.dk
Mobil: +4524611987
Telefon: +4535336626
Hjemmeside: <https://ign.ku.dk>

Ansættelse

Professor

Geografi 1
Københavns Universitet
København K
1 dec. 2014 → nu

Forskningsspecialist

Institut for Kemiteknik, DTU
Lyngby, Danmark
1 jan. 2011 → 30 nov. 2014

Seniorforsker

Forskningscenter Risø
Roskilde, Danmark
1 jan. 1997 → 1 jan. 2011

Gæsteforsker

Michigan State University
USA
1 jan. 1995 → 1 jan. 1996

Forsker

Forskningscenter Risø
Roskilde, Danmark
1 jan. 1993 → 1 jan. 1994

Publikationer

Long-term summer warming reduces post-fire carbon dioxide losses in an arctic heath tundra

Xu, W., Elberling, Bo & Ambus, Per Lennart, 2024, I: Agricultural and Forest Meteorology. 344, 10 s., 109823.

Nitrogen immobilization could link extreme winter warming events to Arctic browning

Rasmussen, Laura Helene, Danielsen, Birgitte Kortegaard, Elberling, Bo, Ambus, Per Lennart, Björkman, M. P., Rinnan, Riikka & Andresen, L. C., 2024, I: Soil Biology and Biochemistry. 191, 11 s., 109319.

Regional emissions of soil greenhouse gases across Tibetan alpine grasslands

Wang, Peiyan, Wang, J., Elberling, Bo, Ambus, Per Lennart, Li, Y., Pan, J., Zhang, R., Guo, H. & Niu, S., 2024, I: Geoderma. 443, 10 s., 116843.

Deepened snow in combination with summer warming increases growing season nitrous oxide emissions in dry tundra, but not in wet tundra

Xu, W., Frendrup, L. L., Michelsen, Anders, Elberling, Bo & Ambus, Per Lennart, 2023, I: Soil Biology and Biochemistry. 180, 12 s., 109013.

Delayed nitrogen application after straw and charred straw addition altered the hot moment of soil N₂O emissions

Ye, X., Ran, H., Wang, X., Li, G., Ambus, Per Lennart, Wang, G. & Zhu, K., 2023, I: European Journal of Soil Science. 74, 1, 15 s., e13349.

Effects of long-term organic fertilizer substitutions on soil nitrous oxide emissions and nitrogen cycling gene abundance in a greenhouse vegetable field

Xu, W., Zhao, D., Ma, Y., Yang, G., Ambus, Per Lennart, Liu, X. & Luo, J., 2023, I: Applied Soil Ecology. 188, 10 s., 104877.

Fate and stabilization of labile carbon in a sandy boreal forest soil – A question of nitrogen availability?

Meyer, N., Sietiö, O., Adamczyk, S., Ambus, Per Lennart, Biasi, C., Glaser, B., Kalu, S., Martin, A., Mganga, K. Z., Olin, M., Seppänen, A., Shrestha, R. & Karhu, K., 2023, I: Applied Soil Ecology. 191, 14 s., 105052.

Fire intensity regulates the short-term postfire response of the microbiome in Arctic tundra soil

Ramm, E., Ambus, Per Lennart, Gschwendtner, S., Liu, C., Schloter, M. & Dannenmann, M., 2023, I: Geoderma. 438, 11 s., 116627.

High nitrous oxide emissions from temporary flooded depressions within croplands

Elberling, Bo, Kovács, Gyula Mate, Hansen, Hans Frederik Engvej, Fensholt, Rasmus, Ambus, Per Lennart, Tong, Xiaoye, Gominski, Dimitri Pierre Johannes, Mueller, Carsten W., Poultney, D. M. N. & Oehmcke, Stefan, 2023, I: Communications Earth and Environment. 4, 1, 9 s., 463.

Moderate nitrogen retention in temperate heath ecosystem after elevated CO₂, drought and warming through 7 years

Andresen, L. C., Ambus, Per Lennart, Beier, Claus & Michelsen, Anders, 2023, I: European Journal of Soil Science. 74, 4, 13 s., e13397.

Spatial controls of methane uptake in upland soils across climatic and geological regions in Greenland

D'Imperio, Ludovica, Li, B., Tiedje, J. M., Oh, Y., Christiansen, Jesper Riis, Kepfer Rojas, Sebastian, Westergaard-Nielsen, Andreas, Brandt, Kristian Koefoed, Holm, Peter Engelund, Wang, P., Ambus, Per Lennart & Elberling, Bo, 2023, I: Communications Earth & Environment. 4, 1, 10 s., 461.

Våd natur kan give væsentlig klimaeffekt – men på lang sigt

Christiansen, Jesper Riis, Jepsen, Martin Rudbeck, Ambus, Per Lennart, Elberling, Bo, Mueller, Carsten W., Bruun, Sander, Busck, Anne Gravsholt, Jensen, Lars Stoumann, Bruun, Hans Henrik, Krøijer, Stine, Jessen, Nina Toudal, Jessen, Søren & Stisen, S., 25 maj 2022, BIO (DM).

A review of the importance of mineral nitrogen cycling in the plant-soil-microbe system of permafrost-affected soils—changing the paradigm

Ramm, E., Liu, C., Ambus, Per Lennart, Butterbach-bahl, K., Hu, B., Martikainen, P. J., Marushchak, M. E., Mueller, Carsten W., Rennenberg, H., Schloter, M., Siljanen, H. M. P., Voigt, C., Werner, C., Biasi, C. & Dannenmann, M., 1 jan. 2022, I: Environmental Research Letters. 17, 1, 34 s., 013004.

Challenges in measuring nitrogen isotope signatures in inorganic nitrogen forms: An interlaboratory comparison of three common measurement approaches

Biasi, C., Jokinen, S., Prommer, J., Ambus, Per Lennart, Dörsch, P., Yu, L., Granger, S., Boeckx, P., Van Nieuland, K., Brueggemann, N., Wissel, H., Voropaev, A., Zilberman, T., Jaentti, H., Trubnikova, T., Welti, N., Voigt, C., Gebus-Czupyt, B., Czupyt, Z. & Wanek, W., 2022, I: Rapid Communications in Mass Spectrometry. 36, 22, 16 s., 9370.

Effects of fire on CO₂, CH₄, and N₂O exchange in a well-drained Arctic heath ecosystem

Hermesdorf, Lena, Elberling, Bo, D'Imperio, Ludovica, Xu, W., Lambæk, A. & Ambus, Per Lennart, 2022, I: Global Change Biology. 28, 16, s. 4882-4899

Microbial carbon use efficiency along an altitudinal gradient

Mganga, K. Z., Sietiö, O., Meyer, N., Poeplau, C., Adamczyk, S., Biasi, C., Kalu, S., Räsänen, M., Ambus, Per Lennart, Fritze, H., Pellikka, P. K. E. & Karhu, K., 2022, I: Soil Biology and Biochemistry. 173, 12 s., 108799.

Modelling impacts of lateral N flows and seasonal warming on an arctic footslope ecosystem N budget and N₂O emissions based on species-level responses

Rasmussen, Laura Helene, Zhang, W., Ambus, Per Lennart, Jansson, P. E., Kitzler, B. & Elberling, Bo, 2022, I: Biogeochemistry. 158, 2, s. 195–213 19 s.

Normalizing time in terms of space: What drives the fate of spring thaw-released nitrogen in a sloping Arctic landscape?

Rasmussen, Laura Helene, Mortensen, Louise Hindborg, Ambus, Per Lennart, Michelsen, Anders & Elberling, Bo, 2022, I: Soil Biology and Biochemistry. 175, 8 s., 108840.

Pyrogenic organic matter as a nitrogen source to microbes and plants following fire in an Arctic heath tundra

Xu, W., Elberling, Bo & Ambus, Per Lennart, 2022, I: Soil Biology & Biochemistry. 170, 9 s., 108699.

Re-visiting soil carbon and nitrogen stocks in a temperate heathland seven years after the termination of free air CO₂ enrichment (FACE)

Li, Qiaoyan, Ambus, Per Lennart, Michelsen, Anders, Schmidt, Inger Kappel, Beier, Claus, Dietzen, Christiana Amalie, Reinsch, S., Arndal, M. F. & Larsen, Klaus Steenberg, 2022, I: Geoderma. 428, 7 s., 116185.

Effects of experimental fire in combination with climate warming on greenhouse gas fluxes in Arctic tundra soils

Xu, W., Lambæk, A., Holm, S. S., Furbo-halken, A., Elberling, Bo & Ambus, Per Lennart, 1 nov. 2021, I: Science of the Total Environment. 795, 12 s., 148847.

Deepened snow enhances gross nitrogen cycling among Pan-Arctic tundra soils during both winter and summer

Xu, W., Priemé, Anders, Cooper, E. J., Mörsdorf, M. A., Semenchuk, P., Elberling, Bo, Grogan, P. & Ambus, Per Lennart, 1 sep. 2021, I: Soil Biology and Biochemistry. 160, 13 s., 108356.

Short-term effects of experimental fire on CO₂, CH₄ and N₂O exchange in a well-drained arctic tundra

Hermesdorf, Lena, D'Imperio, Ludovica, Elberling, Bo & Ambus, Per Lennart, 4 mar. 2021. 1 s.

Analysis of narwhal tusks reveals lifelong feeding ecology and mercury exposure

Dietz, R., Desforges, J., Rigét, F. F., Aubail, A., Garde, E., Ambus, Per Lennart, Drimmie, R., Heide-Jørgensen, M. P. & Sonne, C., 2021, I: Current Biology. 31, 9, s. 2012-2019.e2 10 s.

Effects of two wood-based biochars on the fate of added fertilizer nitrogen—a ¹⁵N tracing study

Kalu, S., Oyekoya, G. N., Ambus, Per Lennart, Tammeorg, P., Simojoki, A., Pihlatie, M. & Karhu, K., 2021, I: Biology and Fertility of Soils. 14 s.

Fire increases soil nitrogen retention and alters nitrogen uptake patterns among dominant shrub species in an Arctic dry heath tundra

Xu, W., Elberling, Bo & Ambus, Per Lennart, 2021, I: Science of the Total Environment. 807, Part 3, 11 s., 150990.

Nitrogen transport in a tundra landscape: the effects of early and late growing season lateral N inputs on arctic soil and plant N pools and N₂O fluxes

Rasmussen, Laura Helene, Zhang, W., Ambus, Per Lennart, Michelsen, Anders, Jansson, P. E., Kitzler, B. & Elberling, Bo, 2021, I: Biogeochemistry. 157, s. 69–84 16 s.

Nitrous oxide surface fluxes in a low Arctic heath: Effects of experimental warming along a natural snowmelt gradient

Kolstad, E., Michelsen, Anders & Ambus, Per Lennart, 2021, I: Soil Biology and Biochemistry. 160, 14 s., 108346.

The Influence of Grain Legume and Tillage Strategies on CO₂ and N₂O Gas Exchange under Varied Environmental Conditions

Hansen, E. M. Ø., Hauggaard-nielsen, H., Justes, E., Ambus, Per Lennart & Mikkelsen, T. N., 2021, I: Agriculture. 11, 5, 18 s., 464.

Slope hydrology and permafrost: The effect of snowmelt N transport on downslope ecosystem

Rasmussen, Laura Helene, Ambus, Per Lennart, Zhang, W., Jansson, P. E., Michelsen, Anders & Elberling, Bo, 1 maj 2020. 2 s.

A new dataset of soil carbon and nitrogen stocks and profiles from an instrumented Greenlandic fen designed to evaluate land-surface models

Morel, X., Hansen, Birger, Delire, C., Ambus, Per Lennart, Mastepanov, M. & Decharme, B., 2020, I: Earth System Science Data. 12, 4, s. 2365-2380 16 s.

Combined effects of glacial retreat and penguin activity on soil greenhouse gas fluxes on South Georgia, sub-Antarctica

Wang, P., D'Imperio, Ludovica, Biersma, Elisabeth M., Ranniku, R., Xu, W., Tian, Q., Ambus, Per Lennart & Elberling, Bo, 2020, I: The Science of the Total Environment. 718, 135255.

Nitrogen isotopes reveal high N retention in plants and soil of old Norse and Inuit deposits along a wet-dry arctic fjord transect in Greenland

Andersen, E. A. S., Michelsen, Anders, Fenger-Nielsen, R., Hollesen, J., Ambus, Per Lennart & Elberling, Bo, 2020, I: Plant and Soil. 455, 1-2, s. 241-255 15 s.

Accumulation of soil carbon under elevated CO₂ unaffected by warming and drought

Dietzen, Christiana Amalie, Larsen, Klaus Steenberg, Ambus, Per Lennart, Arndal, M. F., Beier, Claus, Reinsch, S. & Schmidt, Inger Kappel, 2019, I: Geophysical Research Abstracts. 21, 1 s., EGU2019-5220.

Accumulation of soil carbon under elevated CO₂ unaffected by warming and drought

Dietzen, Christiana Amalie, Larsen, Klaus Steenberg, Ambus, Per Lennart, Michelsen, Anders, Arndal, M. F., Beier, Claus, Reinsch, S. & Schmidt, Inger Kappel, 2019, I: Global Change Biology. 25, 9, s. 2970-2977 8 s.

Biochar application as a tool to decrease soil nitrogen losses (NH₃ volatilization, N₂O emissions, and N leaching) from croplands: Options and mitigation strength in a global perspective

Liu, Q., Liu, B., Zhang, Y., Hu, T., Lin, Z., Liu, G., Wang, X., Ma, J., Wang, H., Jin, H., Ambus, Per Lennart, Amonette, J. E. & Xie, Z., 2019, I: Global Change Biology. 25, 6, s. 2077-2093 17 s.

Combining a Quantum Cascade Laser Spectrometer with an Automated Closed-Chamber System for delta δ^{13} Measurements of Forest Soil, Tree Stem and Tree Root CO₂ Fluxes

Brændholt, A., Ibrom, A., Ambus, Per Lennart, Larsen, Klaus Steenberg & Pilegaard, K., 2019, I: Forests. 10, 5

Deepened winter snow significantly influences the availability and forms of nitrogen taken up by plants in High Arctic tundra

Mörsdorf, M. A., Baggesen, N. S., Yoccoz, N. G., Michelsen, Anders, Elberling, Bo, Ambus, Per Lennart & Cooper, E. J., 2019, I: Soil Biology & Biochemistry. 135, s. 222-234 13 s.

Sea animal activity controls CO₂, CH₄ and N₂O emission hotspots on South Georgia, sub-Antarctica

Wang, P., D'Imperio, Ludovica, Liu, B., Tian, Q., Jia, Z., Ambus, Per Lennart, Rasch, M. & Elberling, Bo, 2019, I: Soil Biology and Biochemistry. 132, s. 174-186 13 s.

Context-dependent tree species effects on soil nitrogen transformations and related microbial functional genes

Ribbons, R. R., Kepfer Rojas, Sebastian, Kosawang, Chatchai, Hansen, Ole Kim, Ambus, Per Lennart, McDonald, M., Grayston, S. J., Prescott, C. E. & Vesterdal, Lars, 1 sep. 2018, I: Biogeochemistry. 140, 2, s. 145-160 1 s.

How does biochar influence soil N cycle? A meta-analysis

Liu, Q., Zhang, Y., Liu, B., Amonette, J. E., Lin, Z., Liu, G., Ambus, Per Lennart & Xie, Z., 2018, I: Plant and Soil. 426, 1-2, s. 211-225 15 s.

Isotopic methods for non-destructive assessment of carbon dynamics in shrublands under long-term climate change manipulation

Andresen, L. C., Domínguez, M. T., Reinsch, S., Smith, A. R., Schmidt, Inger Kappel, Ambus, Per Lennart, Beier, Claus, Boeckx, P., Bol, R., De Dato, G., Emmett, B. A., Estiarte, M., Garnett, M. H., Kröel-dulay, G., Mason, S. L., Nielsen, C. S., Peñuelas, J. & Tietema, A., 2018, I: *Methods in Ecology and Evolution*. 9, 4, s. 866-880 15 s.

Minimum tillage mitigated soil N₂O emissions and maximized crop yield in faba bean in a Mediterranean environment

Volpi, I., Antichi, D., Ambus, Per Lennart, Bonari, E., Nasso, N. & Bosco, S., 2018, I: *Soil & Tillage Research*. 178, s. 11-21 11 s.

Paddy soil drainage influences residue carbon contribution to methane emissions

Tariq, Azeem, Jensen, Lars Stoumann, Sander, B. O., de Tourdonnet, S., Ambus, Per Lennart, Phan Huu Thanh, Mai Van Trinh & de Neergaard, Andreas, 2018, I: *Journal of Environmental Management*. 225, s. 168-176 9 s.

Postfire nitrogen balance of Mediterranean shrublands: Direct combustion losses versus gaseous and leaching losses from the postfire soil mineral nitrogen flush

Dannenmann, M., Diaz-Pines, E., Kitzler, B., Karhu, K., Tejedor, J., Ambus, Per Lennart, Parra, A., Sanchez-Martin, L., Resco, V., Ramirez, D. A., Povoas-Guimaraes, L., Willibald, G., Gasche, R., Zechmeister-Boltenstern, S., Kraus, D., Castaldi, S., Vallejo, A., Rubio, A., Moreno, J. M. & Butterbach-Bahl, K., 2018, I: *Global Change Biology*. 24, 10, s. 4505-4520 16 s.

Resistance of soil protein depolymerization rates to eight years of elevated CO₂, warming, and summer drought in a temperate heathland

Wild, B., Ambus, Per Lennart, Reinsch, S. & Richter, A., 2018, I: *Biogeochemistry*. 140, 3, s. 255-267 13 s.

Activity of Type I Methanotrophs Dominates under High Methane Concentration: Methanotrophic Activity in Slurry Surface Crusts as Influenced by Methane, Oxygen, and Inorganic Nitrogen

Duan, Y., Reinsch, S., Ambus, Per Lennart, Elsgaard, L. & Petersen, S. O., 2017, I: *Journal of Environmental Quality*. 46, 4, s. 767-775 9 s.

Decrease in heathland soil labile organic carbon under future atmospheric and climatic conditions

Thaysen, E. M., Reinsch, S., Larsen, Klaus Steenberg & Ambus, Per Lennart, 2017, I: *Biogeochemistry*. 133, 1, s. 17-36 20 s.

Gas chromatography vs. quantum cascade laser-based N₂O flux measurements using a novel chamber design

Bruemmer, C., Lyshede, B., Lempio, D., Delorme, J., Rueffer, J. J., Fuss, R., Moffat, A. M., Hurkuck, M., Ibrom, A., Ambus, Per Lennart, Flessa, H. & Kutsch, W. L., 2017, I: *Biogeosciences*. 14, 6, s. 1365-1381 17 s.

Impact of decade-long warming, nutrient addition and shading on emission and carbon isotopic composition of CO₂ from two subarctic dwarf shrub heaths

Ravn, N. R., Ambus, Per Lennart & Michelsen, Anders, 2017, I: *Soil Biology & Biochemistry*. 111, s. 15-24 10 s.

Individual variation of persistent organic pollutants in relation to stable isotope ratios, sex, reproductive phase and oxidative status in Scopoli's shearwaters (*Calonectris diomedea*) from the Southern Mediterranean

Costantini, D., Sebastiano, M., Mueller, M. S., Eulaers, I., Ambus, Per Lennart, Malarvannan, G., Covaci, A., Massa, B. & Dell'Omo, G., 2017, I: *Science of the Total Environment*. 598, s. 179-187 9 s.

Linking rhizospheric CH₄ oxidation and net CH₄ emissions in an arctic wetland based on ¹³CH₄ labeling of mesocosms

Nielsen, C. S., Michelsen, Anders, Ambus, Per Lennart, Deepagoda, T. K. K. C. & Elberling, Bo, 2017, I: *Plant and Soil*. 412, 1-2, s. 201-213 13 s.

Long-term and realistic global change manipulations had low impact on diversity of soil biota in temperate heathland

Holmstrup, M., Damgaard, C., Schmidt, Inger Kappel, Arndal, M. F., Beier, Claus, Mikkelsen, T. N., Ambus, Per Lennart, Larsen, Klaus Steenberg, Pilegaard, K., Michelsen, Anders, Andresen, L. C., Haugwitz, M. S., Bergmark, L., Priemé, Anders, Zaitsev, A. S., Georgieva, S., Dam, M., Vestergård, M. & Christensen, Søren, 2017, I: *Scientific Reports*. 7, 11 s., 41388.

The first exposure assessment of legacy and unrestricted brominated flame retardants in predatory birds of Pakistan
Abbasi, N. A., Eulaers, I., Jaspers, V. L. B., Chaudhry, M. J. I., Frantz, A., Ambus, Per Lennart, Covaci, A. & Malik, R. N., 2017, I: Environmental Pollution. 220, Part B, s. 1208-1219 12 s.

Use of feathers to assess polychlorinated biphenyl and organochlorine pesticide exposure in top predatory bird species of Pakistan

Abbasi, N. A., Eulaers, I., Jaspers, V. L. B., Chaudhry, M. J. I., Frantz, A., Ambus, Per Lennart, Covaci, A. & Malik, R. N., 1 nov. 2016, I: Science of the Total Environment. 569-570, s. 1408-1417

Urea in Weaver Ant Feces: Quantification and Investigation of the Uptake and Translocation of Urea in *Coffea arabica*

Vidkjær, Nanna Hjort, Wollenweber, B., Jensen, K. V., Ambus, Per Lennart, Offenberg, J. & Fomsgaard, I. S., 1 sep. 2016, I: Journal of Plant Growth Regulation. 35, 3, s. 803-814 12 s.

Productivity and carbon footprint of perennial grass-forage legume intercropping strategies with high or low nitrogen fertilizer input

Hauggaard-Nielsen, H., Lachouani, P., Knudsen, M. T., Ambus, Per Lennart, Boelt, B. & Gislum, R., 15 jan. 2016, I: Science of the Total Environment. 541, s. 1339-1347

Carbon footprint of rice production under biochar amendment - a case study in a Chinese rice cropping system

Liu, Q., Liu, B., Ambus, Per Lennart, Zhang, Y., Hansen, V., Lin, Z., Shen, D., Liu, G., Bei, Q., Zhu, J., Wang, X., Ma, J., Lin, X., Yu, Y., Zhu, C. & Xie, Z., 1 jan. 2016, I: Global Change Biology. Bioenergy. 8, 1, s. 148-159 12 s.

Corrigendum to "Productivity and carbon footprint of perennial grass-forage legume intercropping strategies with high or low nitrogen fertilizer input": [Sci. Total Environ. 541 (January 2016) pages 1339–1347]

Hauggaard-Nielsen, H., Lachouani, P., Knudsen, M. T., Ambus, Per Lennart, Boelt, B. & Gislum, R., 2016, I: Science of the Total Environment. 557-558, s. 917-918 2 s.

Enhanced priming of old, not new soil carbon at elevated atmospheric CO₂

Vestergård, M., Reinsch, S., Bengtson, P., Ambus, Per Lennart & Christensen, Søren, 2016, I: Soil Biology & Biochemistry. 100, s. 140-148 9 s.

Fire increases the risk of higher soil N₂O emissions from Mediterranean *Macchia* ecosystems

Karhu, K., Dannenmann, M., Kitzler, B., Diaz-Pines, E., Tejedor, J., Ramirez, D. A., Parra, A., Resco de Dios, V., Moreno, J. M., Rubio, A., Guimaraes-Povoas, L., Zechmeister-Boitenstern, S., Butterbach-Bahl, K. & Ambus, Per Lennart, 1 mar. 2015, I: Soil Biology & Biochemistry. 82, s. 44-51 8 s.

UV-induced N₂O emission from plants

Bruhn, D., Albert, K. R., Mikkelsen, T. N. & Ambus, Per Lennart, 1 dec. 2014, I: Atmospheric Environment. 99, s. 206-214 9 s.

Effects of green manure storage and incorporation methods on nitrogen release and N₂O emissions after soil application

Carter, M. S., Sorensen, P., Petersen, S. O., Ma, X. & Ambus, Per Lennart, 1 nov. 2014, I: Biology and Fertility of Soils. 50, 8, s. 1233-1246 14 s.

Effects of lime and concrete waste on Vadose Zone carbon cycling

Thaysen, E. M., Jessen, Søren, Postma, D., Jakobsen, R., Jacques, D., Ambus, Per Lennart, Laloy, E. & Jakobsen, I., nov. 2014, I: Vadose Zone Journal. 13, 11, 11 s.

Combined climate factors alleviate changes in gross soil nitrogen dynamics in heathlands

Bjorsne, A., Rutting, T. & Ambus, Per Lennart, 1 aug. 2014, I: Biogeochemistry. 120, 1-3, s. 191-201 11 s.

Collembola feeding habits and niche specialization in agricultural grasslands of different composition

Sechi, V., D'Annibale, A., Ambus, Per Lennart, Sarossy, Z., Krogh, P. H., Eriksen, J. & Holmstrup, M., 1 jul. 2014, I: Soil Biology & Biochemistry. 74, s. 31-38 8 s.

Gas cleaning with hot char beds studied by stable isotopes

Egsgaard, H., Ahrenfeldt, J., Ambus, Per Lennart, Schaumburg, K. & Henriksen, U. B., 1 maj 2014, I: Journal of Analytical and Applied Pyrolysis. 107, s. 174-182 9 s.

A decade of free-air CO₂ enrichment increased the carbon throughput in a grass-clover ecosystem but did not drastically change carbon allocation patterns

Staddon, P. L., Reinsch, S., Olsson, P. A., Ambus, Per Lennart, Luescher, A. & Jakobsen, I., 1 apr. 2014, I: Functional Ecology. 28, 2, SI, s. 538-545 8 s.

Bacteria and fungi respond differently to multifactorial climate change in a temperate heathland, traced with ¹³C-Glycine and FACE CO₂

Andresen, L. C., Dungait, J. A. J., Bol, R., Selsted, M. B., Ambus, Per Lennart & Michelsen, Anders, 2014, I: P L o S One. 9, 1, 9 s., e85070.

Biological ¹²C-¹³C fractionation increases with increasing community-complexity in soil microcosms

Yang, W., Magid, Jakob, Christensen, Søren, Rønn, Regin, Ambus, Per Lennart & Ekelund, Flemming, 2014, I: Soil Biology & Biochemistry. 69, s. 197-201 5 s.

Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments

Vicca, S., Bahn, M., Estiarte, M., van Loon, E. E., Vargas, R., Alberti, G., Ambus, P. L., Arain, A. M., Beier, C., Bentley, L. P., Borken, W., Buchmann, N., Collins, S. L., de Dato, G., Dukes, J. S., Escolar, C., Fay, P., Guidolotti, G., Hanson, P. J., Kahmen, A. & 28 flere, Kröel-Dulay, G., Ladreiter-Knauss, T., Larsen, Klaus Steenberg, Lellei-Kovacs, E., Lebrija-Trejos, E., Maestre, F. T., Marhan, S., Marshall, M., Meir, P., Miao, Y., Muhr, J., Niklaus, P. A., Ogaya, R., Penuelas, J., Poll, C., Rustad, L. E., Savage, K., Schindlbacher, A., Schmidt, Inger Kappel, Smith, A. R., Sotta, E. D., Suseela, V., Tietema, A., van Gestel, N., van Straaten, O., Wan, S., Weber, U. & Janssens, I. A., 2014, I: Biogeosciences. 11, s. 2991-3013 23 s.

Corrigendum to "Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments"

Vicca, S., Bahn, M., Estiarte, M., van Loon, E., Vargas, R., Alberti, G., Ambus, P. L., Arft, A. M., Beier, C., Bentley, L. P., Borken, W., Buchmann, N., Collins, S. L., de Dato, G., Dukes, J. S., Escolar, C., Fay, P., Guidolotti, G., Hanson, P. J., Kahmen, A. & 28 flere, Kroel-Dulay, G., Ladreiter-Knauss, T., Larsen, Klaus Steenberg, Lellei-Kovacs, E., Lebrija-Trejos, E., Maestre, F. T., Marhan, S., Marshall, M., Meir, P., Miao, Y., Muhr, J., Niklaus, P. A., Ogaya, R., Penuelas, J., Poll, C., Rustad, L. E., Savage, K., Schindlbacher, A., Schmidt, Inger Kappel, Smith, A. R., Sotta, E. D., Suseela, V., Tietema, A., van Gestel, N., van Straaten, O., Wan, S., Weber, U. & Janssens, I. A., 2014, I: Biogeosciences. 11, 12, s. 3307-3308 2 s.

Inorganic carbon fluxes across the vadose zone of planted and unplanted soil mesocosms

Thaysen, E. M., Jacques, D., Jessen, Søren, Andersen, C. E., Laloy, E., Ambus, Per Lennart, Postma, D. & Jakobsen, I., 2014, I: Biogeosciences. 11, s. 7179-7192 14 s.

Short-term utilization of carbon by the soil microbial community under future climatic conditions in a temperate heathland

Reinsch, S., Michelsen, Anders, Sárossy, Z., Egsgaard, H., Schmidt, Inger Kappel, Jakobsen, I. & Ambus, Per Lennart, 2014, I: Soil Biology & Biochemistry. 68, s. 9-19 12 s.

Technical Note: Mesocosm approach to quantify dissolved inorganic carbon percolation fluxes

Thaysen, E. M., Jessen, Søren, Ambus, Per Lennart, Beier, Claus, Postma, D. & Jakobsen, I., 2014, I: Biogeosciences. 11, 4, s. 1077-1084 8 s.

Priming of Soil Carbon Decomposition in Two Inner Mongolia Grassland Soils following Sheep Dung Addition: A Study Using C-13 Natural Abundance Approach

Ma, X., Ambus, Per Lennart, Wang, S., Wang, Y. & Wang, C., 13 nov. 2013, I: PLOS ONE. 8, 11

Impact of future climatic conditions on the potential for soil organic matter priming

Reinsch, S., Ambus, Per Lennart, Thornton, B. & Paterson, E., 1 okt. 2013, I: Soil Biology & Biochemistry. 65, s. 133-140 8 s.

Nitrous oxide emission from *Ulva lactuca* incubated in batch cultures is stimulated by nitrite, nitrate and light

Albert, K. R., Bruhn, A. & Ambus, Per Lennart, 1 okt. 2013, I: Journal of Experimental Marine Biology and Ecology. 448, s. 37-45 9 s.

***In situ* ¹³CO₂ pulse-labeling in a temperate heathland - development of a mobile multi-plot field setup**

Reinsch, S. & Ambus, Per Lennart, 15 jul. 2013, I: Rapid Communications in Mass Spectrometry. 27, 13, s. 1417-1428 12 s.

Annual maize and perennial grass-clover strip cropping for increased resource use efficiency and productivity using organic farming practice as a model

Hauggaard-Nielsen, H., Johansen, A., Carter, M. S., Ambus, Per Lennart & Jensen, E. S., 1 maj 2013, I: European Journal of Agronomy. 47, s. 55-64 10 s.

Long-term effects of cropping system on N₂O emission potential

Petersen, S. O., Ambus, Per Lennart, Elsgaard, L., Schjonning, P. & Olesen, J. E., 1 feb. 2013, I: Soil Biology & Biochemistry. 57, s. 706-712 7 s.

Effects of digestate from anaerobically digested cattle slurry and plant materials on soil microbial community and emission of CO₂ and N₂O

Johansen, A., Carter, M. S., Jensen, E. S., Hauggaard-Nielsen, H. & Ambus, Per Lennart, 1 jan. 2013, I: Agriculture, Ecosystems & Environment. 63, s. 36-44 9 s.

Common arbuscular mycorrhizal networks amplify competition for phosphorus between seedlings and established plants

Merrild, M., Ambus, Per Lennart, Rosendahl, Søren & Jakobsen, I., 2013, I: New Phytologist. 200, 1, s. 229-240 12 s.

Technical note: mesocosm approach to quantification of carbon dioxide fluxes across the vadose zone

Thaysen, E. M., Jessen, Søren, Ambus, Per Lennart, Beier, Claus, Postma, D. & Jakobsen, Iver, 2013, I: Biogeosciences Discussions. s. 9947-9967

The natural abundance of ¹⁵N in litter and soil profiles under six temperate tree species: N cycling depends on tree species traits and site fertility

Callesen, Ingeborg, Nilsson, L. O., Schmidt, Inger Kappel, Vesterdal, Lars, Ambus, Per Lennart, Christiansen, Jesper Riis, Högberg, P. & Gundersen, Per, 2013, I: Plant and Soil. 368, 1-2, s. 375-392 18 s.

UV-induced carbon monoxide emission from living vegetation

Bruhn, D., Albert, K. R., Mikkelsen, T. N. & Ambus, Per Lennart, 2013, I: Biogeosciences. 10, 12, s. 7877-7882 6 s.

Strip cropping of alternating perennial grass-clover and annual rye-vetch intercrops when grown within an organic farming system

Hauggaard-Nielsen, H., Johansen, A., Carter, M. S., Ambus, Per Lennart & Jensen, E. S., 20 sep. 2012, I: Field Crops Research. 136, s. 1-11 11 s.

Consequences of field N₂O emissions for the environmental sustainability of plant-based biofuels produced within an organic farming system

Carter, M. S., Hauggaard-Nielsen, H., Heiske, S., Jensen, M., Thomsen, Sune Tjalfe, Schmidt, J. E., Johansen, A. & Ambus, Per Lennart, 1 jul. 2012, I: Global Change Biology. Bioenergy. 4, 4, SI, s. 435-452 18 s.

Microbial biomass, microbial diversity, soil carbon storage, and stability after incubation of soil from grass-clover pastures of different age

Müller-Stöver, Dorette Sophie, Hauggaard-Nielsen, H., Eriksen, J., Ambus, Per Lennart & Johansen, A., maj 2012, I: Biology and Fertility of Soils. 48, 4, s. 371-383 13 s.

Effects of slow and fast pyrolysis biochar on soil C and N turnover dynamics

Bruun, E. W., Ambus, Per Lennart, Egsgaard, H. & Hauggaard-Nielsen, H., 1 mar. 2012, I: Soil Biology & Biochemistry. 46, s. 73-79 7 s.

Terrestrial plant methane production and emission

Bruhn, D., Moller, I. M., Mikkelsen, T. N. & Ambus, Per Lennart, 1 mar. 2012, I: *Physiologia Plantarum*. 144, 3, s. 201-209 9 s.

Soil respiration is stimulated by elevated CO₂ and reduced by summer drought: three years of measurements in a multifactor ecosystem manipulation experiment in a temperate heathland (CLIMAITE)

Selsted, M. B., van der Linden, L., Ibrom, A., Michelsen, Anders, Larsen, Klaus Steenberg, Pedersen, J., Mikkelsen, T. N. , Pilegaard, K., Beier, Claus & Ambus, Per Lennart, 2012, I: *Global Change Biology*. 18, 4, s. 1216-1230 15 s.

Application of biochar to soil and N₂O emissions: Potential effects of blending fast-pyrolysis biochar with anaerobically digested slurry

Bruun, E. W., Müller-Stöver, Dorette Sophie, Ambus, Per Lennart & Hauggaard-Nielsen, H., aug. 2011, I: *European Journal of Soil Science*. 62, 4, s. 581-589 9 s.

The competitive ability of pea-barley intercrops against weeds and the interactions with crop productivity and soil N availability

Corre-Hellou, G., Dibet, A., Hauggaard-Nielsen, H., Crozat, Y., Gooding, M., Ambus, Per Lennart, Dahlmann, C., von Fragstein, P., Pristeri, A., Monti, M. & Jensen, E. S., 14 jun. 2011, I: *Field Crops Research*. 122, 3, s. 264-272 9 s.

Effects of clover density on N₂O emissions and plant-soil N transfers in a fertilised upland pasture

Klump, K., Bloor, J. M. G., Ambus, Per Lennart & Soussana, J., 1 jun. 2011, I: *Plant and Soil*. 343, 1-2, s. 97-107 11 s.

Reactive nitrogen and greenhouse gas flux interactions in terrestrial ecosystems

Ambus, Per Lennart, Skiba, U., Butterbach-Bahl, K. & Sutton, M. A., 1 jun. 2011, I: *Plant and Soil*. 343, 1-2, s. 1-3 3 s.

Cowpea N rhizodeposition and its below-ground transfer to a co-existing and to a subsequent millet crop on a sandy soil of the Sudano-Sahelian eco-zone

Laberge, G., Haussmann, B. I. G., Ambus, Per Lennart & Høgh-Jensen, H., 1 mar. 2011, I: *Plant and Soil*. 340, 1-2, SI, s. 369-382 14 s.

Influence of fast pyrolysis temperature on biochar labile fraction and short-term carbon loss in a loamy soil

Bruun, E. W., Hauggaard-Nielsen, H., Ibrahim, N., Egsgaard, H., Ambus, Per Lennart, Jensen, P. A. & Dam-Johansen, K., 1 mar. 2011, I: *Biomass & Bioenergy*. 35, 3, s. 1182-1189 8 s.

Measurement of carbon dioxide fluxes in a free-air carbon dioxide enrichment experiment using the closed flux chamber technique

Selsted, M. B., Ambus, Per Lennart, Michelsen, Anders, van der Linden, L., Larsen, Klaus Steenberg, Pilegaard, K., Mikkelsen, T. N. & Beier, Claus, 1 jan. 2011, I: *Atmospheric Environment*. 45, 1, s. 208-214 7 s.

Climate factors increase glycine use by gram positive bacteria

Andresen, L. C., Bol, R., Dungait, J., Ambus, Per Lennart & Michelsen, Anders, 2011.

Effects of elevated atmospheric CO₂, prolonged summer drought and temperature increase on N₂O and CH₄ fluxes in a temperate heathland

Carter, M. S., Ambus, Per Lennart, Albert, K. R., Larsen, Klaus Steenberg, Andersson, M., Priemé, Anders, van der Linden, L. & Beier, Claus, 2011, I: *Soil Biology & Biochemistry*. 43, 8, s. 1660-1670 11 s.

Is methane released from the forest canopy?

Mikkelsen, T. N., Bruhn, D., Ambus, Per Lennart, Larsen, Klaus Steenberg, Ibrom, I. & Pilegaard, K., 2011, I: *iForest*. 4, s. 200-204 5 s.

Labelling belowground with ¹⁸O to determine soil respiration

Andresen, L. C., Ambus, Per Lennart, Dungait, J. & Bol, R., 2011.

Organic matter flow in the food web at a temperate heath under multifactorial climate change

Andresen, L. C., Konestabo, H. S., Maraldo, K., Holmstrup, M., Ambus, Per Lennart, Beier, Claus & Michelsen, Anders, 2011, I: Rapid Communications in Mass Spectrometry. 25, 11, s. 1485-1496 12 s.

Reduced N cycling in response to elevated CO₂, warming, and drought in a Danish heathland

Larsen, K. S., Andresen, L. C., Beier, C., Jonasson, S. E., Albert, K. R., Ambus, P. L., Arndal, M. F., Carter, M. S., Christensen, S., Holmstrup, M., Ibrom, A., Nielsen, J. K., van der Linden, L., Maraldo, K., Michelsen, A., Mikkelsen, T. N., Pilegaard, K., Priemé, A., Ro-Poulsen, H., Schmidt, I. K. & 2 flere, Selsted, M. B. & Andersen, K. S., 2011, *Nitrogen & global change: key findings - future challenges*. 2 s.

Reduced N cycling in response to elevated CO₂, warming, and drought in a Danish heathland: synthesizing results of the CLIMAITE project after two years of treatments

Larsen, K. S., Andresen, L. C., Beier, C., Jonasson, S. E., Albert, K. A., Ambus, P. L., Arndal, M. F., Carter, M. S., Christensen, S., Holmstrup, M., Ibrom, A., Nielsen, J. K., Van der Linden, L., Maraldo, K., Michelsen, A., Mikkelsen, T. N., Pilegaard, K., Priemé, A., Ro-Poulsen, H., Schmidt, I. K. & 2 flere, Selsted, M. B. & Andersen, K. S., 2011, I: Global Change Biology. 17, 5, s. 1884-1899 16 s.

Development of an accumulation-based system for cost-effective chamber measurements of inert trace gas fluxes

Ambus, Per Lennart, Skiba, U., Drewer, J., Jones, S. K., Carter, M. S., Albert, K. R. & Sutton, M. A., 1 okt. 2010, I: European Journal of Soil Science. 61, 5, s. 785-792 8 s.

Emissions of nitrous oxide from Irish arable soils: effects of tillage and reduced N input

Abdalla, M., Jones, M., Ambus, Per Lennart & Williams, M., 1 jan. 2010, I: Nutrient Cycling in Agroecosystems. 86, 1, s. 53-65 13 s.

Belowground heathland responses after 2 years of combined warming, elevated CO₂ and summer drought

Andresen, L. C., Michelsen, Anders, Ambus, Per Lennart & Beier, Claus, 2010, I: Biogeochemistry. 101, 1-3, s. 27-42 16 s.

Emissions of nitrous oxide from arable organic and conventional cropping systems on two soil types

Chirinda, N., Carter, M. S., Albert, K. R., Ambus, Per Lennart, Olesen, J. E., Porter, John Roy & Petersen, S. O., 2010, I: Agriculture, Ecosystems & Environment. 136, 3-4, s. 199-208 10 s.

Plant nutrient mobilization in temperate heathland responds to elevated CO₂, temperature and drought

Andresen, L. C., Michelsen, Anders, Jonasson, S. E., Schmidt, Inger Kappel, Mikkelsen, T. N., Ambus, Per Lennart & Beier, Claus, 2010, I: Plant and Soil. 328, 1-2, s. 381-396 16 s.

Pea-barley intercropping and short-term subsequent crop effects across European organic cropping conditions

Hauggaard-Nielsen, H., Gooding, M., Ambus, Per Lennart, Corre- Hellou, G., Crozat, Y., Dahlmann, C., Dibet, A., von Fragstein, P., Pristeri, A., Monti, M. & Jensen, E. S., 1 okt. 2009, I: Nutrient Cycling in Agroecosystems. 85, 2, s. 141-155 15 s.

Application of the DNDC model to predict emissions of N₂O from Irish agriculture

Abdalla, M., Wattenbach, M., Smith, P., Ambus, Per Lennart, Jones, M. & Williams, M., 15 jul. 2009, I: Geoderma. 151, 3-4, s. 327-337 11 s.

Pea-barley intercropping for efficient symbiotic N₂-fixation, soil N acquisition and use of other nutrients in European organic cropping systems

Hauggaard-Nielsen, H., Gooding, M., Ambus, Per Lennart, Corre- Hellou, G., Crozat, Y., Dahlmann, C., Dibet, A., von Fragstein, P., Pristeri, A., Monti, M. & Jensen, E. S., 10 jul. 2009, I: Field Crops Research. 113, 1, s. 64-71 8 s.

Nitrogen rhizodeposition from soybean (Glycine max) and its impact on nutrient budgets in two contrasting environments of the Guinean savannah zone of Nigeria

Laberge, G., Franke, A. C., Ambus, Per Lennart & Høgh-Jensen, H., 1 maj 2009, I: Nutrient Cycling in Agroecosystems. 84, 1, s. 49-58 10 s.

The influence of water stress on biomass and N accumulation, N partitioning between above and below ground parts and on N rhizodeposition during reproductive growth of pea (*Pisum sativum* L.)

Mahieu, S., Germon, F., Aveline, A., Hauggaard-Nielsen, H., Ambus, Per Lennart & Jensen, E. S., 1 feb. 2009, I: *Soil Biology & Biochemistry*. 41, 2, s. 380-387 8 s.

Atmospheric composition change: ecosystems-atmosphere interactions

Fowler, D., Pilegaard, K., Sutton, M. A., Ambus, P. L., Raivonen, M., Duyzer, J., Simpson, D., Fagerli, H., Fuzzi, S., Schjorring, J. K., Granier, C., Neftel, A., Isaksen, I. S. A., Laj, P., Maione, M., Monks, P. S., Burkhardt, J., Daemmgen, U., Neiryndk, J., Personne, E. & 37 flere, Wichink-Kruit, R., Butterbach-Bahl, K., Flechard, C., Tuovinen, J. P., Coyle, M., Gerosa, G., Loubet, B., Altimir, N., Gruenhage, L., Ammann, C., Cieslik, S., Paoletti, E., Mikkelsen, T. N., Ro-Poulsen, Helge, Cellier, P., Cape, J. N., Horvath, L., Loreto, F., Niinemets, Ü., Palmer, P. I., Rinne, J., Misztal, P., Nemitz, E., Nilsson, D., Pryor, S., Gallagher, M. W., Vesala, T., Skiba, U., Brüggemann, N., Zechmeister-Boltenstern, S., Williams, J., O'Dowd, C., Facchini, M. C., de Leeuw, G., Flossman, A., Chaumerliac, N. & Erisman, J. W., 2009, I: *Atmospheric Environment*. 43, 33, s. 5193-5267 75 s.

Biosphere-atmosphere exchange of reactive nitrogen and greenhouse gases at the NitroEurope core flux measurement sites: Measurement strategy and first data sets

Skiba, U., Drewer, J., Tang, Y. S., van Dijk, N., Helfter, C., Nemitz, E., Famulari, D., Cape, J. N., Jones, S. K., Twigg, M., Pihlatie, M., Vesala, T., Larsen, K. S., Carter, M. S., Ambus, P., Ibrom, A., Beier, C., Hensen, A., Frumau, A., Erisman, J. W. & 25 flere, Brüggemann, N., Gasche, R., Butterbach-Bahl, K., Neftel, A., Spirig, C., Horvath, L., Freibauer, A., Cellier, P., Laville, P., Loubet, B., Magliulo, E., Bertolini, T., Seufert, G., Andersson, M., Manca, G., Laurila, T., Aurela, M., Lohila, A., Zechmeister-Boltenstern, S., Kitzler, B., Schauffler, G., Siemens, J., Kindler, R., Flechard, C. & Sutton, M. A., 2009, I: *Applied Soil Ecology*. 133, 3-4, s. 139-149

Ecosystem Recovery after Drought Events in Our Future Climate

Selsted, M. B., Albert, K., Ambus, Per Lennart, Michelsen, Anders, Ro-Poulsen, Helge, Mikkelsen, T. N. & Ibrom, A., 2009, I: *Institute of Physics Conference Series*.

Ecosystem carbon balance under future climate conditions: The CLIMAITE project carbon synthesis.

Linden, L., Beier, C., Mikkelsen, T. N., Holmstrup, M., Schmidt, Inger Kappel, Ambus, Per Lennart, Pilegaard, K., Albert, K., Andresen, L. C., Selsted, M. B., Larsen, K. S. & Ibrom, A., 2009, I: *Institute of Physics Conference Series*.

Effects of temperature, ultraviolet radiation and pectin methyl esterase on aerobic methane release from plant material

Bruhn, D., Mikkelsen, T. N., Øbro, J., Willats, W. G. T. & Ambus, Per Lennart, 2009, I: *Plant Biology*. 11, 1, s. 43-48 6 s.

Glycine uptake in heath plants and soil microbes responds to elevated temperature, CO₂ and drought

Andresen, L. C., Michelsen, Anders, Jonasson, S. E., Beier, Claus & Ambus, Per Lennart, 2009, I: *Acta Oecologica*. 35, 6, s. 786-796 11 s.

Is nitrogen deposition the main driver of increasing carbon sequestration in a Danish Beech forest?

Larsen, Klaus Steenberg, Ibrom, A., Pilegaard, K., Ambus, Per Lennart, Carter, M. S. & Beier, Claus, 2009, I: *IOP Conference Series: Earth and Environmental Science*. 6, 1 s., 082014.

Is organic farming a mitigation option? - A study on N₂O emission from winter wheat

Carter S., M., Albert, K. & Ambus, Per Lennart, 2009, I: *Institute of Physics Conference Series*.

Nitrogen uptake in temperate heath vegetation and soil microbes is influenced by elevated temperature, CO₂ and drought

Andresen, L. C., Michelsen, Anders, Jonasson, S. E., Beier, Claus & Ambus, Per Lennart, 2009, I: *Institute of Physics Conference Series*.

Responses of carbon and water fluxes following drought events in combinations with warming and elevated CO₂

Selsted, M. B., Albert, K., Ambus, Per Lennart, Michelsen, Anders, Ro-Poulsen, Helge, Mikkelsen, T. N. & Ibrom, A., 2009, I: *Metlan Tyraportteja*. s. 144

CLIMAITE - a three factor climate change ecosystem manipulation experiment: Geophysical Research Abstracts, Vol. 10, EGU2008-A-07931, 2008. SRef-ID: 1607-7962/gra/EGU2008-A-07931. EGU General Assembly 13-18 April 2008 in Vienna, Switzerland

N. Mikkelsen, T., Beier, C., Jonasson, S. E., Holmstrup, M., Schmidt, I. K., Ambus, P. L., Pilegaard, K., Michelsen, A., Albert, K., Andresen, L. C., Arndal, M. F., Bruun, N., Christensen, S., Danbæk, S., Gundersen, P., Jørgensen, P., J. Linden, L., Pedersen, J. K., Maraldo, K., Priemé, A. & 11 flere, Riis-Nielsen, T., Ro-Poulsen, Helge, Andersen, K. S., Selsted, M., Sørensen, P., S. Larsen, K., S. Carter, M., Ibrom, A., Martinussen, Torben, Miglietta, F. & Sverdrup, H., 2008.

Experimental design of multifactor climate change experiments with elevated CO₂, warming and drought: the CLIMAITE project

Mikkelsen, T. N., Beier, C., Jonasson, S. E., Holmstrup, M., Schmidt, I. K., Ambus, P. L., Pilegaard, K., Michelsen, A., Albert, K., Andresen, L. C., Arndal, M. F., Bruun, N., Christensen, S., Danbæk, S., Gundersen, P., Jørgensen, P., Linden, L., Nielsen, J. K., Maraldo, K., Priemé, A. & 11 flere, Riis-Nielsen, Torben, Ro-Poulsen, Helge, Andersen, K. S., Selsted, M. B., Sørensen, P., Larsen, Klaus Steenberg, Carter, M. S., Ibrom, A., Martinussen, Torben, Miglietta, F. & Sverdrup, H., 2008, I: Functional Ecology. 22, 1, s. 185-195 11 s.

Effects of climate and management intensity on nitrous oxide emissions in grassland systems across Europe

Flechard, C. R., Ambus, P., Skiba, U., Rees, R. M., Hensen, A., van Amstel, A., van den Pol-van Dasselaar, A., Soussana, J-F., Jones, M., Clifton-Brown, J., Raschi, A., Horvath, L., Neftel, A., Jocher, M., Ammann, C., Leifeld, J., Fuhrer, J., Calanca, P., Thalman, E., Pilegaard, K. & 23 flere, Di Marco, C., Campbell, C., Nemitz, E., Hargreaves, K. J., Levy, P. E., Ball, B. C., Jones, S. K., van de Bulk, W. C. M., Groot, T., Blom, M., Domingues, R., Kasper, G., Allard, V., Ceschia, E., Cellier, P., Laville, P., Henault, C., Bizouard, F., Abdalla, M., Williams, M., Baronti, S., Berretti, F. & Grosz, B., 1 jun. 2007, I: Applied Soil Ecology. 121, 1-2, s. 135-152 18 s.

Enzymatic evidence for the key role of arginine in nitrogen translocation by arbuscular mycorrhizal fungi

Cruz, C., Egsgaard, H., Trujillo, C., Ambus, Per Lennart, Requena, N., Martins-Loucao, M. A. & Jakobsen, I., 1 jun. 2007, I: Plant Physiology. 144, 2, s. 782-792 11 s.

Full accounting of the greenhouse gas (CO₂, N₂O, CH₄) budget of nine European grassland sites

Soussana, J. F., Allard, V., Pilegaard, K., Ambus, P., Amman, C., Campbell, C., Ceschia, E., Clifton-Brown, J., Czobel, S., Domingues, R., Flechard, C., Fuhrer, J., Hensen, A., Horvath, L., Jones, M., Kasper, G., Martin, C., Nagy, Z., Neftel, A., Raschi, A. & 8 flere, Baronti, S., Rees, R. M., Skiba, U., Stefani, P., Manca, G., Sutton, M., Tubaf, Z. & Valentini, R., 1 jun. 2007, I: Applied Soil Ecology. 121, 1-2, s. 121-134 14 s.

Natural ¹⁵N abundance of soil N pools and N₂O reflect the nitrogen dynamics of forest soils

Poertl, K., Zechmeister-Boltenstern, S., Wanek, W., Ambus, Per Lennart & Berger, T. W., 1 jun. 2007, I: Plant and Soil. 295, 1-2, s. 79-94 16 s.

Short-term carbon and nitrogen cycling in urine patches assessed by combined carbon-13 and nitrogen-15 labelling

Ambus, Per Lennart, Petersen, S. O. & Soussana, J., 1 jun. 2007, I: Applied Soil Ecology. 121, 1-2, s. 84-92 9 s.

Combined effects of drought, temperature and CO₂ on GHG emissions from temperate shrub-land

Ambus, Per Lennart, Priemé, Anders, S. Carter, M., Albert, K., S. Larsen, K., Andersson, M. & Beier, C., 2007.

Denitrification and N₂O losses in a heath-land under changing climate conditions

Ambus, Per Lennart, Priemé, Anders, S. Carter, M., Albert, K., S. Larsen, K., Andersson, M. & Beier, C., 2007.

Influence of ¹⁵N enrichment on the net isotopic fractionation factor during the reduction of nitrate to nitrous oxide in soil

Mathieu, O., Leveque, J., Henault, C., Ambus, Per Lennart, Milloux, M. & Andreux, F., 2007, I: Rapid Communications in Mass Spectrometry. 21, 8, s. 1447-1451 5 s.

Klimaændringer og processer og funktion i terrestriske økosystemer

Schmidt, Inger Kappel, Beier, C., Nielsen, Jane Kongstad, Andresen, L., Michelsen, Anders, Albert, K., Ambus, Per Lennart, Selsted, M., Maraldo, K., Holmstrup, M., Arndal, M. F., Mikkelsen, T. N., Ro-Poulsen, Helge, Jonassen, S. & Karsten, R. J., 2007, I: Flora og Fauna. 113, 4, s. 117-128 12 s.

The effect of increased n deposition on nitrous oxide, methane and carbon dioxide fluxes from unmanaged forest and grassland communities in Michigan

Ambus, Per Lennart & Robertson, G. P., 1 jul. 2006, I: Biogeochemistry. 79, 3, s. 315-337 23 s.

Biologically fixed N₂ as a source for N₂O production in a grass-clover mixture, measured by ¹⁵N₂

Carter, M. & Ambus, Per Lennart, 1 jan. 2006, I: Nutrient Cycling in Agroecosystems. 74, 1, s. 13-26 14 s.

Methane oxidation in pig and cattle slurry storages, and effects of surface crust moisture and methane availability

Petersen, S. & Ambus, Per Lennart, 1 jan. 2006, I: Nutrient Cycling in Agroecosystems. 74, 1, s. 1-11 11 s.

CLIMAITE - CLIMAtE change effects on biological processes In Terrestrial Ecosystems

Beier, C., Mikkelsen, T. N., Ambus, Per Lennart, Pilegaard, K., Jonasson, S., Michelsen, A., Poulsen, H. R., Christensen, S., Primé, A., Schmidt, Inger Kappel, Gundersen, Per & Holmstrup, M., 2006. 1 s.

Climaite - a three factor climate change ecosystem manipulation study: set up and approaches for data analysis

N. Mikkelsen, T., Beier, C., Schmidt, Inger Kappel, Michelsen, Anders, Albert, K., Ambus, Per Lennart & Andersen, K. S., 2006.

Factors controlling regional differences in forest soil emission of nitrogen oxides (NO and N₂O)

Pilegaard, K., Skiba, U., Ambus, Per Lennart, Beier, C., Brueggemann, N., Butterbach-Bahl, K., Dick, J., Dorsey, J., Duyzer, J., Gallagher, M., Gasche, R., Horvath, L., Kitzler, B., Leip, A., Pihlatie, M. K., Rosenkranz, P., Seufert, G., Vesala, T., Westrate, H. & Zechmeister-Boltenstern, S., 2006, I: Biogeosciences. 3, 4, s. 651-661 11 s.

Sources of nitrous oxide emitted from European forest soils

Ambus, Per Lennart, Zechmeister-Boltenstern, S. & Butterbach-Bahl, K., 2006, I: Biogeosciences. 3, 2, s. 135-145 11 s.

Stabilization and plant uptake of N from ¹⁵N-labelled pea residue 16.5 years after incorporation in soil: short communication

Laberge, G., Ambus, Per Lennart, Hauggaard-Nielsen, H. & Jensen, E. S., 2006, I: Soil Biology & Biochemistry. 38, 7, s. 1998-2000 3 s.

The Biological Time Machine - Biological responses to multiple environmental and climatic changes: Environment and Stress, Ph.d. symposium at KVL October 2006

Albert, K., Ro-Poulsen, Helge, N. Mikkelsen, T., Michelsen, Anders, Beier, C., Jonasson, S. E., Ambus, Per Lennart, Schmidt, Inger Kappel, Holmstrup, M., Priemé, Anders & Christensen, Søren, 2006.

Plant-mediated nitrous oxide emissions from beech (*Fagus sylvatica*) leaves

Pihlatie, M., Ambus, Per Lennart, Rinne, J., Pilegaard, K. & Vesala, T., 1 okt. 2005, I: New Phytologist. 168, 1, s. 93-98 6 s.

Pan-European delta ¹³C values of air and organic matter from forest ecosystems

Hemming, D., Yakir, D., Ambus, P., Aurela, M., Besson, C., Black, K., Buchmann, N., Burllett, R., Cescatti, A., Clement, R., Gross, P., Granier, A., Grunwald, T., Havrankova, K., Janous, D., Janssens, IA., Knohl, A., Ostner, BK., Kowalski, A., Laurila, T. & 14 flere, Mata, C., Marcolla, B., Matteucci, G., Moncrieff, J., Moors, E., Osborne, B., Pereira, J., Pihlatie, M., Pilegaard, K., Ponti, F., Rosova, Z., Rossi, F., Scartazza, A. & Vesala, T., 1 jul. 2005, I: Global Change Biology. 11, 7, s. 1065-1093 29 s.

Oxidation of ¹³C-labeled methane in surface crusts of pig-and cattle slurry

Ambus, Per Lennart & Petersen, S., 1 jun. 2005, I: Isotopes in Environmental and Health Studies. 41, 2, s. 125-133 9 s.

Relationship between gross nitrogen cycling and nitrous oxide emission in grass-clover pasture

Ambus, Per Lennart, 1 jun. 2005, I: Nutrient Cycling in Agroecosystems. 72, 2, s. 189-199 11 s.

CLIMAITE – CLIMAE change effects on biological processes in terrestrial ecosystems

Schmidt, Inger Kappel, Beier, C., Mikkelsen, T. N., Ambus, Per Lennart, Pilegaard, K., Johansson, S., Michelsen, A., Poulsen, H. R., Christensen, S., Primé, A., Gundersen, Per & Holmstrup, M., 2005. 1 s.

Climaite: a biological time machine

Beier, C., Mikkelsen, T. N., Ambus, Per Lennart, Pilegaard, K., Jonasson, S., Michelsen, A., Poulsen, H. R., Christensen, S., Primé, A., Schmidt, Inger Kappel, Gundersen, Per & Holmstrup, M., 2005. 1 s.

Heath nitrogen cycling at manipulated 'CLIMAITE'

Andresen, L. C., Ambus, Per Lennart, Beier, C., Jonasson, S. E. & Michelsen, Anders, 2005, *Ikke angivet*. Institute of Nature Conservation, s. 52-52

Inventories of N₂O and NO emissions from European forest soils

Kesik, M., Ambus, Per Lennart, Baritz, R., Bruggemann, N., Butterbach-Bahl, K., Damm, M., Duyzer, J., Horvath, L., Kiese, R., Kitzler, B., Leip, A., Li, C., Pihlatie, M., Pilegaard, K., Seufert, G., Simpson, D., Skiba, U., Smiatek, G., Vesala, T. & Zechmeister-Boltenstern, S., 2005, *I: Biogeosciences*. 2, 4, s. 353-375 23 s.

Nitrous oxide emissions from a beech forest floor measured by eddy covariance and soil enclosure techniques

Pihlatie, M., Rinne, J., Ambus, Per Lennart, Pilegaard, K., Dorsey, J., Rannik, U., Markkanen, T., Launiainen, S. & Vesala, T., 2005, *I: Biogeosciences*. 2, 4, s. 377-387 11 s.

Biomass production, symbiotic nitrogen fixation and inorganic N use in dual and tri-component annual intercrops

Andersen, M., Hauggaard-Nielsen, H., Ambus, Per Lennart & Jensen, E., 1 okt. 2004, *I: Plant and Soil*. 266, 1-2, s. 273-287 15 s.

Freeze-thaw regime effects on carbon and nitrogen dynamics in sub-arctic heath tundra mesocosms

Grogan, P., Michelsen, Anders, Ambus, Per Lennart & Jonasson, S. E., 1 apr. 2004, *I: Soil Biology & Biochemistry*. 36, 4, s. 641-654 14 s.

Assessing the use of delta $\delta^{13}\text{C}$ natural abundance in separation of root and microbial respiration in a Danish beech (*Fagus sylvatica* L.) forest

Formanek, P. & Ambus, Per Lennart, 2004, *I: Rapid Communications in Mass Spectrometry*. 18, 8, s. 897-902 6 s.

Freeze-thaw regime effects on carbon and nitrogen dynamics in sub-arctic heath tundra mesocosms

Grogan, P., Michelsen, Anders, Ambus, Per Lennart & Jonasson, S. E., 2004, *I: Soil Biology & Biochemistry*. 36, s. 641-654

Photorespiration contributes to stomatal regulation and carbon isotope fractionation: a study with barley, potato and *Arabidopsis* plants deficient in glycine decarboxylase

Igamberdiev, A., Mikkelsen, T., Ambus, Per Lennart, Bauwe, H., Lea, P. & Gardestrom, P., 2004, *I: Photosynthesis Research*. 81, 2, s. 139-152 14 s.

Field measurements of atmosphere-biosphere interactions in a Danish beech forest

Pilegaard, K., Mikkelsen, T., Beier, Claus, Jensen, N., Ambus, Per Lennart & Ro-Poulsen, Helge, 10 dec. 2003, *I: Boreal Environment Research*. 8, 4, s. 315-333 19 s.

Redistribution of slurry components as influenced by injection method, soil, and slurry properties

Petersen, S., Nissen, H., Lund, I. & Ambus, Per Lennart, 1 nov. 2003, *I: Journal of Environmental Quality*. 32, 6, s. 2399-2409 11 s.

Biodegradation of chlorinated solvents in a water unsaturated topsoil

Borch, T., Ambus, Per Lennart, Laturnus, F., Svensmark, Bo & Grøn, C., 2003, *I: Chemosphere*. 51, s. 143-152

Field measurements of atmosphere-surface interactions in a Danish beech forest

Pilegaard, K., Mikkelsen, T. N., Beier, C., Jensen, N. O., Ambus, Per Lennart & Ro-Poulsen, Helge, 2003, *I: Boreal Environment Research*. 8, s. 315-333

Evaluating effects of sewage sludge and household compost on soil physical, chemical and microbiological properties
Debosz, K., Petersen, S., Kure, L. & Ambus, Per Lennart, 1 mar. 2002, I: Agriculture, Ecosystems & Environment. 19, 3, s. 237-248 12 s.

Natural carbon isotopes used to study methane consumption and production in soil
Ambus, Per Lennart, Andersen, B., Kemner, M., Sorensen, B. & Wille, J., 2002, I: Isotopes in Environmental and Health Studies. 38, 3, s. 149-157 9 s.

Temporal and spatial distribution of roots and competition for nitrogen in pea-barley intercrops: a field study employing ³²P technique
Hauggaard-Nielsen, H., Ambus, Per Lennart & Jensen, E., 1 sep. 2001, I: Plant and Soil. 236, 1, s. 63-74 12 s.

Influence of plant growth on degradation of linear alkylbenzene sulfonate in sludge-amended soil
Mortensen, G., Egsgaard, H., Ambus, Per Lennart, Jensen, E. & Gron, C., 1 jul. 2001, I: Journal of Environmental Quality. 30, 4, s. 1266-1270 5 s.

Interspecific competition, N use and interference with weeds in pea-barley intercropping
Hauggaard-Nielsen, H., Ambus, Per Lennart & Jensen, E., 20 apr. 2001, I: Field Crops Research. 70, 2, s. 101-109 9 s.

Assessment of CH₄ and N₂O fluxes in a Danish beech (*Fagus sylvatica*) forest and an adjacent N-fertilised barley (*Hordeum vulgare*) field: effects of sewage sludge amendments
Ambus, Per Lennart, Jensen, J. M., Priemé, Anders, Pilegaard, K. & Kjøller, A., 2001, I: Nutrient Cycling in Agroecosystems. 60, 1-3, s. 15-21 7 s.

Crop residue management strategies to reduce N-losses: Interaction with crop N supply
Ambus, Per Lennart & Jensen, E., 2001, I: Communications in Soil Science and Plant Analysis. 32, 7-8, s. 981-996 16 s.

Fluxes of NO₃⁻, NH₄⁺, NO, NO₂, and N₂O in an old danish beech forest
Beier, Claus, Rasmussen, L., Pilegaard, K., Ambus, Per Lennart, Mikkelsen, T. N., Jensen, N. O., Kjøller, Annelise Helene, Priemé, Anders & Ladekar, U. L., 2001, I: Water, Air, and Soil Pollution: Focus. 1, s. 187-195

Nitrous oxide and N-leaching losses from agricultural soil: Influence of crop residue particle size, quality and placement
Ambus, Per Lennart, Jensen, E. & Robertson, G., 2001, I: Phytion (Austria). 41, 3, s. 7-15 9 s.

Plant uptake of LAS and DEHP from sludge amended soil
Grøn, C., Laturnus, F., Mortensen, G. K., Egsgaard, H., Samsøe-Petersen, L., Ambus, Per Lennart & Jensen, E. S., 2001, ACS symposium series. Lipnick, R. L., Hermens, J. L. M., Jones, K. C. & Muir, D. C. G. (red.). 772 udg. American Chemical Society, s. 99-111 13 s.

Plant uptake and soil degradation of organic contaminants in sludge amended soil
Gron, C., Laturnus, F., Mortensen, G., Egsgaard, H., Bennetzen, S., Ambus, Per Lennart & Jensen, E. S., 21 mar. 1999, I: ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY. 217, 1, s. U716

Fluxes of CH₄ and N₂O in aspen stands grown under ambient and twice-ambient CO₂
Ambus, Per Lennart & Robertson, G., 1999, I: Plant and Soil. 209, 1, s. 1-8 8 s.

Nitrous oxide production by denitrification and nitrification in temperate forest, grassland and agricultural soils
Ambus, Per Lennart, 1 sep. 1998, I: European Journal of Soil Science. 49, 3, s. 495-502 8 s.

Automated near-continuous measurement of carbon dioxide and nitrous oxide fluxes from soil
Ambus, Per Lennart & Robertson, G., 1 mar. 1998, I: Soil Science Society of America Journal. 62, 2, s. 394-400 7 s.

Nitrogen mineralization and denitrification as influenced by crop residue particle size

Ambus, Per Lennart & Jensen, E., 1 dec. 1997, I: Plant and Soil. 197, 2, s. 261-270 10 s.

Nitrous oxide emission from an agricultural field: Comparison between measurements by flux chamber and micrometeorological techniques

Christensen, Søren, Ambus, Per Lennart, Arah, J., Clayton, H., Galle, B., Griffith, D., Hargreaves, K., Klemmedtsson, L., Lind, A., Maag, M., Scott, A., Skiba, U., Smith, K., Welling, M. & Wienhold, F., 1 dec. 1996, I: Atmospheric Environment. 30, 24, s. 4183-4190 8 s.

Production of N₂O in soil during decomposition of dead yeast cells with different spatial distributions

Ambus, Per Lennart, 1 apr. 1996, I: Plant and Soil. 181, 1, s. 7-12 6 s.

Spatial and Seasonal Nitrous Oxide and Methane Fluxes in Danish Forest-, Grassland-, and Agroecosystems

Ambus, Per Lennart & Christensen, Søren, 1 sep. 1995, I: Journal of Environmental Quality. 24, 5, s. 993-1001 9 s.

Measurement of N₂O emission from a fertilized grassland: An analysis of spatial variability

Ambus, Per Lennart & Christensen, Søren, 20 aug. 1994, I: Journal of Geophysical Research: Atmospheres. 99, D8, s. 16549-16555 7 s.

Micrometeorological and chamber methods for measurement of nitrous oxide fluxes between soils and the atmosphere: Overview and conclusions

SMITH, K., CLAYTON, H., ARAH, J., Christensen, Søren, Ambus, Per Lennart, FOWLER, D., HARGREAVES, K., SKIBA, U., HARRIS, G., WIENHOLD, F., KLEMEDTSSON, L. & GALLE, B., 20 aug. 1994, I: Journal of Geophysical Research: Atmospheres. 99, D8, s. 16541-16548 8 s.

Control of denitrification enzyme activity in a streamside soil

Ambus, Per Lennart, 1 apr. 1993, I: F E M S Microbiology Reviews. 102, 3-4, s. 225-234 10 s.

Similar N₂O flux from soil measured with different chamber techniques

Ambus, Per Lennart, CLAYTON, H., ARAH, J., SMITH, K. & Christensen, Søren, 1 jan. 1993, I: ATMOSPHERIC ENVIRONMENT PART A-GENERAL TOPICS. 27, 1, s. 121-123 3 s.

Denitrification variability and control in a riparian fen irrigated with agricultural drainage water

Ambus, Per Lennart & Christensen, Søren, 1993, I: Soil Biology & Biochemistry. 25, 7, s. 915-923 9 s.

Nitrogen turnover rates in a riparian fen determined by ¹⁵N dilution

Ambus, Per Lennart, MOSIER, A. & Christensen, Søren, 1 dec. 1992, I: Biology and Fertility of Soils. 14, 4, s. 230-236 7 s.

Comparison of Denitrification in Two Riparian Soils

Ambus, Per Lennart & Lowrance, R., 1 jul. 1991, I: Soil Science Society of America Journal. 55, 4, s. 994-997 4 s.