

## Papers published Paulo Artaxo

year	Up to 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Papers	227	20	12	22	27	30	24	27	24	23	17	32

(\*) Total number of publications up to now: **471 trabalhos**.

Google Scholar: 62.076 citations, 1152 publications, h-index: 115. Google Scholar: <http://scholar.google.com/citations?user=uC8sffYAAAAJ&hl=en>

Research Gate: [https://www.researchgate.net/profile/Paulo\\_Artaxo](https://www.researchgate.net/profile/Paulo_Artaxo), 51.319 citations. Research Gate h-index: 113.

Web of Sciences ResearchID: <https://www.webofscience.com/wos/author/record/1086283>. 482 papers, citations: 35.838, h-index: 90. ResearcherID Web of Science: E-8874-2010.

Scopus database: <http://www.scopus.com/authid/detail.url?authorId=7004864963>. Scopus Author ID: 7004864963. Total Citations: 30.024. Total papers 389. Índice H: 90.

ORCID ID: [orcid.org/0000-0001-7754-3036](http://orcid.org/0000-0001-7754-3036). Web: <http://orcid.org/0000-0001-7754-3036>. Total of 648 papers.

Loop profile: 107243: 27.813 citations, 531 publications. <https://loop.frontiersin.org/people/107243/overview>

Brazilian Curriculum Vitae CNPq Lattes System: <http://lattes.cnpq.br/3977660018939385>.

## Papers published in Science and Nature

Publication of 27 papers in Science and Nature Family of journals.

- 1) **Artaxo, P.**, Working together for Amazonia. Editorial *Science Magazine*, Vol. 363, Issue 6425, doi: 10.1126/science.aaw6986, January 2019.
- 2) **Artaxo, P.**, Break down boundaries in climate research. World View Section, *Nature* 481, 239, 2012.
- 3) Davidson, E., A., Alessandro C. A., **P. Artaxo**, J. K. Balch, I. F. Brown, M. C. Bustamante, M. T. Coe, R. S. DeFries, M. Keller, M. Longo, J. W. Munger, W. Schroeder, B. S. Soares-Filho, C. M. Souza Jr., S. C. Wofsy. The Amazon Basin in Transition. *Nature*, 481, 321-328, 2012.
- 4) Andreae, M.O., D. Rosenfeld, **P. Artaxo**, A. A. Costa, G. P. Frank, K. M. Longo, and M. A. F. Silva-Dias, Smoking rain clouds over the Amazon. *Science*, Vol. 303, (5662) 1337-1342, 2004.
- 5) Clayes, M., B. Graham, G. Vas, W. Wang, R. Vermeylen, V. Pashynska, J. Cafmeyer, P. Guyon, M. O. Andreae, **P. Artaxo**, W. Maenhaut. Formation of secondary organic aerosols through photo-oxidation of isoprene. *Science*, Vol. 303, 1173 - 1176, 2004

- 6) Jiwen Fan, **P. Artaxo**, et al., Substantial Convection and Precipitation Enhancements by Ultrafine Aerosol Particles. *Science*, Vol. 359, Issue 6374, pp 411-418, DOI: 10.1126/science.aan8461, 2018.
- 7) Rahman. A. A., **P. Artaxo**. A. Asrat, A. Parker. Developing countries must lead on solar geoengineering research. *Nature*, Vol. 556, Pg. 22-24, 2018
- 8) Yingjun Liu, **P. Artaxo**, et al., Isoprene photo-oxidation products quantify the effect of pollution on hydroxyl radicals over Amazonia. *Sciences Advances*, Vol. 4, No. 4, DOI: 10.1126/sciadv.aar2547, 2018.
- 9) Wang, J., **P. Artaxo**, et al., Vertical transport during rainfall sustains aerosol concentration in Amazon boundary Layer. *Nature*, 539, 416-419, doi:10.1038/nature19819, 2016.
- 10) Scott, C., **P. Artaxo**, et al., Impact on short-lived climate forcers increases projected warming due to deforestation. *Nature Communications*, Vol. 9, 157, doi:10.1038/s41467-017-02412-4, 2018.
- 11) Bateman, A. P., **P. Artaxo**, et al., Submicron Particulate Matter is Primarily in Liquid Form over Amazon Rain Forest. *Nature Geosciences*, 9, 34-37, doi:10.1038/ngeo2599, 2015.
- 12) Reddington, C. L., E.W. Butt, D. A. Ridley, **P. Artaxo**, W. T. Morgan, H. Coe, and D. V. Spracklen. Air quality and human health improvements from reductions in deforestation-related fire in Brazil, *Nature Geoscience* 8, 768–771 (2015) doi:10.1038/ngeo2535 2015.
- 13) Pöhlker, C., **P. Artaxo**, et al., Biogenic potassium salt particles as seeds for secondary organic aerosol in the Amazon. *Science*, 337, 1075-1078, doi: 10.1126/science.1223264, 2012.
- 14) Bowman, **P. Artaxo**, et al., Fire in the Earth System. *Science*, 324, 481-484, DOI: 10.1126/science.1163886, 2009.
- 15) Pöschl, U., **P. Artaxo**, et al., Rainforest aerosols as biogenic nuclei of clouds and precipitation in the Amazon. *Science*, 329, 1513-1516, doi: 10.1126/science.1191056, 2010.
- 16) Prenni, A. J., **P. Artaxo**, et al., Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin. *Nature Geosciences*, 2, 402-405, 2009.
- 17) Chambers, J. Q., and **P. Artaxo**. Deforestation size influences rainfall. *Nature Climate Change*. Vol. 7, 175-176 (2017) doi:10.1038/nclimate3238.
- 18) Dasa Gu, **P. Artaxo**, et al., Airborne observations reveal elevational gradient in tropical forest isoprene emissions. *Nature Comm.*, 8, 15541 doi: 10.1038/ncomms15541, 2017.
- 19) Salvo, A., **P. Artaxo**, et al., Reduced ultrafine particle levels in São Paulo's atmosphere during shifts from gasoline to ethanol use. *Nature Communications*, 8, 77-93. DOI: 10.1038/s41467-017-00041-5.
- 20) Alves, N. O., A. T. Vessoni, A. Quinet, R. Fortunato, G. S. Kajitani, M. S. Peixoto, S. Hacon, **P. Artaxo**, P. Saldiva, C. Menck, and S. R. B. de Medeiros. Biomass burning in the Amazon region causes DNA damage and cell death in human lung cells. *Nature Scientific Reports*, Vol. 7, Article number 10937, 2017. DOI:10.1038/s41598-017-11024-3.
- 21) Scott, C. E., **P. Artaxo**, et al., Impact on short-lived climate forcers increases projected warming due to deforestation. *Nature Communications*, Vol. 9, 157, doi:10.1038/s41467-017-02412-4, 2018.

- 22) Brito, J., **P. Artaxo**, et al., Disentangling vehicular emission impact on urban air pollution using ethanol as a tracer. *Scientific Reports*, 8:10679, DOI:10.1038/s41598-018-29138-7. 2018.
- 23) Bourtsoukidis, E., **P. Artaxo**, et al., Strong sesquiterpene emissions from Amazonian soils. *Nature Communications*, 9, 2226, DOI: 10.1038/s41467-018-04658-y. 2018.
- 24) S. China, P. Artaxo, et al., Fungal spores as a source of sodium salt particles in the Amazon basin. *Nature Communications*, vol. 9, Article number: 4793, <https://doi.org/10.1038/s41467-018-07066-4>, 2018.
- 25) Shrivastava, M., P. Artaxo, et al., Urban pollution greatly enhances the formation of natural aerosols over the Amazon rainforest. *Nature Communications*, Vol. 10, 1, 1046, <https://doi.org/10.1038/s41467-019-08909-4>, 2019.
- 26) William T. Morgan, Eoghan Darbyshire, Dominick V. Spracklen, Paulo Artaxo & Hugh Coe. Non-deforestation drivers of fires are increasingly important sources of aerosol and carbon dioxide emissions across Amazonia. *Scientific Reports Nature* 9:16975 <https://doi.org/10.1038/s41598-019-53112-6>, 2019.
- 27) de Oliveira, G., Chen, J.M., Stark, S.C., Berenger, E., Moutinho, P., Artaxo, P., Anderson, L.O., Aragão, L.E.O.C. Smoke pollution's impacts in Amazonia. *Science*, Vol. 369, issue 6504, 634-635, DOI: 10.1126/science.abd5942, 2020.

## Papers Published

- 1) Orsini, C.; Artaxo, P.; Tabacniks, M., "Preliminary data on atmospheric aerosols of the Amazon Basin," *Atmospheric Environment*, 16, 9, 2177-2181, DOI: 10.1016/0004-6981(82)90287-6, [https://doi.org/10.1016/0004-6981\(82\)90287-6](https://doi.org/10.1016/0004-6981(82)90287-6), 1982.
- 2) Artaxo, P.; Orsini, C.; Tabacniks, M.; Bouéres, L.; Leslie, A., Characteristics of natural and brushfire atmospheric aerosols of the Amazon Basin, *Anais da Academia Brasileira de Ciências*, 54, 2, 299-314, 1982.
- 3) Artaxo, P.; Orsini, C.; Bouéres, L.; Leslie, A., "Aspectos estruturais do aerossol atmosférico da Bacia Amazônica", *Acta Amazônica*, 12, 3, 39-46, <http://dx.doi.org/10.1590/1809-43921982123S039>, 1982.
- 4) Rodrigues, D.; Artaxo, P., "Aspectos ecológicos da energia nuclear", in: *Física para ciências biológicas e biomédicas*, Okuno, E.; Caldas, I.; Robilotta, C., Harper & Row, São Paulo, 196-198, 1982.
- 5) Orsini, C.; Artaxo, P.; Tabacniks, M., The São Paulo PIXE system and its use on a national monitoring air quality program, *Nuclear Instruments & Methods in Physics Research*, 231, 462-465, doi: 10.1016/0168-583X(84)90418-X, 1984.
- 6) Orsini, C.; Artaxo, P.; Tabacniks, M., "Trace elements in the urban aerosol of São Paulo", *Ciência e Cultura*, 36, 5, 823-827, 1984.
- 7) Orsini, C.; Tabacniks, M.; Artaxo, P.; Andrade, F.; Kerr, A., "Characteristics of fine and coarse particles of natural and urban aerosols of Brazil," *Atmospheric Environment*, 20, 11, 2259-2269, <http://www.sciencedirect.com/science/article/pii/0004698186903161>, 1986.

- 8) Tabacniks, M.; Orsini, C.; Artaxo, P., "PIXE analysis for air pollution source apportionment in urban areas of Brazil," *Nuclear Instruments & Methods in Physics Research*, B22, 315-318, 1987.
  - 9) Artaxo, P.; Orsini, C.; "PIXE and receptor models applied to remote aerosol source apportionment in Brazil," *Nuclear Instruments & Methods in Physics Research*, B22, 259-263, 1987.
  - 10) Artaxo, P.; Storms, H.; Bruynseels, F.; Van Grieken, R.; Maenhaut, W. - "Composition and sources of aerosols from the Amazon Basin - *Journal of Geophysical Research*, 93, 1605-1615, doi:10.1029/JD093iD02p01605, <http://onlinelibrary.wiley.com/doi/10.1029/JD093iD02p01605/full>, 1988.
  - 11) Van Grieken, R.; Artaxo, P.; Bernard, P.; Bruynseels F.; Otten, Ph.; Storms, H.; Xhoffer, Ch.- "Characterization of individual environmental particles" - in *Chemistry for protection of the environment, Studies in Environmental Sciences 34*, edited by L. Pawlowski, E. Mentasti, W.J. Lacy, C. Sarzanini - Elsevier, Amsterdam, DOI: 10.1016/S0166-1116(08)71299-8 1988.
  - 12) Artaxo, P.; Andrade, F.; Setzer, A.; A composição elementar e as fontes de aerossóis na atmosfera Antártica, in: *Ciências Atmosféricas e espaciais na Antártica*, editor, E. Pereira, V. Kirchhoff, Publicação INPE, 117-129, 1989.
  - 13) Artaxo, P.; Maenhaut, W.; Storms, H.; Van Grieken, R.; "Aerosol characteristics and sources for the Amazon basin during the wet season," *Journal of Geophysical Research*, 95, D10, 16971-16985, doi:10.1029/JD095iD10p16971, <http://onlinelibrary.wiley.com/doi/10.1029/JD095iD10p16971/full>, 1990.
  - 14) Artaxo, P., F. Andrade, W. Maenhaut, Trace Elements and receptor modeling of aerosols in the Antarctica peninsula. *Nuclear Instruments and Methods in Physics Research*, B49, 383-387, 1990.
  - 15) Artaxo, P., W. Maenhaut, Trace Element concentrations and size distribution of biogenic aerosols from the Amazon basin during the wet season. *Nuclear Instruments and Methods in Physics Research*, B49, 366-371, 1990.
  - 16) Garstang, M.; Swap, R.; Greco, S.; Harriss, R.; Talbot, R.; Shipham, M.; Connors, V.; Artaxo, P.- "The Amazon Boundary Layer Experiment: A Meteorological perspective"; *Bulletin of the American Meteorological Society*, 71, 19-32, <https://journals.ametsoc.org/doi/abs/10.1175/1520-0477%281990%29071%3C0019%3ATABLEA%3E2.0.CO%3B2>, 1990.
  - 17) Wouters, L., P. Artaxo, R. Van Grieken, Laser microprobe mass analysis of individual Antarctic aerosol particles. *International Journal of Environmental Analytical Chemistry*, 38, 427-438, <https://doi.org/10.1080/03067319008026946>, <https://www.tandfonline.com/doi/abs/10.1080/03067319008026946>, 1990.
  - 18) Rojas, C.M.; P. Artaxo, R. Van Grieken, Aerosols in Santiago de Chile: a study using receptor modeling with X-Ray Fluorescence and single-particle analysis. *Atmospheric Environment*,
- 
-

- 24B, 2, 227-241, <http://www.sciencedirect.com/science/article/pii/095712729090028S> , 1990.
- 19) Talbot, R.W.; M.O. Andreae, H. Berresheim, P. Artaxo, M. Garstang, R.C. Harriss, K.M. Beecher, S.M. Li, "Aerosol chemistry during the wet season in central Amazonia: the influence of long-range transport," *Journal of Geophysical Research*, 95, D10, 16955-16969, doi:10.1029/JD095iD10p16955, <http://onlinelibrary.wiley.com/doi/10.1029/JD095iD10p16955/full>, 1990.
  - 20) Greco, S., R. Swap, M. Garstang, S. Ulanski, M. Shipham, R.C. Harriss, R. Talbot, M.O. Andreae, P. Artaxo, Rainfall and surface kinematic conditions over central Amazonia during ABLE-2B. *Journal of Geophysical Research*, 95, D10, 17001-17014, doi:10.1029/JD095iD10p17001, <http://onlinelibrary.wiley.com/doi/10.1029/JD095iD10p17001/full> , 1990.
  - 21) Van Grieken, R., P. Artaxo, P. Bernard, L. Leysen, Ph. Otten, H. Storms, A. Van Put, L. Wouters, Ch. Xhoffer, Micro-analysis of individual environmental particles, *Chemia Analytyczna*, 35, 75-89, 1990.
  - 22) Spektor, D., V.A. Hofmeister, P. Artaxo, J.A.P. Braga, F. Echalar, D.P. Nogueira, C.P. Hayes, G. Thurston, M. Lippmann, "Effects of heavy industrial pollution on respiratory function in the children of Cubatão, Brazil: A preliminary report. *Environmental Health Perspectives*, 94, 51-54, 1991.
  - 23) Cachier, H., Gaudichet, A., Artaxo, P., Bergametti, Chatenet, B., G., Lecloarec, M.F., Liousse, C., Masclet, P., Quisefit J.P., e Yoboué, V., Aerosol measurements during biomass burning in tropical Africa savannas. In: "CEC Cost. Biatex Joint Meeting Report", editors: Angeletti, G., Beilke, S., Slanina, J., Delft, Holanda, 91-98, 1991.
  - 24) Van Grieken, R., C. Xhoffer, L. Wouters, P. Artaxo, Micro-analysis techniques for characterizing individual environmental particles. *Analytical Sciences*, 7, 1117-1122, 1991.
  - 25) Artaxo, P., M. L. C. Rabello, W. Maenhaut, R. Van Grieken, Trace elements and individual particle analysis of aerosol particles from the Antarctic peninsula, *Tellus*, 44B, 318-334, 1992. <https://doi.org/10.1034/j.1600-0889.1992.00010.x>.
  - 26) Artaxo, P., M.L.C. Rabello, F. Watt, G. Grime, E. Swietlicki, J. Knox, H-C. Hansson, A new technique to measure trace elements in individual aerosol particles through scanning proton microprobe. *Journal of Aerosol Science*, 23, 373-376, <http://www.sciencedirect.com/science/article/pii/002185029290427W>, [https://doi.org/10.1016/0021-8502\(92\)90427-W](https://doi.org/10.1016/0021-8502(92)90427-W), 1992.
  - 27) Bingemer, H.G., M.O. Andreae, T.W. Andreae, P. Artaxo, G. Helas, N. Mihalopoulos, B.C. Nguyen, "Sulfur gases and aerosols in and above the equatorial African rainforest. *Journal of Geophysical Research*, Vol. 97, No. D6, 6207-6217, doi:10.1029/91JD01112, <http://onlinelibrary.wiley.com/doi/10.1029/91JD01112/full> , 1992.
  - 28) Artaxo, P., M.L.C. Rabello, F. Watt, G. Grime, E. Swietlick, Nuclear microprobe analysis and source apportionment of individual aerosol particles. *Nuclear Instruments and Methods in Physics Research B75*, pp 521-525, 1993.
- 
-

- 
- 29) Artaxo, P., F. Gerab, M.L.C. Rabello, Elemental composition of aerosol particles from two background monitoring stations in the Amazon Basin, *Nuclear Instruments and Methods in Physics Research*, B75, 277-281, 1993.
- 30) Artaxo, P., M. Yamasoe, J.V. Martins, S. Kocinas, S. Carvalho, W. Maenhaut, Case study of atmospheric measurements in Brazil: Aerosol emissions from Amazon Basin Biomass Burning, in Crutzen, P.J., and J.-G. Goldammer (eds.) 1993. *Fire in the Environment: T Vegetation fires' ecological, atmospheric, and climatic importance Dahlem Konferenzen ES13.*, 139-158, Chichester: John Wiley & Sons.
- 31) Wouters, L., S. Hagedoren, I. Dierck, P. Artaxo, R. Van Grieken, Laser Microprobe Mass Analysis of Amazon Basin Aerosols, *Atmospheric Environment*, 27, 5, 661-668, <http://www.sciencedirect.com/science/article/pii/096016869390184Z>, [https://doi.org/10.1016/0960-1686\(93\)90184-Z](https://doi.org/10.1016/0960-1686(93)90184-Z), 1993.
- 32) Fishman, J. Logan, P. Artaxo, H. Cachier, G.R. Carmichael, R. Dickinson, M.A. Fosberg, G. Helas, M. Kanakidou, J.P. Lacaux, F. Rohrer, What is the impact of fires on atmospheric chemistry, climate, and biogeochemical cycles? in: Crutzen, P.J., and J.-G. Goldammer (eds.) 1993. *Fire in the Environment: The ecological, atmospheric, and climatic importance of vegetation fires. Dahlem Konferenzen ES13.*, 345-358, Chichester: John Wiley & Sons.
- 33) Artaxo, P., F. Gerab, M. A. Yamasoe, J. V. Martins, Fine Mode Aerosol Composition in Three Long Term Atmospheric Monitoring Sampling Stations in the Amazon Basin. *Journal of Geophysical Research*, 99, D11, Pg. 22.857-22.868, doi:10.1029/94JD01023, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/94JD01023> 1994.
- 34) Artaxo, P., H-C Hansson, Size distribution of biogenic aerosol particles from the Amazon basin. *Atmospheric Environment*, 29, 3, 393-402, <http://www.sciencedirect.com/science/article/pii/135223109400178N> , 1995.
- 35) Gaudichet, A., F. Echalar, B. Chatenet, J.P. Quisefit, G. Malingre, H. Cachier, P. Buat Menard, P. Artaxo, W. Maenhaut, Trace elements in tropical African savanna biomass burning aerosols. *Journal of Atmospheric Chemistry*, 22, 19-39, 1995.
- 36) Echalar, F., A. Gaudichet, H. Cachier, P. Artaxo, Aerosol emissions by tropical forest and savanna biomass burning characteristic trace elements and fluxes. *Geophysical Research Letters*, 22, 3039-3042, doi:10.1029/95GL03170, <http://onlinelibrary.wiley.com/doi/10.1029/95GL03170/full> , 1995.
- 37) Hacon, S., P. Artaxo, F. Gerab, M.A. Yamasoe, R. Calixto, L.F. Conti, D. Lacerda, Atmospheric mercury and trace elements in the region of Alta Floresta in the Amazon basin. *Water Air and Soil Pollution*, 80, no. 1- 4, 273-283, 1995.
- 38) Artaxo, P., F. Gerab, M. A. Yamasoe, J. V. Martins, The chemistry of atmospheric aerosol particles in the Amazon Basin. In: "Chemistry of the Amazon: Biodiversity, natural products and environmental concerns," American Chemical Society Books Series, ACS Symposium series 588, ed. Peter R. Seidl, Otto R. Gottlieb, Maria A. C. Kaplan. 265-280, 1995.
- 39) Pereira, E. B., A. W. Setzer, F. Gerab, P. Artaxo, M. C. Pereira, G. Monroe, Airborne measurements of biomass burning aerosols in Brazil related to the TRACE-A experiment.
-

- Journal of Geophysical Research, 101, No. D19, 23.983-23.992, doi:10.1029/96JD00098, <http://onlinelibrary.wiley.com/doi/10.1029/96JD00098/full> , 1996.
- 40) Swap, R., M. Garstang, S. Macko, P. Tyson, W. Maenhaut, P. Artaxo, P. Kallberg, R. Talbot, The long-range transport of southern African aerosols to the tropical South Atlantic. *Journal of Geophysical Research*, 101, D9, 23777-23792, doi:10.1029/95JD01049, <http://onlinelibrary.wiley.com/doi/10.1029/95JD01049/abstract>, 1996.
- 41) Cruvinel, P., S. Crestana, P. Artaxo, J. V. Martins, M. J. A. Armelin, Studying the spatial variability of Cr in agricultural field using both Particle Induced X-ray Emission (PIXE) and Instrumental Neutron Activation Analysis (INAA) technique. *Nuclear Instruments and Methods in Physics Research*, B109/110, 247-251, 1996.
- 42) Maenhaut, W., G. Koppen, P. Artaxo, Long term atmospheric aerosol study in Cuiabá, Brazil: Multielemental composition, sources, and impact of biomass burning. In: "Biomass Burning and Global Change", editado por Joel Levine, Publicado pela MIT Press, ISBN 0-262-12201, page. 637-652, 1996.
- 43) Martins, J.V., P. Artaxo, P. V. Hobbs, C. Lioussé, H. Cachier, Y. Kaufman, A. Plana-Fattori, Particle size distributions, elemental composition, carbon measurements and optical properties of smoke from biomass burning in the Pacific Northwest of the United States. In: "Biomass Burning and Global Change", editado por Joel Levine, Publicado pela MIT Press, ISBN 0-262-12201, page. 716-732, 1996.
- 44) Feitas, S.R., K. M. Longo, M. A. F. Silva Dias, P. Artaxo, Numerical modelling of air mass trajectories from the biomass burning areas of the Amazon basin. *Anais da Academia Brasileira de Ciências*, 68, page. 193-206. 1997.
- 45) Correia, A. L., P. Artaxo, W. Maenhaut, Long term monitoring of atmospheric aerosols in the Antarctic peninsula. *Anais da Academia Brasileira de Ciências*, 68, page. 207-222. 1997.
- 46) Hopke, P.K., Y. Xie, T. Raunemaa, S. Biegalski, S. Landsberger, W. Maenhaut, P. Artaxo, D. Cohen, Characterization of the Gent Stacked Filter Unit PM10 sampler. *Aerosol Science and Technology*, 27, 726-735, <https://doi.org/10.1080/02786829708965507>, <https://www.tandfonline.com/doi/abs/10.1080/02786829708965507>, 1997.
- 47) Artaxo, P., F. Gerab, M.A. Yamasoe, Long term atmospheric aerosol characterization in the Amazon basin. In: *Environmental Geochemistry in the Tropics*, editado por J. Wasserman, E.V. Silva Filho, R. Villas Boas, Springer Verlag. Pag. 227-250. Abril de 1997.
- 48) Kaufman, Y., P. V. Hobbs, V.W. J. H. Kirchhoff, P. Artaxo, L. Remer, B.N. Holben, M. D. King, E. M. Prins, D. E. Ward, K. M. Longo, L. F. Mattos, C. A. Nobre, J. Spinhirne, A. M. Thompson, J. F. Gleason, S. A. Christopher, The Smoke Cloud and Radiation Experiment in Brazil (SCAR-B). *Journal of Geophysical Research*, 103, D24, 31783-31808, doi: 10.1029/98JD02281, <http://onlinelibrary.wiley.com/doi/10.1029/98JD02281/abstract>, 1998.
- 49) Artaxo, P. Hobbs, Y. Kaufman, V. Kirchhoff, Preface for the SCAR-B Experiment. *Journal of Geophysical Research*, 103, D24, 31780-31781, doi: 10.1029/98JD02814, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/98JD02281>, 1998.
- 
-

- 
- 50) Artaxo, P., E. T. Fernandes, J. V. Martins, M. A. Yamasoe, P. V. Hobbs, W. Maenhaut, K. M. Longo, A. Castanho. Large Scale Aerosol Source Apportionment in Amazonia. *Journal of Geophysical Research*, 103, D24, 31837-31848. doi: 10.1029/98JD02346, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/98JD02346>, 1998.
  - 51) Echalar, F., P. Artaxo, J. Martins, M. Yamasoe, F. Gerab, W. Maenhaut, and B. Holben, Long-term monitoring of atmospheric aerosols in the Amazon Basin: Source identification and apportionment. *Journal of Geophysical Research*, 103, D24, 31849-31864, doi: 10.1029/98JD01749, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/98JD01749>, 1998.
  - 52) Martins, J. V., P. V. Hobbs, R. E. Weiss, P. Artaxo, Morphology and structure of smoke particles from biomass burning in Brazil. *Journal of Geophysical Research*, 103, D24, 32041-32050, doi: 10.1029/98JD02593, 1998.
  - 53) Martins, J. V., P. Artaxo, C. Liousse, J. S. Reid, P. V. Hobbs, Y. J. Kaufman, Effects of black carbon content, particle size and mixing on light absorption by aerosol particles from biomass burning in Brazil. *Journal of Geophysical Research*, Vol. 103, D24, 32041-32050, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/98JD02593>, 1998.
  - 54) Yamasoe, M. A., Y. J. Kaufman, O. Dubovik, L. A. Remer, B. N. Holben, P. Artaxo, Retrieval of the real part of the refractive index of aerosols from sun/sky radiometers during SCAR-B. *Journal of Geophysical Research*, Vol. 103, D24, 31893-31902, doi:10.1029/98JD01211, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/98JD01211>, 1998.
  - 55) Gerab, F., P. Artaxo, E. Swietlicki, J. Pallon, Scanning proton microprobe applied to analysis of individual particles from the Amazon Basin. *Nuclear Instruments and Methods B*, 136, 318-323, [https://doi.org/10.1016/S0168-583X\(97\)00856-2](https://doi.org/10.1016/S0168-583X(97)00856-2), 1998.
  - 56) Gerab, F., P. Artaxo, R. Gillet, G. Ayers, PIXE, PIGE and Ion Chromatography of aerosol particles from Northeast Amazon basin. *Nuclear Instruments and Methods B*, 136, 955-960, [https://doi.org/10.1016/S0168-583X\(97\)00887-2](https://doi.org/10.1016/S0168-583X(97)00887-2), 1998.
  - 57) Vasconcellos P. D, Artaxo PE, Ciccioli P, Cecinato A, Brancaleoni E, Frattoni M. Chemical composition of aerosol collected in the Amazon Forest. *Química Nova*, Vol. 21, Issue: 4 Pages: 385-393. 1998.
  - 58) Correia, A. L., P. Artaxo, W. Maenhaut, Atmospheric aerosols in the Antarctic peninsula. *Annals of Glaciology*, 27, 560-564, <https://doi.org/10.3189/1998AoG27-1-560-564>, 1998.
  - 59) Vanderlei Martins, J., Peter V. Hobbs, Ray E. Weiss, Paulo Artaxo. Sphericity and morphology of smoke particles from biomass burning in Brazil. *Journal of Geophysical Research*, Vol. 103, NO. D24, PP. 32,051-32,057, doi:10.1029/98JD01153, 1998.
  - 60) Artaxo, P., A. D. Castanho, M. A. Yamasoe, J. V. Martins, K. M. Longo, Analysis of atmospheric aerosols by PIXE: the importance of real time and complementary measurements. *Nuclear Instruments and Methods in Physics Research B*, 150, 312-321, [https://doi.org/10.1016/S0168-583X\(98\)01007-6](https://doi.org/10.1016/S0168-583X(98)01007-6), 1999.
-



- 61) Artaxo, P., P. Oyola, R. Martinez, Aerosol composition and source apportionment in Santiago de Chile. *Nuclear Instruments and Methods in Physics Research B*, 150, 409-416, [https://doi.org/10.1016/S0168-583X\(98\)01078-7](https://doi.org/10.1016/S0168-583X(98)01078-7), 1999.
  - 62) Fahey, D. W., Schuman, U., Ackerman, S., Artaxo, P., Boucher, O., Danilin, M.Y., Karcher, B., Minnis, P., Nakajima, T., Toon, O. B. Aviation-produced aerosols, and cloudiness, in: IPCC (Intergovernmental Panel on Climate Change) special report on aviation and the global atmosphere. Edited by J. Penner, D. Lister, D. J. Griggs, D. J. Dokken, M. McFarland, pg. 65-120, Cambridge University Press, Cambridge, United Kingdom, 1999.
  - 63) Longo, K. M., A. M. Thompson, V. W. J. H. Kirchhoff, L. Remer, S. R. Freitas, M. A. F. Silva Dias, P. Artaxo, W. Hart, J. D. Spinhirne, M. A. Yamasoe, Correlation between smoke and tropospheric ozone concentrations in Cuiabá during Smoke Clouds and radiation – Brazil (SCAR-B). *Journal of Geophysical Research*, 104, D10, 12,113-12,130, doi: 10.1029/1999JD900044, 1999.
  - 64) Martins, J. V., P. Artaxo, E. S. B. Ferraz, M. H. Tabacniks, Chronological studies of tree-rings from the Amazon Basin using thick target PIXE and proton backscattering analysis. *Nuclear Instruments and Methods in Physics Research B*, 150, 240-247, [https://doi.org/10.1016/S0168-583X\(98\)01035-0](https://doi.org/10.1016/S0168-583X(98)01035-0), 1999.
  - 65) Gatti, L. V., A. A. Mozeto, P. Artaxo, Trace elements in lake sediments measured by the PIXE technique. *Nuclear Instruments and Methods in Physics Research B*, 150, 298-305, [https://doi.org/10.1016/S0168-583X\(98\)01079-9](https://doi.org/10.1016/S0168-583X(98)01079-9). 1999.
  - 66) Cruvinel, P., R. G. Flocchini, P. Artaxo, S. Crestana, P.S.P. Hermann Junior, Elemental Analysis of agricultural soil samples by particle-induced X-ray emission (PIXE) technique. *Nuclear Instruments and Methods in Physics Research B*, 150, 478-483, [https://doi.org/10.1016/S0168-583X\(98\)01017-9](https://doi.org/10.1016/S0168-583X(98)01017-9), 1999.
  - 67) Macchione, M., A. P. Oliveira, C. T. Gallafrio, F. P. Muchão, M. T. Obara, E. T. Guimarães, P. Artaxo, M. King, G. Lorenzi-Filho, V. C. B. Junqueira, P. H. N. Saldiva, Acute effects of inhalable particles on the frog palate mucociliary epithelium. *Environmental Health Perspectives*, 107, (10), 829-833, DOI: 10.1289/ehp.99107829, 1999.
  - 68) Zhou, J., E. Swietlicki, H. C. Hansson, P. Artaxo, Aerosol particle size distribution and hygroscopic growth in the Amazonian rain forest, *Journal of Aerosol Science*, 30, S163 – S164, 1999.
  - 69) Maenhaut, W., M. T. Fernandez-Jimenez, P. Artaxo, Long-term study of atmospheric aerosols in Cuiabá, Brazil: multi-elemental composition, sources, and source apportionment. *Journal of Aerosol Science*, 30, S259-260, 1999.
  - 70) Yamasoe, M. A., P. Artaxo, A. H. Miguel, A. G. Allen, Chemical composition of aerosol particles from direct emissions of biomass burning in the Amazon Basin: water-soluble species and trace elements. *Atmospheric Environment*, 34, 1641-1653, <http://www.sciencedirect.com/science/article/pii/S1352231099003295> , 2000.
- 
-

- 71) Artaxo, P., R. C. de Campos, E. T. Fernandes, J. V. Martins, Z. Xiao, O. Lindqvist, M. T. Fernández-Jiménez, W. Maenhaut, Large Scale Mercury and Trace Element Measurements in the Amazon Basin, *Atmospheric Environment*, 34, 4085-4096, 2000.
  - 72) Kesselmeier, J., U. Kuhn, A. Wolf, M. O. Andreae, P. Ciccioli, E. Brancaleoni, M. Frattoni, A. Guenther, J. Greenberg, P. De Castro Vasconcellos, Telles de Oliva, T. Tavares, P. Artaxo, Atmospheric volatile organic compounds (VOC) at a remote tropical forest site in central Amazonia, *Atmospheric Environment*, 34, 4063 - 4072, 2000.
  - 73) Kubátová, A., R. Vermeylen, M. Claves, Jan Cafmeyer, W. Maenhaut, G. Roberts, P. Artaxo, Carbonaceous aerosol characterization in the Amazon basin, Brazil: Novel dicarboxylic acids and related compounds. *Atmospheric Environment*, 34, 5037-5051, 2000.
  - 74) Freitas, S. R., Silva Dias, M. A. F., Silva Dias, P. L., K. M. Longo, P. Artaxo, M.O. Andreae, H. Fischer, A convective kinematic trajectory technique for low resolution atmospheric models. *Journal of Geophysical Research*, Vol. 105, D19, 24375-24386, doi:10.1029/2000JD900217, 2000.
  - 75) Roberts, G.C., P. Artaxo, M. O. Andreae, The chemistry and role of cloud condensation nuclei in the Amazon Basin. *Journal of Aerosol Science*, Vol. 31, S62 - S63, <http://www.sciencedirect.com/science/article/pii/S0021850200900697>, 2000.
  - 76) Andreae, M.O., P. Artaxo, H. Fischer, S.R. Freitas, et al., Transport of biomass burning smoke to the upper troposphere by deep convection in the equatorial region. *Geophysical Research Letters*, Vol. 28, 6, 951-954, doi: 10.1029/2000GL12391, <http://onlinelibrary.wiley.com/doi/10.1029/2000GL12391/full>, 2001.
  - 77) Formenti, P., M. O. Andreae, L. Lange, G. Roberts, J. Cafmeyer, I. Rajta, W. Maenhaut, B. N. Holben, P. Artaxo e J. Lelieveld, Saharan dust in Brazil and Suriname during LBA-CLAIRE (March 1998), *Journal of Geophysical Research*, Vol. 106, D14, 14.919, doi: 10.1029/2000JD900827, <http://onlinelibrary.wiley.com/doi/10.1029/2000JD900827/abstract>, 2001.
  - 78) Zdehhal, Z., R. Vermeylen, M. Claves, W. Maenhaut, P. Guyon, P. Artaxo, Characterization of novel di- and tricarboxylic acids in fine tropical aerosols, *Journal of Mass Spectrometry*, 36: (4) 403-46, 2001.
  - 79) Roberts, G. C., M. O. Andreae, J. Zhou. P. Artaxo, Cloud condensation nuclei in the Amazon basin: marine conditions over a continent? *Geophysical Research Letters*, Vol. 28, N. 14, 2807-2810, doi: 10.1029/2000GL012585, <http://onlinelibrary.wiley.com/doi/10.1029/2000GL012585/abstract>, 2001.
  - 80) Artaxo, P., The atmospheric component of biogeochemical cycles in the Amazon basin, In *The biogeochemistry of the Amazon basin*. Editado por Michael E. McClain, Reynaldo Victória, Jeffrey E. Richey. Oxford University Press, ISBN 0-19-51143, pg. 42-52, 2001.
  - 81) Castanho, A. D. Almeida, P. Artaxo, Wintertime, and summertime São Paulo aerosol source apportionment study, *Atmospheric Environment*, 35, 4889 - 4902, <http://www.sciencedirect.com/science/article/pii/S1352231001003570>, 2001.
-

- 82) Lara, L.B.L.S, P. Artaxo, L. A. Martinelli, R. L Victoria, P. B. Camargo, A. Krusche, G. Ayers, E. S. B. Ferraz, M. V. Ballester, Chemical composition of rainwater and land-use changes in Piracicaba River basin: Southeast Brazil. *Atmospheric Environment*, 35, 4937 - 4945, 2001.
- 83) Maenhaut, W., M. T. Fernández-Jiménez, I. Rajta, P. Artaxo, Two-year study of atmospheric aerosols in Alta Floresta, Brazil: Multielemental composition and source apportionment. *Nuclear Instruments and Methods B.*, 189, 243-248, doi: 10.1016/50168-583X(01)01050-3, 2002.
- 84) Martinelli, L.A., P. B. Camargo, L.B.L.S. Lara, R.L. Victoria, P. Artaxo, Stable carbon and nitrogen isotopic composition of bulk aerosol particles in a C4 plant landscape of southeast Brazil. *Atmospheric Environment*, 36, 2427-2432, <http://www.sciencedirect.com/science/article/pii/S135223100100454X>, 2002.
- 85) Artaxo, P., Aerosol sampling and analysis, in *Environmental Monitoring Handbook*, Edited by Alex Guenther, McGraw-Hill Professional, New York, USA, ISBN: 0-07-135176-0, 2002.
- 86) Schafer, J. S., T. F. Eck, B. N. Holben, P. Artaxo, M. A. Yamasoe, A. S. Procópio, Observed reductions of total irradiance by biomass-burning aerosols in the Brazilian Amazon and Zambian Savanna. *Geophysical Research Letters* Vol. 29, No. 17, 1823-1826, doi:10.1029/2001GL014309, <http://onlinelibrary.wiley.com/doi/10.1029/2001GL014309/full>, 2002.
- 87) Zhou, J., E. Swietlicki, H. C. Hansson, P. Artaxo, Sub-micrometer aerosol particle size distribution and hygroscopic growth measured in the Amazonian rain forest during the wet season. *Journal of Geophysical Research*, Vol. 107, No. D20, 8055 - 8065, doi:10.1029/2000JD000203, <http://onlinelibrary.wiley.com/doi/10.1029/2000JD000203/abstract>, 2002.
- 88) Artaxo, P., J. V. Martins, M. A. Yamasoe, A. S. Procópio, T. M. Pauliquevis, M. O. Andreae, P. Guyon, L. V. Gatti, A. M. C. Leal. Physical and chemical properties of aerosols in the wet and dry season in Rondônia, Amazonia. *Journal of Geophysical Research*, Vol. 107, No. D20, 8081 - 8095, doi:10.1029/2001JD000666, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000666/abstract> , 2002.
- 89) Andreae, M.O., S. S. de Almeida, P. Artaxo, C. Brandão, F. E. Carswell, P. Ciccioli, A. Culf, J. L. Esteves, J. Gash, J. Grace, P. Kabat, J. Lelieveld, Y. Malhi, A. O. Manzi, F. X. Meixner, A. Nobre, C. Nobre, M. A. L. Ruivo, M. A. Silva-Dias, P. Stefani, R. Valentini, J. von Jouanne, e M. Waterloo, Biogeochemical cycling of carbon, water, energy, trace gases and aerosols in Amazonia: The LBA-EUSTACH experiments. *Journal of Geophysical Research*, Vol. 107, D20, 8066 - 8091, doi:10.1029/2001JD000524, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000524/abstract>, 2002.
- 90) Silva Dias, M. A. F, S. Rutledge, P. Kabat, P. L. Silva Dias, C. Nobre, G. Fisch, A.J. Dolman, E. Zipser, M. Garstang, A. Manzi, J. D. Fuentes, H. Rocha, J. Marengo, A. Plana-Fattori, L. Sá, R. Alvalá, M. O. Andreae, P. Artaxo, R. Gielow, L. V. Gatti. Clouds and rain processes in a biosphere-atmosphere interaction context in the Amazon Region, *Journal of Geophysical Research*, Vol. 107, No. D20, 8072 - 8092, doi:10.1029/2001JD000335, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000335/abstract> , 2002.
- 
-

- 
- 91) Williams, E., D. Rosenfeld, N. Madden, J. Gerlach, N. Gears, L. Atkinson, N. Dunnemann, G. Frostrom, M. Antonio, B. Biazon, R. Camargo, H. Franca, A. Gomes, M. Lima, R. Machado, S. Manhaes, L. Nachtigall, H. Piva, W. Quintiliano, L. Machado, P. Artaxo, G. Roberts, N. Renno, R. Blakeslee, J. Bailey, D. Boccippio, A. Betts, D. Wolff, B. Roy, J. Halverson, T. Rickenbach, J. Fuentes, and E. Avelino, Contrasting convective regimes over the Amazon: Implications for cloud electrification, *Journal of Geophysical Research*, Vol. 107, No. D20, 8082 - 9001, doi:10.1029/2001JD000380, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000380/abstract> , 2002.
- 92) Schafer, J. S., B.N. Holben, T.F. Eck, M.A. Yamasoe, P. Artaxo, Atmospheric effects on insolation in the Brazilian Amazon: Observed modification of solar radiation by clouds and smoke and derived single scatter albedo of fire aerosols, *Journal of Geophysical Research*, Vol. 107, No. D20, 8074 - 8089, doi:10.1029/2001JD000428, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000428/abstract> , 2002.
- 93) Mayol-Bracero, O. L., P. Guyon, B. Graham, G. Roberts, M. O. Andreae, S. Decesari, M. C. Facchini, S. Fuzzi, P. Artaxo, Water-Soluble Organic Compounds in Biomass Burning Aerosols over Amazonia: 2. Apportionment of the Chemical Composition and Importance of the Polyacidic Fraction, *Journal of Geophysical Research*, Vol. 107, No. D20, 8091 - 9006, doi:10.1029/2001JD000522, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000522/abstract> , 2002.
- 94) Graham, B. O. L. Mayol-Bracero, P. Guyon, G. C. Roberts, S. Decesari, M. Cristina Facchini, P. Artaxo, W. Maenhaut, P. Köll, M. O. Andreae, Water-soluble organic compounds in biomass burning aerosols over Amazonia: 1. Characterization by NMR and GC-MS. *Journal of Geophysical Research*, Vol. 107, No. D20, 8047 - 8062, doi:10.1029/2001JD000336, <http://onlinelibrary.wiley.com/doi/10.1029/2001JD000336/abstract> , 2002.
- 95) Roberts, G. C. P. Artaxo, J. Zhou, E. Swietlicki, M. O. Andreae, Sensitivity of CCN spectra on chemical and physical properties of aerosol: A case study from the Amazon Basin. *Journal of Geophysical Research*, Vol. 107, No. D20, 8070 - 8088, doi:10.1029/2001JD000583, <http://onlinelibrary.wiley.com/wol1/doi/10.1029/2001JD000583/abstract> , 2002.
- 96) Artaxo, P., M. A. F. Silva Dias, M. O. Andreae, O mecanismo da floresta para fazer chover. *Scientific American Brasil*, Ano 1, número 11, páginas 38-45, abril de 2003.
- 97) Mace, K. A., P. Artaxo, and R. A. Duce, Water-soluble organic nitrogen in Amazon Basin aerosols during the dry (biomass burning) and wet seasons. *Journal of Geophysical Research*, Vol. 108, No. D16, 4512, doi:10.1029/2003JD003557, <http://onlinelibrary.wiley.com/doi/10.1029/2003JD003557/epdf> , 2003.
- 98) Correia, A. L., R. Freydier, R. J. Delmas, J. Simões, J. D. Taupin, B. Dupré, P. Artaxo, Trace elements in South America aerosol during 20th century inferred from a Nevado Illimani ice core, Eastern Bolivian Andes (6350 m asl). *Atmospheric Chemistry and Physics*, 3, 1337-1352, [www.atmos-chem-phys.net/3/1337/2003/](http://www.atmos-chem-phys.net/3/1337/2003/), doi:10.5194/acp-3-1337-2003, 2003.
- 99) Blazso, M., S. Janitsek, A. Gelencser, P. Artaxo, B. Graham, M. O. Andreae. Study of tropical organic aerosol by thermally assisted alkylation-gas chromatography mass spectrometry. *Journal of Analytical and Applied Pyrolysis*, 68, 351-369, 2003.
-

- 100)** Guyon, P., O. Boucher, B. Graham, J. Beck, O. L. Mayol-Bracero, G. C. Roberts, W. Maenhaut, P. Artaxo, and M. O. Andreae, Refractive index of aerosol particles over the Amazon tropical forest during LBA-EUSTACH 1999, *Journal of Aerosol Science*, Vol. 34/7, 883-907, <http://www.sciencedirect.com/science/article/pii/S0021850203000521>, 2003.
- 101)** Guyon, P., B. Graham, J. Beck, O. Boucher, E. Gerasopoulos, O. L. Mayol-Bracero, G. C. Roberts, P. Artaxo, and M. O. Andreae, Physical properties and concentration of aerosol particles over the Amazon tropical forest during background and biomass burning conditions. *Atmospheric Chemistry and Physics* 3, 951 – 967, [www.atmos-chem-phys.net/3/951/2003/](http://www.atmos-chem-phys.net/3/951/2003/), doi:10.5194/acp-3-951-2003, 2003.
- 102)** Eck, T. F., B. N. Holben, J. S. Reid, N. T. O'Neill, J. S. Schafer, O. Dubovik, A. Smirnov, M.A. Yamasoe, and P. Artaxo, High aerosol optical depth biomass burning events: a comparison of optical properties for different source regions. *Geophysical Research Letter*, 30, 20, 2035, doi: 10.1029/2003GL017861, <http://onlinelibrary.wiley.com/doi/10.1029/2003GL017861/abstract>, 2003.
- 103)** Guyon, P., B. Graham, G. C. Roberts, O. L. Mayol-Bracero, W. Maenhaut, P. Artaxo, M. O. Andreae, In-canopy gradients, composition, sources, and optical properties of aerosol over the Amazon Forest. *J. Geophys. Res.*, 108, D18, 4591. doi: 10.1029/2003JD003465, <http://onlinelibrary.wiley.com/doi/10.1029/2003JD003465/abstract> , 2003.
- 104)** Procópio, A. S.; L. A. Remer, P. Artaxo, Y. J. Kaufman, B. N. Holben, Modeled spectral optical properties for smoke aerosols in Amazonia. *Geophysical Research Letters*, 30, 24, 2265 - 2270. doi: 10.1029/2003GL018063, <http://onlinelibrary.wiley.com/doi/10.1029/2003GL018063/abstract> , 2003.
- 105)** Graham, B. P. Guyon, P. E. Taylor, P. Artaxo, W. Maenhaut, M. M. Glovsky, R. C. Flagan, M. O. Andreae, Organic compounds present in the natural Amazonian aerosol: Characterization by gas chromatography–mass spectrometry. *J. Geophys. Res.*, 108, No. D24, 4766. doi: 10.1029/2003JD003990, <http://onlinelibrary.wiley.com/doi/10.1029/2003JD003990/abstract> , 2003.
- 106)** Graham, B., P. Guyon, W. Maenhaut, P. E. Taylor, M. Ebert, S. Matthias -Maser, O. L. Mayol-Bracero, R. Godoi, P. Artaxo, F. X. Meixner, M. A. Moura, C. H. Rocha, R. V. Grieken, M. Glovsky, R. Flagan, M. O. Andreae, Composition and diurnal variability of the natural Amazonian aerosol. *J. Geophys. Res.*, 108, D24, 4765. doi: 10.1029/2003JD004049, <http://onlinelibrary.wiley.com/doi/10.1029/2003JD004049/abstract> , 2003.
- 107)** Correia, A. L., R. Delmas, R. Freydier, J. Simões, J. D. Taupin, B. Dupré, P. Artaxo, Heavy metals in South America aerosol during 20th century from Illimani ice-core, Eastern Bolivian Andes, *Journal de Physique IV*, Vol. 107, 333-336, 2003.
- 108)** Landulfo, E., A. Papayannis, P. Artaxo, A.D.A. Castanho, A.Z. de Freitas, R.F. Sousa, N.D. Vieira Junior, M.P.M.P. Jorge, O. R. Sánchez-Ccoyllo, D. S. Moreira. Synergetic measurements of aerosols over São Paulo, Brazil, using LIDAR, sunphotometer, and satellite data during the dry season. *Atmospheric Physics and Chemistry (ACP)* 3: 1523-1539, [www.atmos-chem-phys.net/3/1523/2003/](http://www.atmos-chem-phys.net/3/1523/2003/), doi:10.5194/acp-3-1523-2003, 2003.
- 
-

- 109)** Brasseur, G.P., P. Artaxo, L.A. Barrie, R.J. Delmas, I. Galbally, et al. An integrated view of the causes and impacts of atmospheric changes. In: *Atmospheric Chemistry in a Changing World*, G.P. Brasseur, R.G. Prinn, and A.A.P. Pszenny (eds.), Springer Verlag, Heidelberg, Germany, ISBN 978-3-642-18984-5, 10.1007/978-3-642-18984-5, 207–230, 2003.
- 110)** Andreae, M.O., D. Rosenfeld, P. Artaxo, A. A. Costa, G. P. Frank, K. M. Longo, and M. A. F. Silva-Dias, Smoking rain clouds over the Amazon. *Science*, Vol. 303, (5662) 1337-1342, <http://science.sciencemag.org/content/303/5662/1337/tab-e-letters> , 2004.
- 111)** Claeys, M., B. Graham, G. Vas, W. Wang, R. Vermeylen, V. Pashynska, J. Cafmeyer, P. Guyon, M. O. Andreae, P. Artaxo, W. Maenhaut. Formation of secondary organic aerosols through photo-oxidation of isoprene. *Science*, Vol. 303, 1173 - 1176, <http://science.sciencemag.org/content/303/5661/1173?page=112> , 2004.
- 112)** Guyon, P., B. Graham, G. C. Roberts, O. L. Mayol-Bracero, W. Maenhaut, P. Artaxo, and M. O. Andreae. Sources of optically active aerosol particles over the Amazon Forest. *Atmospheric Environment*, Vol. 38, No. 7, 1039-1051, doi: 10.1016/j.atmosenv.2003.10.051, <http://www.sciencedirect.com/science/article/pii/S1352231003009701> , 2004.
- 113)** Procópio, A. S., P. Artaxo, Y. J. Kaufman, L. A. Remer, J. S. Schafer, B. N. Holben, Multiyear analysis of Amazonian biomass burning smoke radiative forcing of climate. *Geophysical Research Letters*, *Geophysical Research Letters*, Vol. 31, No. 3, pg. L03108 – L03112, doi:10.1029/2003GL018646, <http://onlinelibrary.wiley.com/doi/10.1029/2003GL018646/abstract> , 2004.
- 114)** Davidson, E. A., and P. Artaxo, Globally significant changes in biological processes of the Amazon Basin: Results of the Large-scale Biosphere-Atmosphere Experiment. *Global Change Biology*, Vol. 10, No. 5, pg. 1–11, doi: 10.1111/j.1529-8817.2003.00779.x. <http://onlinelibrary.wiley.com/doi/10.1111/j.1529-8817.2003.00779.x/abstract>, 2004.
- 115)** Okin, G. S., N. Mahowald, O. A. Chadwick, P. Artaxo. Impact of desert dust on the biogeochemistry of phosphorus in terrestrial ecosystems. *Global Biogeochemical Cycles*, Vol. 18, No. 2, GB2005, doi:10.1029/2003GB002145, <http://onlinelibrary.wiley.com/doi/10.1029/2003GB002145/abstract> , 2004.
- 116)** Lioussé, C., H. Cachier, J.M. Grégoire, J. Penner, D. Lavoué, P. Hobbs, M. Scholes, P. Barbosa, M. O. Andreae and P. Artaxo. Deriving global quantitative estimates for spatial and temporal distributions of biomass burning emissions. In: *Emissions of trace gases and aerosols into the atmosphere*, edited by Claire Granier, Paulo Artaxo, and Claire Reeves, Kluwer Academic Publishers, London, ISBN: 1-4020-2166-6, pg. 71-114, 2004.
- 117)** Wiedinmyer, C., A. Guenther, P. Harley, N. Hewitt, C. Geron, P. Artaxo, R. Steinbrecher, and R. Rasmussen, *Global Organic Emissions from Vegetation*. In: *Emissions of trace gases and aerosols into the atmosphere*, edited by Claire Granier, Paulo Artaxo, and Claire Reeves, Kluwer Academic Publishers, London, ISBN: 1-4020-2166-6, pg. 115-170, 2004.
- 118)** Sabine, C., Heiman M., Artaxo, P., et al., Current status and past trends of the global carbon cycle. In: *The Global Carbon Cycle: Integrating Humans, Climate, and the Natural*
- 
-

---

World (Scope Series), Editors: Christopher B. Field, Michael R. Raupach, Island Press, ISBN: 1559635274, Washington, D.C., 2004.

- 119)** Rissler, J., E. Swietlicki, J. Zhou, L. V. Gatti, G. Roberts, M. O. Andreae, P. Artaxo, Physical properties of the sub-micrometer aerosol over the Amazon rain forest during the wet-to-dry season transition – Comparison of modeled and measured CCN concentrations. *Atmospheric Chemistry and Physics*, 4, 2119 - 2143, [www.atmos-chem-phys.net/4/2119/2004/](http://www.atmos-chem-phys.net/4/2119/2004/), doi:10.5194/acp-4-2119-2004, 2004.
- 120)** Artaxo, P., Mudanças climáticas globais e a Amazônia. *Ciência Hoje*, Vol. 35, no. 206. page. 40-42, 2004.
- 121)** Molina, L.T.; Molina, M.J.; Slott, R.; Kolb, C.E.; Gabor, P.K.; Meng, F.; Singh, R.; Galvez, O.; Sloan, J.J.; Anderson, W.; Tang, X.Y.; Shao, M.; Zhu, T.; Zhang, Y.H.; Hu, M.; Gurjar, B.R.; Artaxo, P.; Oyola, P.; Gramsci, E.; Hidalgo, D.; Gertler, A. 2004 Critical Review: Air Quality in Selected Megacities; 2004. *Journal of the Air and Waste Management Association*, online supplement, June 2004.
- 122)** Guyon P, W. Maenhaut, M. Blazso, S. Janitsek, A. Gelencser P. Artaxo, M. O. Andreae, Study of tropical organic aerosol by thermally assisted alkylation-gas chromatography mass spectrometry, *Journal of analytical and applied pyrolysis* 71 (2): 1027-1029, June 2004.
- 123)** Cordova, A.M., K. Longo, S. Freitas, L.V. Gatti, P. Artaxo, A. Procópio, M.A.F. Silva Dias, and E.D. Freitas, 2004: Nitrogen oxides measurements in an Amazon site and enhancements associated with a cold front. *Atmos. Chem. Phys. Discuss.*, 4, 2301-2331, <https://doi.org/10.5194/acpd-4-2301-2004>, 2004. <https://www.atmos-chem-phys-discuss.net/acpd-2003-132/>, 2004.
- 124)** Freitas, S. R., K. M. Longo, M. A. F. Silva Dias, P. L. Silva Dias, R. Chatfield, E. Prins, P. Artaxo, F. S. Recuero, Monitoring the Transport of Biomass Burning Emissions in South America. *Environmental Fluid Mechanics*, Vol. 5, No. 1, pg. 135-167, doi: 10.1007/s10652-005-0243-7, <https://link.springer.com/article/10.1007/s10652-005-0243-7>, 2005.
- 125)** Falkovich, A. H., E. R. Graber, G. Schkolnik, Y. Rudich, W. Maenhaut, P. Artaxo, Low molecular weight organic acids in aerosol particles from Rondônia, Brazil, during the biomass-burning, transition, and wet periods. *Atmospheric Chemistry and Physics (ACP)*, 5, 781-797, [www.atmos-chem-phys.net/5/781/2005/](http://www.atmos-chem-phys.net/5/781/2005/), doi:10.5194/acp-5-781-2005, 2005.
- 126)** Artaxo, P., Física do Meio Ambiente: Entendendo o funcionamento do planeta Terra, in: *Física Tendências e Perspectivas*, Gil da Costa Marques, organizador. Editora Livraria da Física, ISBN 85-88325-48-9, pg. 235-240, 2005.
- 127)** Trebs, I., S. Metzger, F. X. Meixner, G. Helas, A. Hoffer, Y. Rudich, A. H. Falkovich, M. A. L. Moura, R. S. Silva Jr., P. Artaxo, J. Slanina, M. O. Andreae. The NH<sub>4</sub><sup>+</sup>-NO<sub>3</sub><sup>-</sup>-Cl<sup>-</sup>-SO<sub>4</sub><sup>2-</sup>-H<sub>2</sub>O aerosol system and its gas-phase precursors at a pasture site in the Amazon Basin: How relevant are mineral cations and soluble organic acids? *Journal of Geophysical Research-Atmospheres*, 110, (D7) D07303, doi:10.1029/2004JD005478, <http://onlinelibrary.wiley.com/doi/10.1029/2004JD005478/abstract>, 2005.
-

- 128)** Castanho, A. D. A., J. V. Martins, P. Artaxo, L. Remer, M. Yamasoe, A. Plana-Fattori. Chemical characterization of aerosols on the East Coast of the United States using aircraft and ground-based stations during the CLAMS Experiment. *Journal of the Atmospheric Sciences*, Vol. 62, No. 4, 934-946, DOI: 10.1175/JAS3388.1, <http://journals.ametsoc.org/doi/abs/10.1175/JAS3388.1>, 2005.
- 129)** Schkolnik, G., A. H. Falkovich, Y. Rudich, W. Maenhaut, and P. Artaxo, A New Analytical Method for the Determination of Levoglucosan, Saccharidic Compounds and 2-methylerythritol and its application to Smoke and Rainwater Samples. *Environmental Science and Technology*, Vol. 39, n. 8, 2744-2752, DOI: 10.1021/es048363c, <http://pubs.acs.org/doi/abs/10.1021/es048363c>.2005.
- 130)** Lara, L. L., P. Artaxo, L.A. Martinelli, P.B. Camargo, R.L. Victoria, and E.S.B. Ferraz Properties of aerosols from sugarcane burning emissions in Southeastern Brazil. *Atmospheric Environment*, doi:10.1016/j.atmosenv.2005.04.026, Vol. 39, Issue 26, pg. 4627-4637, <http://www.sciencedirect.com/science/article/pii/S135223100500395X>, 2005.
- 131)** Guyon, P., G. Frank, M. Welling, D. Chand, P. Artaxo, G. Nishioka, L. V. Rizzo, J. Lloyd, O. Kolle, M. A. F. Silva Dias, L. V. Gatti, A. M. Cordova, M. O. Andreae. Airborne measurements of trace gases and aerosol particles emissions from biomass burning in Amazonia. *Atmospheric Chemistry and Physics*, 5, 2989 – 3002, [www.atmos-chem-phys.net/5/2989/2005/](http://www.atmos-chem-phys.net/5/2989/2005/), doi:10.5194/acp-5-2989-2005, 2005.
- 132)** Ometto, J. P. A. D. Nobre, H. Rocha, P. Artaxo, L. Martinelli, Amazônia and the Modern Carbon Cycle: Lessons Learned. Invited manuscript no. OEC-JE-2004-0459. *Oecologia*, Vol. 143, No. 4, pg. 483-500, doi 10.1007/s00442-005-0034-3, <https://link.springer.com/article/10.1007/s00442-005-0034-3> , 2005.
- 133)** Landulfo E., A. Papayannis, A. Z. de Freitas, N. D. Vieira, R. F. Souza, A. Goncalves, A. D. A. Castanho, P. Artaxo, O. R. Sanchez-Ccoyllo, D. S. Moreira, M. P. M. P. Jorge. Tropospheric aerosol observations in Sao Paulo, Brazil, using a compact lidar system. *International Journal of Remote Sensing*, Vol. 26, No. 13, pg. 2.797-2.816, 2005.
- 134)** Mahowald, N., P. Artaxo, A. Baker, T. Jickells, G. Okin, J. Randerson, A. Townsend. Impacts of biomass burning emissions and land-use change on Amazonian atmospheric phosphorus cycling and deposition. *Global Biogeochemical Cycles*, 19 (4) doi:10.1029/2005GB002541, <http://onlinelibrary.wiley.com/doi/10.1029/2005GB002541/abstract> , 2005.
- 135)** Godoy, M. L. D. P., J. M. Godoy, and P. Artaxo, Aerosol source apportionment around a large coal-fired power plant – Thermoelectric Complex Jorge Lacerda, Santa Catarina, Brazil. *Atmospheric Environment*, 39, 5307-5324, doi:10.1016/j.atmosenv.2005.05.033, <http://www.sciencedirect.com/science/article/pii/S1352231005004899> , 2005.
- 136)** Artaxo, P., L. V. Gatti, A. M. C. Leal, K. M. Longo, S. R. de Freitas, L. L. Lara, T. M. Pauliquevis, A. S. Procópio, L. V. Rizzo. Química atmosférica na Amazônia: A Floresta e as emissões de queimadas controlando a composição da atmosfera amazônica. *Acta Amazônica*, Vol. 35, número 2, pg. 185-198, 2005.
- 
-



- 137)** Mircea, M., Facchini, M.C., Decesari, S., Cavalli, F., Emblico, L., Fuzzi, S., Vestin, A., Rissler, J., Swietlicki, E., Frank, G., Andreae, M.O., Maenhaut, W., Rudich, Y, P. Artaxo, Importance of the organic aerosol fraction for modeling aerosol hygroscopic growth and activation: a case study in the Amazon Basin. *Atmospheric Chemistry and Physics*, 5, 3111 -3126, [www.atmos-chem-phys.net/5/3111/2005/](http://www.atmos-chem-phys.net/5/3111/2005/) , doi:10.5194/acp-5-3111-2005, 2005.
- 138)** McFiggans, G., P. Artaxo., U. Baltensperger, H. Coe., C. Facchini, G. Feingold, S. Fuzzi, M. Gysel, A. Laaksonen, U. Lohmann, T. Mentel, D. Murphy, C. O'Dowd, J. Snider. The Effect of Physical & Chemical Aerosol Properties on Warm Cloud Droplet Activation. *Atmospheric Chemistry and Physics*, 6, 2593–2649, [www.atmos-chem-phys.net/6/2593/2006/](http://www.atmos-chem-phys.net/6/2593/2006/), doi:10.5194/acp-6-2593-2006, 2006.
- 139)** Artaxo, P., Paulo H. Oliveira, Luciene L. Lara, Theotonio M. Pauliquevis, Luciana V. Rizzo, Carlos Pires Junior, Melina A. Paixão, Karla M. Longo, Saulo de Freitas, Alexandre L. Correia Efeitos climáticos de partículas de aerossóis biogênicos e emitidos em queimadas na Amazônia. *Revista Brasileira de Meteorologia*, v.21, n.3, pg. 1-22, 2006.
- 140)** Artaxo, P., A Amazônia e as mudanças globais. *Ciência Hoje*, Vol. 38, número 224, 21-25, março de 2006.
- 141)** Rissler, J., A. Vestin, E. Swietlicki, G. Fisch, J. Zhou, P. Artaxo, and M. O. Andreae. Size distribution and hygroscopic properties of aerosol particles from dry-season biomass burning in Amazonia. *Atmospheric Chemistry and Physics*, 6, 471–491, [www.atmos-chem-phys.net/6/471/2006/](http://www.atmos-chem-phys.net/6/471/2006/) , doi:10.5194/acp-6-471-2006, 2006.
- 142)** Trebs, I., L. L. Lara, L. M. M. Zeri, L. V. Gatti, P. Artaxo, R. Dlugi, J. Slanina, M. O. Andreae, F. X. Meixner, Dry and wet deposition of inorganic nitrogen compounds to a tropical pasture site (Rondônia, Brazil). *Atmospheric Chemistry and Physics*, 6, 447–469, [www.atmos-chem-phys.net/6/447/2006/](http://www.atmos-chem-phys.net/6/447/2006/) , doi:10.5194/acp-6-447-2006, 2006.
- 143)** Decesari, S., S. Fuzzi, M. C. Facchini, M. Mircea, L. Emblico, F. Cavalli, W. Maenhaut, X. Chi, G. Schkolnik, A. Falkovich, Y. Rudich, M. Claeys, V. Pashynska, G. Vas, I. Kourtchev, R. Vermeylen, A. Hoffer, M. O. Andreae, E. Tagliavini, F. Moretti and P. Artaxo, Characterization of the organic composition of aerosols from Rondônia, Brazil, during the LBA-SMOCC 2002 experiment and its representation through model compounds. *Atmospheric Physics and Chemistry*, 6, 375 – 402, [www.atmos-chem-phys.net/6/375/2006/](http://www.atmos-chem-phys.net/6/375/2006/), doi:10.5194/acp-6-375-2006, 2006.
- 144)** Chand, D., P. Guyon, P. Artaxo, O. Schmid, G. P. Frank, L. V. Rizzo, O. L. Mayol-Bracero, L. V. Gatti, and M. O. Andreae. Optical and physical properties of aerosols in the boundary layer and free troposphere over the Amazon Basin during the biomass burning season. *Atmospheric Chemistry and Physics*, 6, 2911-2925, [www.atmos-chem-phys.net/6/3443/2006/](http://www.atmos-chem-phys.net/6/3443/2006/), doi:10.5194/acp-6-3443-2006, 2006.
- 145)** Schmid, O., P. Artaxo, W. P. Arnott, D. Chand, L. V. Gatti, G. P. Frank, A. Hoffer, M. Schnaiter, and M. O. Andreae. Spectral light absorption by ambient aerosols influenced by biomass burning in the Amazon Basin – I. Comparison and field calibration of absorption measurement techniques. *Atmospheric Chemistry and Physics*, 6, 3443 – 3462, [www.atmos-chem-phys.net/6/3443/2006/](http://www.atmos-chem-phys.net/6/3443/2006/), doi:10.5194/acp-6-3443-2006, 2006.
-

- 146)** Hoffer, A., A. Gelencser, M. Blazso, P. Guyon, P. Artaxo, e M. O. Andreae. Diel and seasonal variations in the chemical composition of biomass burning aerosol. *Atmospheric Chemistry and Physics*, 6, 3505 – 3515, [www.atmos-chem-phys.net/6/3505/2006/](http://www.atmos-chem-phys.net/6/3505/2006/), doi:10.5194/acp-6-3505-2006, 2006.
- 147)** Hoffer, A., A. Gelencser, P. Guyon, G. Kiss, O. Schmid, G. P. Frank, P. Artaxo, and M. O. Andreae. Optical properties of humic-like substances (HULIS) in biomass-burning aerosols. *Atmospheric Chemistry and Physics*, 6, 3563–3570, [www.atmos-chem-phys.net/6/3563/2006/](http://www.atmos-chem-phys.net/6/3563/2006/), doi:10.5194/acp-6-3563-2006, 2006.
- 148)** Cançado, José E.D., Paulo H. N. Saldiva, Luiz A.A Pereira, Luciene B.L.S. Lara, Paulo Artaxo, Luiz A. Martinelli, Marcos A. Arbex, Antonella Zanobetti, e Alfesio L. F. Braga. The Impact of Sugar Cane Burning Emissions on the Respiratory System of Children and Elderly. *Environmental Health Perspectives*, 114 (5) 725-729, doi:10.1289/ehp.8485, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1459926/>, 2006.
- 149)** Fuzzi, S., P. Artaxo, et al., Overview of the inorganic and organic composition of size-segregated aerosol in Rondônia, Brazil, from the biomass burning period to the onset of the wet season. *Journal of Geophysical Research*, Vol. 112, (D1), Art. D01201, pg. 1201-1236, doi:10.1029/2005JD006741, <http://onlinelibrary.wiley.com/doi/10.1029/2005JD006741/abstract>, 2007.
- 150)** Oliveira, P. H. F.; P. Artaxo, C. Pires Jr, S. de Lucca, A. Procópio, B. Holben, J. Schafer, L. F. Cardoso, S. C. Wofsy, H. R. Rocha. The effects of biomass burning aerosols and clouds on the CO<sub>2</sub> flux in Amazonia. *Tellus Series B-Chemical and Physical Meteorology*, 59B, (3) 338–349, DOI: 10.1111/j.1600-0889.2007.00270.x, <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0889.2007.00270.x/abstract>, 2007.
- 151)** Bulbovas, Patrícia, Silvia Ribeiro de Souza, Regina Maria de Moraes, Flávio Luizão, Paulo Artaxo. Respostas de *Glycine max* 'Tracajá' exposta ao ozônio sob condições controladas. *Pesquisa Agropecuária Brasileira*, v. 42, n.5, pg. 641-646, 2007.
- 152)** Yokelson, R. J., Thomas Karl, Paulo Artaxo, Donald R. Blake, Ted J. Christian, David W.T. Griffith, Alex Guenther, and Wei Min Hao. The tropical forest and fire emissions experiment: overview and airborne fire emission factor measurements. *Atmospheric Chemistry and Physics*, 7 (19) 5175-5196, [www.atmos-chem-phys.net/7/5175/2007/](http://www.atmos-chem-phys.net/7/5175/2007/), doi:10.5194/acp-7-5175-2007, 2007.
- 153)** Lloyd, J., O. Kolle, Fritsch, H., de Freitas, S. R., Dias, M. A. F. Silva, Artaxo, P., Nobre, A. D., de Araujo, A. C., Kruijt, B., Sogacheva, L., Fisch, G., Thielmann, A., Kuhn, U., Andreae, M. O., An airborne regional carbon balance for Central Amazonia. *Biogeosciences* 4 (5): 759-768, <http://www.biogeosciences.net/4/759/2007/>, 2007.
- 154)** Karl, T., R. Yokelson, A. Guenther, J. Greenberg, D. Blake, P. Artaxo TROFFEE (TROpical Forest and Fire Emissions Experiment): Investigating Emission, Chemistry, and Transport of Biogenic Volatile Organic Compounds in the Lower Atmosphere over Amazonia. *Journal of Geophysical Research*, 112, (D18), art. D18302, doi:10.1029/2007JD008539, <http://onlinelibrary.wiley.com/doi/10.1029/2007JD008539/full>, 2007.

- 155)** Miller, J. B., L. V. Gatti, M. d'Amelio, A. M., Crotwell, E. J. Dlugencky, P. Bakwin, P. Artaxo, P. P. Tans. Airborne measurements indicate large methane emissions from the Eastern Amazon Basin. *Geophysical Research Letters*, 34, (10), Art. No. L10809, doi:10.1029/2006GL029213, <http://onlinelibrary.wiley.com/doi/10.1029/2006GL029213/abstract>, 2007.
- 156)** Correia, A. L., A. D. de Almeida Castanho, J. V. Martins, K. M. Longo, M. A. Yamasoe e P. Artaxo. Inferência de aerossóis. Capítulo de livro em *O sensor MODIS e suas aplicações ambientais no Brasil*. Editores: Bernardo F. T. Rudorff; Yosio E. Shimabukuro & Juan C. Ceballos. Editora Parêntese, São José dos Campos, S.P. ISBN 978-85-60507-00-9. 2007.
- 157)** Pauliquevis, Teotônio, Paulo Artaxo, Paulo Henrique Oliveira, Melina Paixão. O papel das partículas de aerossol no funcionamento do ecossistema amazônico. *Ciência e Cultura*, Vol. 59, n. 3, 48-50, 2007.
- 158)** Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. van Dorland, 2007: Changes in Atmospheric Constituents and in Radiative Forcing. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. ISSN 978-0-521-88009-1, 2007.
- 159)** Karl, Thomas G., T. J. Christian, R. J. Yokelson, P. Artaxo, W. Min Hao, and A. Guenther. The Tropical Forest and Fire Emissions Experiment: method evaluation of volatile organic compound emissions measured by PTR-MS, FTIR, and GC from tropical biomass burning. *Atmospheric Chemistry and Physics*, 7, 5883-5897, [www.atmos-chem-phys.net/7/5883/2007/](http://www.atmos-chem-phys.net/7/5883/2007/), doi:10.5194/acp-7-5883-2007, 2007.
- 160)** Freud, E., D. Rosenfeld, M. Andreae, A. Costa, and P. Artaxo. Robust relations between CCN and the vertical evolution of cloud drop size distribution in deep convective clouds. *Atmospheric Chemistry and Physics*, 8, 1661-1675, [www.atmos-chem-phys.net/8/1661/2008/](http://www.atmos-chem-phys.net/8/1661/2008/), doi:10.5194/acp-8-1661-2008, 2008.
- 161)** Trebs, I.; Andreae, M. O.; E. Wolfgang; Mayol-Bracero, O.; Soto-García, L.; Rudich, Y.; Falkovich, A.; Maenhaut, W.; Artaxo, P.; Otjes, R.; Slanina, J. Aerosol Inorganic Composition at a Tropical Site: Discrepancies Between Filter-Based Sampling and a Semi-Continuous Method. *Aerosol Science and Technology*, 42:255–269, 2008. DOI: 10.1080/02786820801992899. <http://www.tandfonline.com/doi/abs/10.1080/02786820801992899>, 2008.
- 162)** Schafer, J. S., T. F. Eck, B. N. Holben, P. Artaxo, A. Duarte. Characterization of the optical properties of atmospheric aerosols in Amazonia from long-term AERONET monitoring (1993-1995; 1999-2006). *Journal of Geophysical Research-Atmospheres*, Vol. 113, Issue: D4 Article Number: D04204, doi:10.1029/2007JD009319. <http://onlinelibrary.wiley.com/doi/10.1029/2007JD009319/abstract>, 2008.

- 163)** Castanho, A. D. A., Martins J. V., Artaxo P. MODIS aerosol optical depth retrievals with high spatial resolution over an urban area using the critical reflectance. *Journal of Geophysical Research-Atmospheres*, Volume: 113, Issue: D2, Article Number: D02201, doi: 10.1029/2007JD008751.  
<http://onlinelibrary.wiley.com/doi/10.1029/2007JD008751/abstract>, 2008.
- 164)** Luo, Chao, Mahowald, N, Bond, T., Chuang, P. Y., Artaxo, P., Siefert, R. Chen, Y., Schauer, J. Combustion iron distribution and deposition, *Global Biogeochemical Cycles*, Volume: 22, Issue: 1, Article Number: GB1012, doi:10.1029/2007GB002964.  
<http://onlinelibrary.wiley.com/doi/10.1029/2007GB002964/abstract>, 2008.
- 165)** Villas-Boas, V., L. Moratelli, I. Nascimento, R. M. Dallago, R. Dellanora, A.L. Loureiro and P. Artaxo. Study of the Relation between the Inorganic and Organic Material in the Air Pollution of the City of Caxias do Sul. *Chemical and Engineering Transactions* Vol. 13, 263-270, 2008.
- 166)** Cristovam Barcellos, Antônio Miguel Vieira Monteiro Carlos Corvalán, Helen C. Gurgel, Marília Sá Carvalho, Paulo Artaxo, Sandra Hacon, Virginia Ragoni. Mudanças climáticas e ambientais e seus efeitos na saúde: cenários e incertezas para o Brasil. Ministério da Saúde, Brasil; Organização Pan-Americana da Saúde. Brasília: Organização Pan-Americana da Saúde, 40p: il. ISBN 978-85-87943-79-8, 2008.
- 167)** Andreae, M. O., P. Artaxo, Barrie, L. A., Brenguier, J. L., Cotton, W. R., Feingold, G., G. Sunling L., Hegg, D. A., Kauffman, Y. (Deceased), Levin, Z., Lohmann, U., Tanre, D., Yuter, S. The WMO/IUGG International Aerosol Precipitation Science Assessment Group (IAPSAG) Aerosol Pollution Impact on Precipitation: A Scientific Review. Editors: Z. Levin, W. R. Cotton. Editado pela Springer Verlag, ISBN 978-1-4020-8689-2. 2009.
- 168)** Tanré, Didier, P. Artaxo, S. Tuter and Y. Kaufman, In Situ and remote sensing techniques for measuring aerosols, clouds and precipitation. Chapter 5 of The WMO/IUGG International Aerosol Precipitation Science Assessment Group (IAPSAG) Aerosol Pollution Impact on Precipitation: A Scientific Review. Editors: Zev Levin, William Cotton. Editado pela Springer Verlag, ISBN 978-1-4020-8689-2. Pp. 143-203, 2009.
- 169)** Mahowald, N., T. D. Jickells, A. R. Baker, P. Artaxo, C. R. Benitez-Nelson, G. Bergametti, T. C. Bond, Y. Chen, D. D. Cohen, B. Herut, N. Kubilay, R. Losno, C. Luo, W. Maenhaut, K. A. McGee, G. S. Okin, R. L. Siefert, and S. Tsukuda (2008). Global distribution of atmospheric phosphorus sources, concentrations and deposition rates, and anthropogenic impacts, *Global Biogeochem. Cycles*, 22, GB4026, doi:10.1029/2008GB003240, <http://onlinelibrary.wiley.com/doi/10.1029/2008GB003240/abstract> , 2008.
- 170)** Artaxo, P., Mudanças Climáticas e a Amazônia, *Scientific American Brasil*, Edição Especial Amazônia, Pag. 91-95, Outubro de 2008.
- 171)** Bowman, D. M. J. S., J. K. Balch, P. Artaxo, W. J. Bond, J. M. Carlson, M. A. Cochrane, C. M. D. Antonio, R. S. DeFries, J. C. Doyle, S. P. Harrison, F. H. Johnston, J. E. Keeley, M. A. Krawchuk, C. A. Kull, J. Brad Marston, M. A. Moritz, I. C. Prentice, C. I. Roos, A. C. Scott, T. W. Swetnam, G. R. van der Werf, and S. J. Pyne, Fire in the Earth System. *Science*, 324, 481-
- 
-

- 484, DOI: 10.1126/science.1163886, <http://science.sciencemag.org/content/324/5926/481.full> , 2009.
- 172)** Prenni, A. J., M. D. Petters, S. M. Kreidenweis, C. L. Heald, S. Martin, P. Artaxo, R. M. Garland, A. G. Wollny, and U. Pöschl. Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin. *Nature Geosciences*, Vol. 2, pp. 402-405, doi:10.1038/ngeo517, <http://www.nature.com/ngeo/journal/v2/n6/abs/ngeo517.html>, 2009.
- 173)** Mahowald, N. M., S. Engelstaedter, C. Luo, A. Sealy, P. Artaxo, S. Bonnet, Y. Chen, P. Chuang, D. D. Cohen, B. Herut, A. M. Johansen, N. Kubilay, R. Losno, W. Maenhaut, A. Paytan, J. M. Prospero, L. M. Shank, R. L. Siefert. Atmospheric iron deposition: Global distribution, variability, and human perturbations. *Annual Review of Marine Sciences*, doi: 10.1146/annurev.marine.010908.163727. <http://www.annualreviews.org/doi/abs/10.1146/annurev.marine.010908.163727>, 2009.
- 174)** Rocha, H. R. da, A. O. Manzi, O. M. Cabral, S. D. Miller, M. L. Goulden, S. R. Saleska, N. R. Coupe, S. C. Wofsy, L. S. Borma, P. Artaxo, G. Vourlitis, J. S. Nogueira, A. D. Nobre, F. L. Cardoso, B. Kruijt, H. C. Freitas, C. Randow, R. Aguiar, J. F. Maia. Patterns of water and heat flux across a biome gradient from tropical forest to savanna in Brazil. *Journal of Geophysical Research – Biogeosciences*. Vol. 114, G00B12, doi:10.1029/2007JG000640. <http://onlinelibrary.wiley.com/doi/10.1029/2007JG000640/abstract>, 2009.
- 175)** Borma, L.S., H. R. da Rocha, O. M. Cabral, E. Collicchio, P. Artaxo, D. Kurzatkowski, P.J. Brugger, H. Freitas, R. Tannus, L. Oliveira, Celso von Randow, C. D. Rennó. Atmospheric and hydrological controls of the evapotranspiration over a floodplain forest in the Bananal island region, Amazonia. *Journal of Geophysical Research – Biogeosciences*. Vol.114, G01003, doi:10.1029/2007JG000641, <http://onlinelibrary.wiley.com/doi/10.1029/2007JG000641/pdf> 2009.
- 176)** Gunthe, S. S., S. M. King, D. Rose, Q. Chen, P. Roldin, D. K. Farmer, J. L. Jimenez, P. Artaxo, M. O. Andreae, S. T. Martin, and U. Pöschl. Cloud condensation nuclei in pristine tropical rainforest air of Amazonia: size-resolved measurements and modeling of atmospheric aerosol composition and CCN activity. *Atmospheric Chemistry and Physics*, 9, 7551-7575, [www.atmos-chem-phys.net/9/7551/2009/](http://www.atmos-chem-phys.net/9/7551/2009/), doi:10.5194/acp-9-7551-2009, 2009.
- 177)** Ansmann, A., H. Baars, M. Tesche, D. Muller, D. Althausen, R. Engelmann, T. Pauliquevis, and P. Artaxo. Dust and smoke transport from Africa to South America: Lidar profiling over Cape Verde and the Amazon rainforest”. *Geophysical Research Letters*, Vol. 36, L11802, doi:10.1029/2009GL037923, <http://onlinelibrary.wiley.com/doi/10.1029/2009GL037923/abstract>, 2009.
- 178)** Karl, T., A. B. Guenther, A. Turnipseed, G. Tyndall, P. Artaxo, and S. T. Martin, Rapid Formation of Isoprene Photo-oxidation Products Observed in Amazonia, *Atmospheric Chemistry and Physics* 9, 7753 – 7767, [www.atmos-chem-phys.net/9/7753/2009/](http://www.atmos-chem-phys.net/9/7753/2009/) doi:10.5194/acp-9-7753-2009, 2009.
- 179)** Artaxo, P., Mudanças Climáticas: mil anos de duração? *Revista Ciência Hoje*, Vol. 43, Pag. 10-11, março de 2009.

- 180)** Freitas, S. R., K. M. Longo, M. A. F. S. Dias, R. Chatfield, P. Silva Dias, P. Artaxo, M. O. Andreae, G. Grell, L. F. Rodrigues, A. Fazenda and J. Panetta. The Coupled Aerosol and Tracer Transport model to the Brazilian developments on the Regional Atmospheric Modeling System (CATT-BRAMS). Part 1: Model description and evaluation. *Atmos. Chem. Phys.*, 9, 2843-2861, 2009. [www.atmos-chem-phys.net/9/2843/2009/](http://www.atmos-chem-phys.net/9/2843/2009/) doi:10.5194/acp-9-2843-2009.
- 181)** Procopio A. S. and P. Artaxo. Direct and Semi-Direct Aerosol Effects: A Modeled Study for Biomass Burning Aerosol Radiative Forcing in the Amazon Region. In: Current problems in atmospheric Radiation (IRS 2008): Proceedings of the International Radiation Symposium (IRC/IAMAS), Ed. T. Nakajima, M. A. Yamasoe. American Institute of Physics Conference Proceedings Volume 1100. pp. 649-652. ISBN: 978-0-7354-0635-3, 2009.
- 182)** Martins, J. V.; Artaxo, P.; Kaufman, Y. J.; Castanho, A. D.; Remer, L. A. Spectral absorption properties of aerosol particles from 350-2500nm. *Geophysical Research Letters*, Vol. 36, No. 13, L13810. <http://dx.doi.org/10.1029/2009GL037435>. 2009.
- 183)** Barcellos, Cristovam, Antônio M. V. Monteiro, Carlos Corvalán, Helen C. Gurgel, Marília S. Carvalho, Paulo Artaxo, Sandra Hacon e Virginia Ragoni. Mudanças climáticas e ambientais e as doenças infecciosas: cenários e incertezas para o Brasil. Climatic and Environmental Changes and their Effect on Infectious Diseases: Scenarios and Uncertainties for Brazil. *Epidemiologia e Serviços de Saúde*, Brasília, 18(3):285-304, 2009.
- 184)** Chen, Q., D. K. Farmer, J. Schneider, S. R. Zorn, C. L. Heald, T. G. Karl, A. Guenther, J. D. Allan, N. Robinson, H. Coe, J. R. Kimmel, T. Pauliquevis, S. Borrmann, U. Pöschl, M. O. Andreae, P. Artaxo, J. L. Jimenez, and S. T. Martin. Mass Spectral Characterization of Submicron Biogenic Organic Particles in the Amazon Basin. *Geophysical Research Letters*, Vol. 36, L20806, doi:10.1029/2009GL039880, <http://onlinelibrary.wiley.com/doi/10.1029/2009GL039880/abstract> , 2009.
- 185)** Artaxo, P., L. V. Rizzo, M. Paixão, S. de Lucca, P. H. Oliveira, L. L. Lara, K. T. Wiedemann, M. O. Andreae, B. Holben, J. Schafer, A. L. Correia, and T. M. Pauliquevis. Aerosol particles in Amazonia: Their composition, role in the radiation balance, cloud formation, and nutrient cycles. In: Amazonia and Global Change, Ed. M. Keller, M. Bustamante, J. Gash, P. S. Dias. American Geophysical Union, Geophysical Monograph 186, pg. 235-254, ISBN: 978-0-87590-449-8, 2009.
- 186)** Nobre, C., J. Marengo, P. Artaxo, Understanding the climate of Amazonia: Progress from LBA. In: Amazonia and Global Change, Ed. M. Keller, M. Bustamante, J. Gash, P. S. Dias. American Geophysical Union, Geophysical Monograph 186, pg. 147-150, ISBN: 978-0-87590-449-8, 2009.
- 187)** Batistella, M., P. Artaxo, C. Nobre, M. Bustamante, F; Luizão. Results From LBA and a Vision for Future Amazonian Research. In: Amazonia and Global Change, Ed. M. Keller, M. Bustamante, J. Gash, P. S. Dias. American Geophysical Union, Geophysical Monograph 186, pg. 551-555, ISBN: 978-0-87590-449-8, 2009.
- 188)** Longo, K., S. R. de Freitas, M. O. Andreae, R. Yokelson, P. Artaxo. Biomass Burning in Amazonia: Emissions, Long-Range Transport of Smoke and Its Regional and Remote
- 
-

- Impacts. In: Amazonia and Global Change, Ed. M. Keller, M. Bustamante, J. Gash, P. S. Dias. American Geophysical Union, Geophysical Monograph 186, pg. 209-234, ISBN: 978-0-87590-449-8, 2009.
- 189)** Hess, P., M. Johnston, B. Brown-Steiner, T. Holloway, J.B. de Andrade, P. Artaxo. Air quality issues associated with biofuel production and use. Pages 169-194 in R.W. Howarth and S. Bringezu (eds) Biofuels: Environmental Consequences and Interactions with Changing Land Use. Proceedings of the Scientific Committee on Problems of the Environment (SCOPE) International Biofuels Project Rapid Assessment, <http://cip.cornell.edu/biofuels/>. 2009.
- 190)** Ahlm, L., E. D. Nilsson, R. Krejci, E.M. Martensson, M. Vogt and P. Artaxo. Aerosol number fluxes over the Amazon rain forest during the wet season. Atmospheric Chemistry and Physics, Vol. 9, pp. 9.381-9.400, [www.atmos-chem-phys.net/9/9381/2009/](http://www.atmos-chem-phys.net/9/9381/2009/) , doi:10.5194/acp-9-9381-2009, 2009.
- 191)** Pöschl, Uli, S. T. Martin, B. Sinha, Q. Chen, S. S. Gunthe, J. A. Huffman, S. Borrmann, D. K. Farmer, R. M. Garland, G. Helas, J. L. Jimenez, S. M. King, A. Manzi, E. Mikhailov, T. Pauliquevis, M. D. Petters, A. J. Prenni, P. Roldin, D. Rose, J. Schneider, H. Su, S. R. Zorn, P. Artaxo, M. O. Andreae. Rainforest aerosols as biogenic nuclei of clouds and precipitation in the Amazon. Science, Vol. 329, 1513-1516, doi: 10.1126/science.1191056, <http://science.sciencemag.org/content/329/5998/1513.long> , 2010.
- 192)** Rizzo, L. V., Artaxo, P., Karl, T., Guenther, A. B., Greenberg, J. P. Aerosol properties, incanopy gradients, turbulent fluxes, and VOC concentrations at a pristine forest site in Amazonia. Atmospheric Environment, Vol. 44, Issue 4, 503-511, DOI: 10.1016/j.atmosenv.2009.11.002, <http://escholarship.org/uc/item/6sr5m9n9#> , 2010.
- 193)** Ekström, S., B. Nozière, M. Hultberg, T. Alsberg, J. Magnér, E. D. Nilsson, and P. Artaxo. A possible role of ground-based microorganisms on cloud formation in the atmosphere. Biogeosciences, 7, Issue 1, 387-394, <http://www.biogeosciences.net/7/387/2010/> , 2010.
- 194)** Heald, C. L., J. H. Kroll, J. L. Jimenez, K. S. Docherty, P. F. DeCarlo, A. C. Aiken, Q. Chen, S.T. Martin, D. K. Farmer, P. Artaxo, A. J. Weinheimer. A simplified description of organic aerosol elemental composition and implications for atmospheric aging. Geophysical Research Letters, Vol. 37, Article number L08803, 5 PP., doi: 10.1029/2010GL042737, <http://onlinelibrary.wiley.com/doi/10.1029/2010GL042737/abstract>, 2010.
- 195)** Martin, S. T., M. O. Andreae, P. Artaxo, D. Baumgardner, Qi Chen, A. H. Goldstein, A. B. Guenther, C. L. Heald, O. L. Mayol-Bracero, P. H. McMurry, T. Pauliquevis, U. Pöschl, K. A. Prather, G. C. Roberts, S. R. Saleska, M. A. Silva Dias, D. V. Spracklen, E. Swietlicki, and I. Trebs. Sources and Properties of Amazonian Aerosol Particles. Review of Geophysics, Vol. 48, Article number RG2002, DOI: 10.1029/2008RG000280, <http://onlinelibrary.wiley.com/doi/10.1029/2008RG000280/abstract>, 2010.
- 196)** Martin, S.T., M. O. Andreae, D. Althausen, P. Artaxo, H. Baars, S. Borrmann, Q. Chen, D. K. Farmer, A. Guenther, S. S. Gunthe, J. L. Jimenez, T. Karl, K. Longo, A. Manzi, T. Pauliquevis, M. D. Petters, A. J. Prenni, U. Pöschl, L. V. Rizzo, J. Schneider, J. N. Smith, E. Swietlicki, J. Tota, J. Wang, A. Wiedensohler, and S. R. Zorn. An overview of the Amazonian Aerosol Characterization Experiment 2008 (AMAZE-08). Atmospheric Chemistry and Physics - ACP,

- 
- Vol. 10, pp. 18139-18195, [www.atmos-chem-phys.net/10/11415/2010/](http://www.atmos-chem-phys.net/10/11415/2010/), doi:10.5194/acp-10-11415-2010, 2010.
- 197)** Ahlm, L., E. D. Nilsson, R. Krejci, E. M. Martensson, M. Vogt, and P. Artaxo. A comparison of dry and wet season aerosol number fluxes over the Amazon rain forest. *Atmospheric Chemistry and Physics*, 10, Issue 6, pg. 3063-3079, [www.atmos-chem-phys.net/10/3063/2010/](http://www.atmos-chem-phys.net/10/3063/2010/). doi:10.5194/acp-10-3063-2010, 2010.
- 198)** Ahlm, L., R. Krejci, E. D. Nilsson, E. M. Martensson, M. Vogt and P. Artaxo. Emission and dry deposition of accumulation mode particles in the Amazon basin. *Atmospheric Chemistry and Physics*, 10, 10237–10253, doi:10.5194/acp-10-10237-2010. [www.atmos-chem-phys.net/10/10237/2010/](http://www.atmos-chem-phys.net/10/10237/2010/).
- 199)** Claeys, M., I. Kourtchev, V. Pashynska, G. Vas, R. Vermeylen, W. Wang, J. Cafmeyer, X. Chi, P. Artaxo, M. O. Andreae, and W. Maenhaut. Polar organic marker compounds in atmospheric aerosols during the LBA-SMOCC 2002 biomass burning experiment in Rondônia, Brazil: sources and source processes, time series, diel variations, and size distributions. *Atmospheric Chemistry and Physics*, 10, 9319 – 9331, [www.atmos-chem-phys.net/10/9319/2010/](http://www.atmos-chem-phys.net/10/9319/2010/) , doi:10.5194/acp-10-9319-2010, 2010.
- 200)** Kuhn, U., L. Ganzeveld, A. Thielmann, T. Dindorf, G. Schebeske, M. Welling, J. Sciare, G. Roberts, F. X. Meixner, J. Kesselmeier, J. Lelieveld, O. Kolle, P. Ciccioli, J. Lloyd, J. Trentmann, P. Artaxo, and M. O. Andreae. Impact of Manaus City on the Amazon Green Ocean atmosphere: ozone production, precursor sensitivity, and aerosol load. *Atmospheric Chemistry and Physics*. 10, 9251-9282, [www.atmos-chem-phys.net/10/9251/2010/](http://www.atmos-chem-phys.net/10/9251/2010/) doi:10.5194/acp-10-9251-2010.
- 201)** Longo, K., S. Freitas, M. O. Andreae, A. Setzer, E. Prins, P. Artaxo. The Coupled Aerosol and Tracer Transport model to the Brazilian developments on the Regional Atmospheric Modeling System (CATT-BRAMS). Part 2: Model sensitivity to the biomass burning inventories. *Atmospheric Chemistry and Physics*, Vol. 10, pg. 7533-7544, doi:10.5194/acp-10-5785-2010, [www.atmos-chem-phys.net/10/5785/2010/](http://www.atmos-chem-phys.net/10/5785/2010/) , 2010.
- 202)** Ben-Ami, Y., I. Koren, Y. Rudich, P. Artaxo, S. T. Martin and M. O. Andreae. Transport of Saharan Dust from the Bodélé Depression to the Amazon Basin: a case study. *Atmospheric Chemistry and Physics*, Vol. 10, 7533-7544, 2010. doi:10.5194/acp-10-7533-2010. [www.atmos-chem-phys.net/10/7533/2010/](http://www.atmos-chem-phys.net/10/7533/2010/).
- 203)** Moraes, A. C. L., E. Ignotti, P. Artaxo, L. Jacobson, H. Castro, S. Hacon. Wheezing in children and adolescents living next to a petrochemical plant in Rio Grande do Norte, Brazil. *Jornal de Pediatria*, 0021-7557/10/86-04/337, ISSN 0021-7557, v. 86, n. 4, pg. 337-344, <http://dx.doi.org/10.1590/S0021-75572010000400015>, 2010.
- 204)** Ignotti, E., J. G. Valente, K. M. Longo, S.R. Freitas, S. S. Hacon, and P. Artaxo. Impact on human health of particulate matter emitted from burnings in the Brazilian Amazon region. *Revista Saúde Pública* 44, N. 1, 121-130, ISSN 0034-8910, DOI: 10.1590/S0034-89102010000100013, [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0034-89102010000100013](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89102010000100013) , 2010.
-



- 205)** do Carmo, Cleber; Hacon, Sandra; Longo, Karla; Freitas, Saulo; Ignotti, Eliane; de Leon, Antônio; and Artaxo, Paulo. Association between particulate matter from biomass burning and respiratory diseases in the southern region of the Brazilian Amazon. *Revista Panamericana de Salud Publica-Pan American Journal of Public Health*. Vol. 27, Issue: 1, Pages: 10-16, 2010.
- 206)** Ignotti, Eliane, Sandra Hacon, Dennys Mourão, Karla Longo, Saulo Freitas, Paulo Artaxo, Antônio Carlos Monteiro Ponce de Leon. Air pollution and hospital admissions for respiratory diseases in the subequatorial Amazon: a time series approach. *Cadernos de Saúde Pública*, Vol. 26, número 4, páginas 747-761, 2010.
- 207)** Artaxo, P., Reductions in deforestation rates in Amazonia. *Global Atmospheric Pollution Forum newsletter*. Vol. 8, Pg. 2-3, February 2010.
- 208)** Soto-Garcia, L. L; Andreae, MO; Andreae, TW; Artaxo, P.; Maenhaut, W.; Kirchstetter, T.; Novakov, T.; Chow, JC; Mayol-Bracero, O. L. Evaluation of the carbon content of aerosols from the burning of biomass in the Brazilian Amazon using thermal, optical, and thermal-optical analysis methods. *Atmospheric Chemistry and Physics*. Vol. 11, Issue: 9 Pages: 4425-4444. DOI: 10.5194/acp-11-4425-2011. [www.atmos-chem-phys.net/11/4425/2011/](http://www.atmos-chem-phys.net/11/4425/2011/).
- 209)** Gilardoni, S., E. Vignati, E. Marmer, F. Cavalli, C. Belis, V. Gianelle, A. Loureiro, and P. Artaxo. Sources of carbonaceous aerosol in the Amazon basin. *Atmospheric Chemistry and Physics*, 11, 2747-2764, [www.atmos-chem-phys.net/11/2747/2011/](http://www.atmos-chem-phys.net/11/2747/2011/). doi:10.5194/acp-11-2747-2011. 2011.
- 210)** Rizzo, L. V., Correia, A. L., Artaxo, P., Procópio, A. S., Andreae, M. O. Spectral dependence of aerosol light absorption over the Amazon Basin. *Atmospheric Chemistry and Physics*, 11, 8899–8912, 2011. [www.atmos-chem-phys.net/11/8899/2011/](http://www.atmos-chem-phys.net/11/8899/2011/). doi:10.5194/acp-11-8899-2011.
- 211)** Alves, N. O; S. B. de Medeiros, A. L. M. Loureiro; F. C. Santos; K. H. Nascimento; R. Dallacort; P. C. Vasconcellos; S. S. Hacon; P. Artaxo. Genotoxicity and composition of particulate matter from biomass burning in the Eastern Brazilian Amazon region. *Ecotoxicology and Environmental Safety*. Paper No. EES-10-182R1. doi:10.1016/j.ecoenv.2011.04.007, 2011.
- 212)** Oliveira, B., Ignotti, E., Hacon, S., Artaxo, P. Comparison of Health Effects from Exposure to Air Pollution Derived from Combustion of Fossil Fuels and Biomass Burning in Brazil. *EPIDEMIOLOGY*, Vol. 22, Issue: 1, Pages: S194-S195 Supplement: Suppl. S Published: JAN 2011.
- 213)** Oliveira, Beatriz, Ignotti, Eliane, Hacon, Sandra, Rodrigues, Poliany, Artaxo, Paulo. Quantification of Exposure by PM<sub>2.5</sub> From the Biomass Burning in the Brazilian Amazon: Estimative of Potential Dose. *EPIDEMIOLOGY*, Volume: 22, Issue: 1, Pages: S211-S211 Supplement: Suppl. S Published: JAN 2011.
- 214)** Sisenando, H. A, S. R Batistuzzo de Medeiros, P. H N Saldiva, P. Artaxo, S. S Hacon. Genotoxic potential generated by biomass burning in the Brazilian Legal Amazon by *Tradescantia* micronucleus bioassay: a toxicity assessment study. *Environmental Health*
-

---

2011, Vol. 10. doi:10.1186/1476-069X-10-41. URL:  
<http://www.ehjournal.net/content/10/1/41>.

- 215)** Ebben, C. J., I. S. Martinez, M. Shrestha, A. M. Buchbinder, A. L. Corrigan, A. Guenther, T. Karl, T. Petaja, W.W. Song, S. R. Zorn, P. Artaxo, M. Kulmala, S. T. Martin, L. M. Russell, J. Williams, and F. M. Geiger. Contrasting organic aerosol particles from boreal and tropical forests during HUMPPA-COPEC-2010 and AMAZE-08 using coherent vibrational spectroscopy. *Atmospheric Chemistry and Physics*, Vol. 11, 10327-10329, [www.atmos-chem-phys.net/11/10317/2011/](http://www.atmos-chem-phys.net/11/10317/2011/), doi:10.5194/acp-11-10317-2011.
- 216)** Schneider, J., F. Freutel, S. R. Zorn, Q. Chen, D. K. Farmer, J. L. Jimenez, S. T. Martin, P. Artaxo, A. Wiedensohler, and S. Borrmann. Mass-spectrometric identification of primary biological particle markers: indication for low abundance of primary biological material in the pristine submicron aerosol of Amazonia. *Atmospheric Chemistry and Physics*, 11, 11415–11429, 2011, [www.atmos-chem-phys.net/11/11415/2011/](http://www.atmos-chem-phys.net/11/11415/2011/), doi:10.5194/acp-11-11415-2011.
- 217)** Kulmala, M., A. Asmi, H.K. Lappalainen, U. Baltensperger, J.-L. Brenguier, M. C. Facchini, H.-C. Hansson, Ø. Hov, C. O'Dowd, U. Pöschl, A. Wiedensohler, R. Boers, O. Boucher, G. De Leeuw, J. Feichter, R. Krejci, P. Laj, H. Lihavainen, U. Lohmann, G. McFiggans, T. Mentel, C. Pilinis, I. Riipinen, M. Schultz, A. Stohl, E. Swietlicki, H. Denier Van den Gon, E. Vignati, M. Amann, C. Alves, S. Arabas, P. Artaxo, D.C.S. Beddows, P. Beukes, R. Bergström, M. Bilde, S. Clegg, H. Coe, B. d'Anna, S. Gilardoni, J. Debernard, S. Decesari, M. Fischer, A.M. Fjæraa, C. George, P. Halloran, T. Hamburger, R.M. Harrison, H. Herrman, T. Hoffmann, C. Hoose, M. Hu, U. Hörrak, Y. Iinuma, T. Iversen, M. Josipovic, M. Junying, M. Kanakidou, A. Kiendler-Scharr, A. Kirkevåg, G. Kiss, Z. Klimont, P. Kolmonen, J.E. Kristjansson, L. Laakso, A. Laaksonen, L. Labonnote, K.E.J. Lehtinen, R. Makkonen, G. McMeeking, J. Merikanto, A. Minikin, S. Mirme, T. Morgan, D. O'Donnell, T.S. Panwar, H. Pawlowska, A. Petzold, J.J. Pienaar, C. Pio, C. Plass-Duelmer, A.S.H. Prévôt, S. Pryor, D. Rosenfeld, J. Schwarz, Ø. Seland, X.J. Shen, B. Sierau, D. Simpson, J.Y. Sun, D. Topping, P. Tunved, P. Vaattovaara, V. Vakkari, P. van Zyl, J.P. Veefkind, B. Wehner, J. Wildt, G. Visschedijk, S. Woodward, H. Vuollekoski, A. Zardini, K. Zhang, V.-M. Kerminen, K. Carslaw and S. N. Pandis. General Overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) - integrating aerosol research from nano to global scales. *Atmos. Chem. Phys.*, 11, 13061-13143, 2011, [www.atmos-chem-phys.net/11/13061/2011/](http://www.atmos-chem-phys.net/11/13061/2011/), doi:10.5194/acp-11-13061-2011.
- 218)** Martinez, Imee Su; Peterson, Mark; Ebben, Carlana; Hayes, Patrick; Artaxo, Paulo; Martin, Scot; Geiger, Franz. On Molecular Chirality within Secondary Organic Aerosol Particles. *Physical Chemistry Chemical Physics*. Vol. 13, Issue: 26, Pg. 12,114–12,122. DOI: 10.1039/c1cp20428a.  
<http://pubs.rsc.org/en/content/articlelanding/2011/cp/c1cp20428a#!divAbstract>, 2011
- 219)** Medeiros, S. R. B. Alves, N. D. Loureiro, A. L. M. dos Santos, F. C. Nascimento, K. H. Dallacort, R. Vasconcellos, P. D. Hacon, S. D. Artaxo, P. Genotoxicity and composition of particulate matter from biomass burning in the eastern Brazilian Amazon region. *Ecotoxicology and Environmental Safety*. Vol. 74, Issue 5, Pg. 1427-1433, 2011 ISSN: 0147-6513. DOI: 10.1016/j.ecoenv.2011.04.007, <https://www.ncbi.nlm.nih.gov/pubmed/21496924>
- 
-

- 220)** Ebben, C. J., S. R. Zorn, S. Lee, P. Artaxo, S. T. Martin, and F. M. Geiger, Stereochemical transfer to atmospheric aerosol particles accompanying the oxidation of biogenic volatile organic compounds, *Geophysical Research Letters*, Vol. 38, Article number L16807, doi:10.1029/2011GL048599, <http://onlinelibrary.wiley.com/doi/10.1029/2011GL048599/full> 2011.
- 221)** Jardine, K., A. Yanez Serrano, A. Arneth, A. Jardine, P. Artaxo, E. Alves, J. Kesselmeier, T. Taylor, S. Saleska, and T. Huxman. Ecosystem-scale compensation points of gas-phase formic and acetic acid in the central Amazon. *Biogeosciences*, 8, 3709–3720, 2011, [www.biogeosciences.net/8/3709/2011/](http://www.biogeosciences.net/8/3709/2011/), doi:10.5194/bg-8-3709-2011.
- 222)** Bowman, D.; J. Balch, P. Artaxo, W. Bond, M. Cochrane, C. D'Antonio, R. DeFries, F. Johnston, J. Keeley, M. Krawchuk, C. Kull, M. Mack, M. Moritz, S. Pyne, C. Roos, A. Scott, N. Sodhi, and T. Swetnam. The human dimension of fire regimes on Earth. *Journal of Biogeography*, Vol. 38, Issue 12, Pg. 2223–2236, DOI: 10.1111/j.1365-2699.2011.02595.x, <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2699.2011.02595.x/full>, 2011.
- 223)** Martins, J. V., A. Marshak, L. Remer, D. Rosenfeld, Y. J. Kaufman, R. Fernandez-Borda, I. Koren, V. Zubko, and P. Artaxo. Remote sensing the vertical profile of cloud droplet effective radius, thermodynamic phase, and temperature. *Atmospheric Chemistry and Physics*, 11, 9485-9501, 2011 [www.atmos-chem-phys.net/11/9485/2011/](http://www.atmos-chem-phys.net/11/9485/2011/) doi:10.5194/acp-11-9485-2011.
- 224)** Johnson, Todd M., Sarath Guttikunda, Gary J. Wells, Paulo Artaxo, Tami C. Bond, Armistead G. Russell, John G. Watson, Jason West. Tools for Improving Air Quality Management, A Review of Top-down Source Apportionment Techniques and Their Application in Developing Countries. World Bank Report 339/2011, Washington D.C.
- 225)** Jardine, K.; Yañez Serrano, A.; Arneth, A.; Abrell, L.; Jardine, A.; van Haren, J.; Artaxo, P.; Rizzo, L. V.; Ishida, F. Y.; Karl, T.; Kesselmeier, J.; Saleska, S.; Huxman, T. Within-canopy sesquiterpene ozonolysis in Amazonia. *Journal of Geophysical Research-Atmospheres*, Vol. 116, Article number D19301, doi:10.1029/2011JD016243, <http://onlinelibrary.wiley.com/doi/10.1029/2011JD016243/abstract>, 2011.
- 226)** Baars, H., A. Ansmann, D. Althausen, R. Engelmann, P. Artaxo, T. Pauliquevis, R. Souza. Further evidence for a significant smoke transport from Africa to Amazonia during the wet season. *Geophysical Research Letters*, Vol. 38, Article number L20802, DOI: 10.1029/2011GL049200. <http://onlinelibrary.wiley.com/doi/10.1029/2011GL049200/abstract>, 2011.
- 227)** Artaxo, P. O papel dos aerossóis no sistema climático. In: O futuro da Terra, ed. Moysés Nussenzveig, FGV Editora, 312 págs. Pg. 167-194. ISBN 978-85-225-0936-2. 2011.
- 228)** Artaxo, P., Riscos e desafios: O aquecimento global não é o fim. In: Mudanças climáticas e mudanças socioambientais globais: reflexões sobre alternativas de futuro. Pag. 11-14. Coordenação de Eda Terezinha de Oliveira e Emília Wanda Rutkowski. Editora UNESCO/IBECC. 184 pp, ISBN 978-85-7652-083-2, 2011.
- 229)** Davidson, E. A., A. C. de Araújo, P. Artaxo, J. K. Balch, I. F. Brown, M. M. da C. Bustamante, [javascript:void\(0\)](http://www.scribd.com/doc/101111111/JavaScript:void(0);); M. T. Coe, R. S. DeFries, M. Keller, M. Longo, J. W. Munger, W. Schroeder,
- 
-

- B. S. Soares-Filho, C. M. Souza Jr., S. C. Wofsy. The Amazon Basin in Transition. *Nature*, 481, 321-328, doi:10.1038/nature10717, <http://www.nature.com/nature/journal/v481/n7381/full/nature10717.html> , 2012.
- 230)** Artaxo, P., Break down boundaries in climate research. World View Section, *Nature* 481, 239, <http://www.nature.com/news/break-down-boundaries-in-climate-research-1.9844>, 2012.
- 231)** Pöhlker, C., K. T. Wiedemann, B. Sinha, M. Shiraiwa, S. S. Gunthe, M. Smith, H. Su, P. Artaxo, Q. Chen, Y. Cheng, W. Elbert, M. K. Gilles, A. L. D. Kilcoyne, R. C. Moffet, M. Weigand, S. T. Martin, U. Pöschl, M. O. Andreae, Biogenic potassium salt particles as seeds for secondary organic aerosol in the Amazon. *Science*, Vol. 337, pg. 1075-1078, doi: 10.1126/science.1223264, <http://science.sciencemag.org/content/337/6098/1075.full> , 2012.
- 232)** Russell, L.M., P. J. Rasch, G. M. Mace, R. B. Jackson, J. Shepherd, P. Liss, M. Leinen, D. Schimel, N. E. Vaughan, A. C. Janetos, P. Boyd, R., J. Norby, K. Caldeira, J. Merikanto, P. Artaxo, J. Melillo, and M. G. Morgan. Ecosystem Impacts of Geoengineering: A Review for Developing a Science Plan. *AMBIO*, DOI 10.1007/s13280-012-0258-5, <https://link.springer.com/article/10.1007/s13280-012-0258-5> , 2012.
- 233)** Frohlich-Nowoisky, J., S. M. Burrows, Z. Xie<sup>1</sup>, G. Engling, P. A. Solomon, M. P. Fraser, O. L. Mayol-Bracero, P. Artaxo, D. Begerow, R. Conrad, M. O. Andreae, V. R. Despres, and U. Pöschl. Biogeography in the air: fungal diversity over land and oceans. *Biogeosciences*, 9, 1125–1136, 2012, [www.biogeosciences.net/9/1125/2012/](http://www.biogeosciences.net/9/1125/2012/), doi:10.5194/bg-9-1125-2012.
- 234)** Williamson, P., Watson, R.T., Mace, G., Artaxo, P., Bodle, R., Galaz, V., Parker, A., Santillo, D., Vivian, C., Cooper, D., Webbe, J., Cung, A. and E. Woods (2012). Impacts of Climate-Related Geoengineering on Biological Diversity. Part I of Geoengineering in Relation to the Convention on Biological Diversity: Technical and Regulatory Matters. Secretariat of the Convention on Biological Diversity. Montreal, CBD Technical Series No. 66, ISBN 92-9225-428-6, 152 pages, 2012.
- 235)** Trebs, I., O. L. Mayol-Bracero, T. Pauliquevis, U. Kuhn, R. Sander, L. Ganzeveld, F. X. Meixner, J. Kesselmeier, P. Artaxo, and M. O. Andreae, Impact of the Manaus urban plume on trace gas mixing ratios near the surface in the Amazon Basin: Implications for the NO-NO<sub>2</sub>-O<sub>3</sub> photostationary state and peroxy radical levels, *Journal of Geophysical Research*, 117, D05307, doi:10.1029/2011JD016386. <http://onlinelibrary.wiley.com/doi/10.1029/2011JD016386/abstract>, 2012.
- 236)** Sisenando, H. A., Silvia R Batistuzzo de Medeiros, Paulo Artaxo, Paulo H N Saldiva, and Sandra S Hacon. Micronucleus frequency in children exposed to biomass burning in the Brazilian Legal Amazon region: a case-control study. MS ID: 7672172146225053. *BMC Oral Health* 2012, 12:6. doi:10.1186/1472-6831-12-6, <https://bmcoralhealth.biomedcentral.com/articles/10.1186/1472-6831-12-6> , 2012.
- 237)** Jardine, K.; Monson, R.; Abrell, L; Saleska, S.; Arneth, A.; Jardine, A.; Karl, T.; Fares, S.; Goldstein, A.; Loreto, F.; Huxman, T. E; Artaxo, P.; Ishida, F. Within-plant isoprene oxidation confirmed by direct emissions of oxidation products methyl vinyl ketone and methacrolein.

- Global Change Biology, Vol. 18, Issue 3, pg. 973-984, doi: 10.1111/j.1365-2486.2011.02610.x, <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2486.2011.02610.x/abstract>, 2012.
- 238)** Andreae, M. O., Artaxo, P., Beck, V., M. Bela, Gerbig, C., Longo, K., Munger, J. W., Wiedemann, K. T., and Wofsy, S. C., Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and dry seasons: Atmospheric Chemistry and Physics, 12, 6041–6065, 2012. doi:10.5194/acp-12-6041-2012. [www.atmos-chem-phys.net/12/6041/2012/](http://www.atmos-chem-phys.net/12/6041/2012/). 2012
- 239)** Eck, T. F., B. N. Holben, J. S. Reid, D. M. Giles, M. A. Rivas, R. P. Singh, S. N. Tripathi, C. J. Bruegge, S. Platnick, G. T. Arnold, N. A. Krotkov, S. A. Carn, A. Sinyuk, O. Dubovik, A. Arola, J. S. Schafer, P. Artaxo, A. Smirnov, H. Chen, and P. Goloub. Fog and cloud induced aerosol modification observed by AERONET. *Journal of Geophysical Research*, Vol. 117, D07206, doi:10.1029/2011JD016839, <http://onlinelibrary.wiley.com/doi/10.1029/2011JD016839/abstract>, 2012.
- 240)** Pauliquevis, T., L. L. Lara, M. L. Antunes, and P. Artaxo. Aerosol and precipitation chemistry measurements in a remote site in Central Amazonia: the role of biogenic contribution. *Atmos. Chem. Phys.*, 12, 4987–5015, 2012. [www.atmos-chem-phys.net/12/4987/2012/](http://www.atmos-chem-phys.net/12/4987/2012/). doi:10.5194/acp-12-11733-2012.
- 241)** Backman, J., L. V. Rizzo, J. Hakala, T. Nieminen, H. E. Manninen, F. Morais, P. P. Aalto, E. Siivola, S. Carbone, R. Hillamo, P. Artaxo, T. Petaja, and M. Kulmala. On the diurnal cycle of urban aerosols, black carbon, and the occurrence of new particle formation events in springtime Sao Paulo, Brazil. *Atmospheric Chemistry and Physics* 12, 11733–11751. doi:10.5194/acp-12-11733-2012. <http://www.atmos-chem-phys.net/12/11733/2012/>, 2012.
- 242)** Oliveira, B. F. A., Ignotti, E., P. Artaxo, P.H.N. Saldiva, W. L. Junger, S. Hacon. Risk assessment of PM2.5 children's residents in the Brazilian Amazon region with biofuel production. *Environmental Health* 2012 11:64. Web site: <http://www.ehjournal.net/content/11/1/64>, doi:10.1186/1476-069X-11-64, 2012.
- 243)** Ebben, Carlana J., Mona Shrestha, Imee S. Martinez, Ashley L. Corrigan, Amanda A. Frossard, Wei W. Song, David R. Worton, Tuukka Petäjä, Jonathan Williams, Lynn M. Russell, Markku Kulmala, Allen H. Goldstein, Paulo Artaxo, Scot T. Martin, Regan J. Thomson, and Franz M. Geiger. Secondary Organic Aerosol Particles from Southern Finland, Amazonia, and California Studied by Coherent Vibrational Spectroscopy. *Journal of Physical Chemistry A Feature Article*, 116, 8271-8290, dx.doi.org/10.1021/jp302631z, <http://pubs.acs.org/doi/abs/10.1021/jp302631z>, 2012.
- 244)** Beck, V., B., H. Chen, C. Gerbig, P. Bergamaschi, L. Bruhwiler, S. Houweling, T. Röckmann, O. Kolle, J. Steinbach, C. J. Sapart, C. van der Veen, C. Frankenberg, T. Koch, M. O. Andreae, P. Artaxo, K. M. Longo, S. C. Wofsy. Methane airborne measurements and comparison to global models during BARCA. *Journal of Geophysical Research*, 117, 15310-15326, D15310, doi:10.1029/2011JD017345, <http://onlinelibrary.wiley.com/doi/10.1029/2011JD017345/abstract>, 2012.
- 
-

- 245)** Baars, H. A. Ansmann, D. Althausen, R. Engelmann, B. Heese, D. Muller, P. Artaxo, M. Paixao, T. Pauliquevis, R. Souza. Aerosol profiling with lidar in the Amazon Basin during the wet and dry season. *Journal of Geophysical Research-Atmospheres*. Vol. 117, D21201, doi:10.1029/2012JD018338, <http://onlinelibrary.wiley.com/doi/10.1029/2012JD018338/abstract> , 2012.
- 246)** Jacobson, Ludmilla da Silva Viana, Sandra de Souza Hacon, Hermano Albuquerque de Castro, Eliane Ignotti, Paulo Artaxo, Antônio Carlos Monteiro Ponce de Leon. Association between fine particulate matter and the peak expiratory flow of schoolchildren in the Brazilian subequatorial Amazon: A panel study. *Environmental Research*, Vol. 117, August 2012, Pages 27–35. <http://dx.doi.org/10.1016/j.envres.2012.05.006>. 2012 <http://www.sciencedirect.com/science/article/pii/S0013935112001752>, 2012.
- 247)** Kuylenstierna, Johan C.I., May Antoniette Ajero, Drew Shindell, Eric Zusman, Frank Murray, Geir Braathen, Kevin Hicks, Linn Persson, Lisa Emberson, Martha Barata, Sara Feresu, Sara Terry, T.S. Panwar, Yousef Meslmani, Nguyen Thi Kim Oanh, Luis Abdón Cifuentes, Msafiri Jackson, Nicholas Muller, Paulo Artaxo, Seydi Ababacar Ndiaye, Susan Casper Anenberg and Emily Nyaboke. Atmosphere. In: Global Outlook Report GEO-5. Pg. 31-64, 528 pages, ISBN: 978-92-807-3177-4, Edited by United Nations Environment Programme (UNEP), Printed and bound in Malta by Progress Press Ltd, Malta, 2012.
- 248)** Huffman, J. A., B. Sinha, R.M. Garland, A. Snee-Pollmann, S.S. Gunthe, P. Artaxo, S.T. Martin, M.O. Andreae, and U. Pöschl. Size distributions and temporal variations of biological aerosol particles in the Amazon rainforest were characterized by microscopy and real-time UV-APS fluorescence techniques during AMAZE-08. *Atmos. Chem. Phys.*, 12, 11997–12019, [www.atmos-chem-phys.net/12/11997/2012/](http://www.atmos-chem-phys.net/12/11997/2012/) doi:10.5194/acp-12-11997-2012, 2012.
- 249)** Pauliquevis, T., Maria L. P. Antunes, Luciene Lara and Paulo Artaxo. How clean is the natural atmosphere? Earthzine online magazine <http://www.earthzine.org/2012/12/17/how-clean-is-the-natural-atmosphere/>, Dec 17, 2012.
- 250)** Artaxo, P., L. V. Rizzo, J. F. Brito, H. M. J. Barbosa, A. Arana, E. T. Sena, G. G. Cirino, W. Bastos, S. T. Martin, M. O. Andreae. Atmospheric aerosols in Amazonia and land-use change: from natural biogenic to biomass burning conditions. *Faraday Discussions*, DOI:10.1039/C3FD00052D, <http://pubs.rsc.org/en/content/articlehtml/2013/fd/c3fd00052d>, 2013.
- 251)** Boucher, O., D. Randall, P. Artaxo, C. Bretherton, G. Feingold, P. Forster, V.-M. Kerminen, Y. Kondo, H. Liao, U. Lohmann, P. Rasch, S. K. Satheesh, S. Sherwood, B. Stevens, and X. Y. Zhang, 2013: Clouds and Aerosols. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change - IPCC* [Stocker, T. F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P. M. Midgley (eds.)]. Pg. 571- Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA.
- 252)** Sena, E. T., P. Artaxo, and A. L. Correia. Spatial variability of the direct radiative forcing of biomass burning aerosols and the effects of land-use change in Amazonia. *Atmospheric*

- Chemistry and Physics, 13, 1261–1275, 2013 [www.atmos-chem-phys.net/13/1261/2013/](http://www.atmos-chem-phys.net/13/1261/2013/) doi:10.5194/acp-13-1261-2013, 2013.
- 253)** Rizzo, L. V., Artaxo, P., Müller, T., Wiedensohler, A., Paixão, M., Cirino, G. G., Arana, A., Swietlicki, E., Roldin, P., Fors, E. O., Wiedemann, K. T., Leal, L. S. M., and Kulmala, M.: Long term measurements of aerosol optical properties at a primary forest site in Amazonia, *Atmos. Chem. Phys.*, 13, 2391-2413, <http://www.atmos-chem-phys.net/13/2391/2013/> doi:10.5194/acp-13-2391-2013, 2013.
- 254)** Brito, J. F., L. V. Rizzo, P. Herckes, P. C. Vasconcellos, S. E. S. Caumo, A. Fornaro, R. Y. Ynoue, P. Artaxo, and M. F. Andrade. Physical-chemical characterization of the particulate matter inside two road tunnels in the São Paulo Metropolitan Area. *Atmos. Chem. Phys.*, 13, 12199–12213, 2013. [www.atmos-chem-phys.net/13/12199/2013/](http://www.atmos-chem-phys.net/13/12199/2013/). doi:10.5194/acp-13-12199-2013.
- 255)** Farmer, D. K., Q. Chen, J. R. Kimmel, K. S. Docherty, E. Nemitz, P. Artaxo, C. Cappa, S. T. Martin, J. L. Jimenez. Chemically resolved particle fluxes over tropical and temperate forests. *Aerosol Science and Technology*, Vol. 47 Issue: 7, Pg: 818-830, DOI: 10.1080/02786826.2013.791022. <http://www.tandfonline.com/doi/abs/10.1080/02786826.2013.791022>, 2013.
- 256)** Andrade Filho, Valdir Soares de, Paulo Artaxo, Sandra de Souza Hacon, Cleber Nascimento do Carmo, Glauber Cirino. Aerosols from biomass burning and respiratory diseases in children, Manaus, Northern Brazil. *Revista de Saúde Pública* 2013; 47 (2) 239 - 247, 2013. <http://www.scielo.br/pdf/rsp/v47n2/0034-8910-rsp-47-02-0239.pdf>. DOI: 10.1590/S0034-8910.2013047004011, 2013.
- 257)** Artaxo, Paulo; Barbosa, Henrique M. J.; Rizzo, Luciana V.; et al. Aerosols in Amazonia: Natural Biogenic Particles and Large Scale Biomass Burning Impacts. Book Editors: DeMott, PJ; ODowd, CD. Conference: 19th International Conference on Nucleation and Atmospheric Aerosols (ICNAA) Location: Colorado State Univ, Ctr Arts, Fort Collins, CO Date: JUN 23-28, 2013. In: NUCLEATION AND ATMOSPHERIC AEROSOLS Book Series: AIP Conference Proceedings, Volume: 1527, Pages: 487-490, DOI: 10.1063/1.4803311, 2013.
- 258)** Matisans, Modris; Tunved, Peter; Hamburger, Thomas; et al. Title: New Aerosol Particle Formation in Amazonia. Book Editors: DeMott, PJ; ODowd, CD. Conference: 19th International Conference on Nucleation and Atmospheric Aerosols (ICNAA) Location: Colorado State Univ, Ctr Arts, Fort Collins, CO Date: JUN 23-28, 2013. In: NUCLEATION AND ATMOSPHERIC AEROSOLS Book Series: AIP Conference Proceedings Volume: 1527, Pages: 571-574, DOI: 10.1063/1.4803335 Published: 2013.
- 259)** Morgan, W. T.; Allan, J. D.; Flynn, M.; et al. Overview of the South American Biomass Burning Analysis (SAMBBA) Field Experiment. Book Editors: DeMott, PJ; ODowd, CD. Conference: 19th International Conference on Nucleation and Atmospheric Aerosols (ICNAA) Location: Colorado State Univ, Ctr Arts, Fort Collins, CO Date: JUN 23-28, 2013. In: NUCLEATION AND ATMOSPHERIC AEROSOLS, Book Series: AIP Conference Proceedings, Volume: 1527, Pages: 587-590, DOI: 10.1063/1.4803339, 2013.
- 
-

- 260)** Andrade, Valdir S., Paulo Artaxo, Sandra Hacon, Cleber N. do Carmo. Aerossóis de queimadas na Amazônia brasileira e impactos na saúde humana. In: Espaço, saúde e ambiente na Amazônia: ensaios de geografia da saúde. Organizador: José Aldemir de Oliveira, Editora Outras Expressões, São Paulo. ISBN: 978-85-64421-57-8. 238p. pp 201-218, 2013.
- 261)** Frey, Anna; Saarnio, Karri; Lamberg, Heikki; Mylläri, Fanni; Karjalainen, Panu; Teinilä, Kimmo; Carbone, Samara; Tissari, Jarkko; Niemelä, Ville; Häyrinen, Anna; Rautiainen, Jani; Kytömäki, Jorma; Artaxo, Paulo; Virkkula, Aki; Pirjola, Liisa; Rönkkö, Topi; Keskinen, Jorma; Jokiniemi, Jorma; Hillamo, Risto. Optical and chemical characterization of aerosols emitted from coal, heavy and light fuel oil, and small-scale wood combustion. *Environmental Science & Technology*, 48 (1), pp 827-836, DOI: 10.1021/es4028698, <http://pubs.acs.org/doi/abs/10.1021/es4028698>, 2014.
- 262)** Barbosa, H. M. J., B. Barja, D. A. Gouveia, T. Pauliquevis, A. Braga, P. Artaxo, G. Cirino, and R. dos Santos, A permanent Raman lidar station in the Amazon: Description, characterization and first results. *Atmos. Meas. Tech.*, 7, 1745–1762, 2014. [www.atmos-meas-tech.net/7/1745/2014/](http://www.atmos-meas-tech.net/7/1745/2014/), doi:10.5194/amt-7-1745-2014.
- 263)** Cirino, G. G., R. A. F. Souza, D. K. Adams, and P. Artaxo. The effect of atmospheric aerosol particles and clouds on net ecosystem exchange in the Amazon. *Atmos. Chem. Phys.*, 14, 6523 – 6543, doi:10.5194/acp-14-6523-2014, <http://www.atmos-chem-phys.net/14/6523/2014/> <http://www.atmos-chem-phys.net/14/6523/2014/>, 2014.
- 264)** Tsigaridis, K., N. Daskalakis, M. Kanakidou, P. J. Adams, P. Artaxo, R. Bahadur, Y. Balkanski, S. E. Bauer, N. Bellouin, A. Benedetti, T. Bergman, T. K. Berntsen, J. P. Beukes, H. Bian, K. Carslaw, M. Chin, G. Curci, T. Diehl, R. Easter, S. Ghan, S. L. Gong, A. Hodzic, C. R. Hoyle, T. Iversen, S. Jathar, J.-L. Jimenez, J. W. Kaiser, A. Kirkevåg, D. Koch, H. Kokkola, Y. H. Lee, G. Lin, X. Liu, G. Luo, X. Ma, G. Mann, N. Mihalopoulos, J.-J. Morcrette, J.-F. Müller, G. Myhre, S. Myriokefalitakis, S. Ng, D. O'Donnell, J. E. Penner, L. Pozzoli, K. J. Pringle, L. M. Russell, M. Schulz, J. Sciare, Ø. Seland, D. T. Shindell, S. Sillman, R. B. Skeie, D. Spracklen, J. Stavrakou, S. D. Steenrod, A. Strunk, T. Takemura, P. Tiitta, S. Tilmes, H. Tost, T. van Noije, K. von Salzen, F. Yu, Z. Wang, Z. Wang, R. Zaveri, H. Zhang, K. Zhang, Q. Zhang, X. Zhang. The AeroCom evaluation and intercomparison of organic aerosol in global models. *Atmos. Chem. Phys.*, 14, 10845-10895, 2014, [www.atmos-chem-phys.net/14/10845/2014/](http://www.atmos-chem-phys.net/14/10845/2014/). doi:10.5194/acp-14-10845-2014.
- 265)** Ross, Christopher; Bowman, David, Balch, Jennifer; Artaxo, Paulo; Bond, William; Cochrane, Mark; D'Antonio, Carla; DeFries, Ruth; Johnston, Fay; Krawchuk, Meg; Kull, Christian; Mack, Michelle; Moritz, Max; Pyne, Stephen; Scott, Andrew; Swetnam, Tom. Pyrogeography, Historical Ecology, and the Human Dimensions of Fire Regimes. *Journal of Biogeography*, Vol 41, number 4, pg. 833-836, DOI: 10.1111/jbi.12285, <http://onlinelibrary.wiley.com/doi/10.1111/jbi.12285/full> , 2014.
- 266)** Cecchini, Micael A., Luiz A. T. Machado, Paulo Artaxo. Droplet size distributions as a function of rainy system type and cloud condensation nuclei concentrations. *Atmospheric Research*, Vol. 143, 301-312, doi: 10.1016/j.atmosres.2014.02.022, <http://www.sciencedirect.com/science/article/pii/S0169809514001227> , 2014.



- 267)** Brito, J., L. V. Rizzo, W. T. Morgan, H. Coe, B. Johnson, J. Haywood, K. Longo, S. Freitas, M. O. Andreae, and P. Artaxo. Ground based aerosol characterization during the South American Biomass Burning Analysis (SAMBBA) field experiment. *Atmos. Chem. Phys.*, 14, 12069–12083, [www.atmos-chem-phys.net/14/12069/2014/](http://www.atmos-chem-phys.net/14/12069/2014/), doi:10.5194/acp-14-12069-2014, 2014.
- 268)** Arana, Andréa e P. Artaxo. Composição elementar do aerossol atmosférico na região central da bacia amazônica. *Quim. Nova*, Vol. 37, No. 2, 268-276, <http://dx.doi.org/10.5935/0100-4042.20140046>, <http://quimicanova.sbq.org.br/imagebank/pdf/v37n2a13.pdf> , 2014.
- 269)** Alves, Nilmara de Oliveira; Sandra de Souza Hacon; Marcos Felipe de Oliveira Galvão; Milena Simões Peixoto; Paulo Artaxo; Pérola de Castro Vasconcellos, Silvia Regina Batistuzzo de Medeiros. Genetic Damage of organic matter in the Brazilian Amazon: a comparative study between intense and moderate biomass burning. *Environmental Research*, 130, 51-58, web site: <http://www.sciencedirect.com/science/article/pii/S0013935114000048>, <http://dx.doi.org/10.1016/j.envres.2013.12.011>, 2014.
- 270)** Allan, J.D., W. T. Morgan, E. Darbyshire, M. J. Flynn, P. I. Williams, D. E. Oram, P. Artaxo, J. Brito, J. D. Lee, and H. Coe. Airborne Observations of IEPOX-Derived Isoprene SOA in the Amazon during SAMBBA. *Atmos. Chem. Phys.*, 14, 11393–11407, [www.atmos-chem-phys.net/14/11393/2014/](http://www.atmos-chem-phys.net/14/11393/2014/), doi:10.5194/acp-14-11393-2014, 2014.
- 271)** Rocha-Lima, A., J. V. Martins, L. A. Remer, N. A. Krotkov, M. H. Tabacniks, Y. Ben-Ami, and P. Artaxo. Optical, microphysical, and compositional properties of the Eyjafjallajökull volcanic ash. *Atmospheric Chemistry and Physics*, 14, 10649–10661, 2014 [www.atmos-chem-phys.net/14/10649/2014/](http://www.atmos-chem-phys.net/14/10649/2014/). doi:10.5194/acp-14-10649-2014.
- 272)** Pöhlker, C., J. Saturno, M. L. Krüger, J-D. Förster, M. Weigand, K. T. Wiedemann, M. Bechtel, P. Artaxo, M. O. Andreae. Efflorescence upon humidification? X-ray microspectroscopic in situ observation of changes in aerosol microstructure and phase state upon hydration. *Geophysical Research Letters*, Vol 41, DOI: 10.1002/2014GL059409, Paper number 2014GL059409R, <http://onlinelibrary.wiley.com/doi/10.1002/2014GL059409/abstract>, 2014.
- 273)** González, Nélide J.D., Anna-Karin Borg-Karlson, Paulo Artaxo, Alex Guenther, Radovan Krejci, Barbara Nozière, Kevin Noone. Primary and secondary organics in the tropical Amazonian rainforest aerosols: Chiral analysis of 2-methyltetraols. *Environmental Science: Processes & Impacts*, 16 (6), 1413 – 1421. DOI: 10.1039/c4em00102h, <http://pubs.rsc.org/en/content/articlelanding/2014/em/c4em00102h#!divAbstract> , 2014.
- 274)** Arana, A., Ana L. Loureiro, Henrique M. J. Barbosa, Rene Van Grieken and Paulo Artaxo. Optimized energy dispersive X-ray fluorescence analysis of atmospheric aerosols collected at pristine and perturbed Amazon Basin sites. *X-Ray Spectrometry*, 43, 228-237, doi: 10.1002/xrs.2544, <http://onlinelibrary.wiley.com/doi/10.1002/xrs.2544/abstract>, 2014.
- 
-

- 275)** Almeida, G. P., J. F. Brito, C. A. Morales, M. F. Andrade, and P. Artaxo. Measured and modelled Cloud Condensation Nuclei concentration in São Paulo, Brazil: the importance of aerosol size-resolved chemical composition on CCN concentration prediction. *Atmos. Chem. Phys.*, 14, 7559–7572, 2014. [www.atmos-chem-phys.net/14/7559/2014/](http://www.atmos-chem-phys.net/14/7559/2014/), doi:10.5194/acp-14-7559-2014.
- 276)** Artaxo, P., Silva Dias, M.A.F., Nagy, L., Luizão, F., Cunha, H.B., Quesada, C., Marengo, J. A., Krusche, A., Perspectivas de pesquisas na relação entre clima e o funcionamento da floresta amazônica. *Ciência e Cultura*, ISSN 2317-6660, Vol. 66, no. 3, pg. 41-46, 2014.
- 277)** Jacobson L. S. V., Hacon S, Castro H., Ignotti E, Artaxo P, Saldiva, P., Leon, A.C.M. P., (2014) Acute Effects of Particulate Matter and Black Carbon from Seasonal Fires on Peak Expiratory Flow of Schoolchildren in the Brazilian Amazon. *PLoS ONE* Vol., 9, Issue 8: e104177. doi: 10.1371/journal.pone.0104177. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0104177>, 2014.
- 278)** Artaxo, P., Mudanças climáticas e o Brasil. *Revista USP*, número 103, p.8-12, 2014.
- 279)** Artaxo, P. Uma nova era geológica em nosso planeta: o Antropoceno? *Revista USP*, número 103, page. 8-12, 2014. ISSN 2316-9036. DOI: <http://dx.doi.org/10.11606/issn.2316-9036.v0i103p13-24>. <http://www.revistas.usp.br/revusp/article/view/99279>.
- 280)** Roos, Christopher I. Bowman, David M. J. S. Balch, Jennifer K. Artaxo, Paulo, Bond, William J. Cochrane, Mark, D'Antonio, Carla M., DeFries, Ruth, Mack, Michelle, Johnston, Fay H., Krawchuk, Meg A., Kull, Christian A., Moritz, Max A., Pyne, Stephen, Scott, Andrew C., Swetnam, Thomas W. Pyrogeography, historical ecology, and the human dimensions of fire regimes. *Journal of Biogeography* 41, 833–836, doi: 10.1111/jbi.12285, <https://doi.org/10.1111/jbi.12285>, 2014.
- 281)** Bateman, A. P., Z. Gong, P. Liu, B. Sato, G. Cirino, Y. Zhang, P. Artaxo, A. Bertram, A. Manzi, L. Rizzo, R. Souza, R. Zaveri, and S. T. Martin. Submicron Particulate Matter is Primarily in Liquid Form over Amazon Rain Forest. *Nature Geosciences*, Vol. 9, Issue 1, Pg 34-37, <http://www.nature.com/ngeo/journal/v9/n1/full/ngeo2599.html><http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo2599.html>, doi:10.1038/ngeo2599, 2015.
- 282)** Reddington, C. L., E.W. Butt, D. A. Ridley, P. Artaxo, W. T. Morgan, H. Coe, and D. V. Spracklen. Air quality and human health improvements from reductions in deforestation-related fire in Brazil, *Nature Geoscience* 8, 768–771 (2015) doi:10.1038/ngeo2535, <http://www.nature.com/ngeo/journal/v8/n10/full/ngeo2535.html>, 2015.
- 283)** Belis, C. A., F Karagulian, F Amato, M Almeida, P Artaxo, DCS Beddows, V Bernardoni, MC Bove, S Carbone, D Cesari, D Contini, E Cuccia, E Diapouli, K Eleftheriadis, O Favez, I El Haddad, RM Harrison, S Hellebust, J Hovorka, E Jang, H Jorquera, T Kammermeier, M Karl, F Lucarelli, D Mooibroek, S Nava, JK Nøjgaard, P Paatero, M Pandolfi, MG Perrone, JE Petit, A Pietrodangelo, P Pokorná, P Prati, ASH Prevot, U Quass, X Querol, D Saraga, J Sciare, A Sfetsos, G Valli, R Vecchi, M Vestenius, E Yubero, PK Hopke. A new methodology to assess the performance and uncertainty of source apportionment models II: The results of two European intercomparison exercises. *Atmospheric Environment*, Vol. 123, Pg. 240-250,

---

<http://www.sciencedirect.com/science/article/pii/S1352231015304854>,  
2015.doi:10.1016/j.atmosenv.2015.10.068,

- 284)** Yañez-Serrano, A. M., Nölscher, A. C., Williams, J., Wolff, S., Alves, E., Martins, G. A., Bourtsoukidis, E., Brito, J., Jardine, K., Artaxo, P., and Kesselmeier, J. Diel and seasonal changes of Biogenic Volatile Organic Compounds within and above an Amazonian rainforest. *Atmospheric Chemistry and Physics*, 15, 3359–3378, 2015. [www.atmos-chem-phys.net/15/3359/2015/](http://www.atmos-chem-phys.net/15/3359/2015/). doi:10.5194/acp-15-3359-2015.
- 285)** Chen, Qi, D. K. Farmer, L. V. Rizzo, T. Pauliquevis, M. Kuwata, T. G. Karl, A. Guenther, J. Schneider, J. D. Allan, H. Coe, M. O. Andreae, U. Pöschl, J. L. Jimenez, P. Artaxo, S. T. Martin. Fine-Mode Organic Mass Concentrations and Sources in the Amazonian Wet Season (AMAZE-08). *Atmos. Chem. Phys.*, 15, 3687–3701, 2015, [www.atmos-chem-phys.net/15/3687/2015/](http://www.atmos-chem-phys.net/15/3687/2015/), doi:10.5194/acp-15-3687-2015.
- 286)** Snider, G., C.L. Weagle, R.V. Martin, A. van Donkelaar, K. Conrad, D. Cunningham, C. Gordon, M. Zwicker, C. Akoshile, P. Artaxo, N.X. Anh, J. Brook, J. Dong, R.M. Garland, R. Greenwald, D. Griffith, K. He, B.N. Holben, R. Kahn, I. Koren, N. Lagrosas, P. Lestari, Z. Ma, J.V. Martins, E. Quel, Y. Rudich, A. Salam, S.N. Tripathi, C. Yu, Q. Zhang, M. Brauer, A. Cohen, M.D. Gibson, and Y. Liu. SPARTAN: A Global Network to Evaluate and Enhance Satellite-Based Estimates of Ground-level Aerosol for Global Health Applications. *Atmospheric Measurements Techniques AMT*, 8, 505–521, 2015, [www.atmos-meas-tech.net/8/505/2015/](http://www.atmos-meas-tech.net/8/505/2015/), doi:10.5194/amt-8-505-2015.
- 287)** Jardine, K., A.M. Yañez-Serrano, J. Williams, N. Kunert, A. Jardine, A. Teixeira, T. Taylor, L. Abrell, P. Artaxo, A. Guenther, N. Hewitt, E. House, A. P. Florentino, M. Torn, A. Manzi, N. Higuchi, J. Kesselmeier, T. Behrendt, P. R. Veres, B. Derstroff, J. Fuentes, J. Chambers, S. Martin, M. O. Andreae. Dimethyl Sulfide in the Green Ocean Amazon. *Global Biogeochemical Cycles*, Vol 29, doi: 10.1002/2014GB004969, <http://onlinelibrary.wiley.com/doi/10.1002/2014GB004969/pdf>, 2015.
- 288)** Bela, M. M., K. M. Longo, S. R. Freitas, D. S. Moreira, V. Beck, S. C. Wofsy, C. Gerbig, K. Wiedemann, M. O. Andreae, and P. Artaxo. Ozone production and transport over the Amazon Basin during the dry-to-wet and wet-to-dry transition seasons. *Atmospheric Chemistry and Physics*, 15, 757–782, [www.atmos-chem-phys.net/15/757/2015/](http://www.atmos-chem-phys.net/15/757/2015/), doi:10.5194/acp-15-757-2015.
- 289)** Pacifica, F., G. A. Folberth, S. Sitch, J. M. Haywood, P. Artaxo, and L. V. Rizzo. Biomass burning-related ozone damage on vegetation over the Amazon Forest. *Atmos. Chem. Phys.*, 15, 2791–2804, 2015. [www.atmos-chem-phys.net/15/2791/2015/](http://www.atmos-chem-phys.net/15/2791/2015/), doi:10.5194/acp-15-2791-2015.
- 290)** Andreae, M. O., Acevedo, O. C., Araújo, A., Artaxo, P., Barbosa, C. G. G., Barbosa, H. M. J., Brito, J., Carbone, S., Chi, X., Cintra, B. B. L., da Silva, N. F., Dias, N. L., Dias-Júnior, C. Q., Ditas, F., Ditz, R., Godoi, A. F. L., Godoi, R. H. M., Heimann, M., Hoffmann, T., Kesselmeier, J., Könemann, T., Krüger, M. L., Lavric, J. V., Manzi, A. O., Lopes, A. P., Martins, D. L., Mikhailov, E. F., Moran-Zuloaga, D., Nelson, B. W., Nölscher, A. C., Santos Nogueira, D., Piedade, M. T. F., Pöhlker, C., Pöschl, U., Quesada, C. A., Rizzo, L. V., Ro, C.-U., Ruckteschler, N., Sá, L. D. A., de Oliveira Sá, M., Sales, C. B., dos Santos, R. M. N., Saturno, J., Schöngart,
-

- J., Sörgel, M., de Souza, C. M., de Souza, R. A. F., Su, H., Targhetta, N., Tóta, J., Trebs, I., Trumbore, S., van Eijck, A., Walter, D., Wang, Z., Weber, B., Williams, J., Winderlich, J., Wittmann, F., Wolff, S., and Yáñez-Serrano, A. M.: The Amazon Tall Tower Observatory (ATTO): overview of pilot measurements on ecosystem ecology, meteorology, trace gases, and aerosols. *Atmos. Chem. Phys.*, 15, 10723-10776, 2015 [www.atmos-chem-phys.net/15/10723/2015/](http://www.atmos-chem-phys.net/15/10723/2015/), doi:10.5194/acp-15-10723-2015.
- 291)** Sena, E. T., and P. Artaxo. A novel methodology using MODIS and CERES for assessing the daily radiative forcing of smoke aerosols in large scale over the Amazonia. *Atmos. Chem. Phys.*, 15, 5471-5483, 2015, [www.atmos-chem-phys.net/15/5471/2015/](http://www.atmos-chem-phys.net/15/5471/2015/), doi:10.5194/acp-15-5471-2015.
- 292)** Rap, A., D. V. Spracklen, L. Mercado, C. L. Reddington, J. M. Haywood, R. J. Ellis, O. L. Phillips, P. Artaxo, D. Bonal, N. Restrepo Coupe, and N. Butt (2015), Fires increase Amazon forest productivity through increases in diffuse radiation, *Geophys. Res. Lett.*, 42, doi: 10.1002/2015GL063719. <http://onlinelibrary.wiley.com/doi/10.1002/2015GL063719/full>
- 293)** Womack, A. M., P. E. Artaxo, F. Y. Ishida, R. C. Mueller, S. R. Saleska, K. T. Wiedemann, B. J. M. Bohannon, and J. L. Green. Characterization of active and total fungal communities in the atmosphere over the Amazon rainforest. *Biogeosciences*, 12, 6337–6349, 2015, <http://www.biogeosciences.net/12/6337/2015/bg-12-6337-2015.html>, doi:10.5194/bg-12-6337-2015.
- 294)** Seifert, Patric, Clara Kunz, Holger Baars, Albert Ansmann, Johannes Buhl, Fabian Senf, Ronny Engelmann, Dietrich Althausen, and Paulo Artaxo. Seasonal variability of heterogeneous ice formation in stratiform clouds over the Amazon Basin. *Geophysical Research Letters*, 42, 5587–5593, Paper 2015GL064068, doi: 10.1002/2015GL064068, 2015.
- 295)** Alves, N. de O., J. Brito, S. Caumo, A. Arana, S. de S. Hacon, P. Artaxo, R. Hillamo, K. Teinilä, S. R. B. de Medeiros, P. de C. Vasconcellos. Biomass burning in the Amazon region: Aerosol source apportionment and associated health risk assessment. *Atmospheric Environment*, Vol. 120, 277–285, <http://www.sciencedirect.com/science/article/pii/S1352231015303046>, doi:10.1016/j.atmosenv.2015.08.059, 2015.
- 296)** Levine, J. G., A. R. MacKenzie, O. J. Squire, A. T. Archibald, P. T. Griffiths, N. L. Abraham, J. A. Pyle, D. E. Oram, G. Forster, J. F. Brito, J. D. Lee, J. R. Hopkins, A. C. Lewis, S. J. B. Bauguitte, C. F. Demarco, P. Artaxo, P. Messina, J. Lathière, D. A. Hauglustaine, E. House, C. N. Hewitt, and E. Nemitz. Isoprene chemistry in pristine and polluted Amazon environments: Eulerian and Lagrangian model frameworks and the strong bearing they have on our understanding of surface ozone and predictions of rainforest exposure to this priority pollutant. *Atmos. Chem. Phys. Discuss.*, 15, 24251-24310, doi:10.5194/acpd-15-24251-2015, <http://www.atmos-chem-phys-discuss.net/15/24251/2015/acpd-15-24251-2015.html>, 2015.
- 297)** Jardine, Kolby J., J. Q. Chambers, J. Holm, A. B. Jardine, C. G. Fontes, R. F. Zorzanelli, K. T. Meyers, V. F. de Souza, S. Garcia, B. O. Gimenez, L. R. de O. Piva, N. Higuchi, P. Artaxo, S. Martin and A. O. Manzi. Green Leaf Volatile Emissions during High Temperature and

Drought Stress in a Central Amazon Rainforest. *Plants*, 4(3), 678 - 690; doi:10.3390/plants4030678, <http://www.mdpi.com/2223-7747/4/3/678>, 2015.

- 298)** Brito, Joel; Wurm, Florian; Yañez Serrano, Ana M.; Assunção, João V. de; Godoy, José M.; Artaxo, Paulo. Vehicular Emission Ratios of VOCs in a Megacity Impacted by Extensive Ethanol Use: Results of Ambient Measurements in São Paulo, Brazil. *Environmental Science and Technology*, 49 (19) pp 11381-11387, DOI: 10.1021/acs.est.5b03281, 2015.
- 299)** Scott, C. E., Spracklen, D. V., Pierce, J. R., Riipinen, I., D'Andrea, S. D., Rap, A., Carslaw, K. S., Forster, P. M., Artaxo, P., Kulmala, M., Rizzo, L. V., Swietlicki, E., Mann, G. W., Pringle, K. J. Impact of gas-to-particle partitioning approaches on the simulated radiative effects of biogenic secondary organic aerosol. *Atmospheric Chemistry and Physics*, 15, 12989-13001, 2015. [www.atmos-chem-phys.net/15/12989/2015/](http://www.atmos-chem-phys.net/15/12989/2015/). doi:10.5194/acp-15-12989-2015.
- 300)** Glaucia M. Souza, Reynaldo L. Victoria, Luciano M. Verdade, Carlos A. Joly, Paulo Artaxo, Carlos H. de Brito Cruz Heitor Cantarella, Helena L. Chum, Luis Augusto Barbosa Cortez, Rocio Diaz-Chavez, Erick Fernandes, Geoffrey B. Fincher, José Goldemberg, Luiz Augusto Horta Nogueira, Brian J. Huntley, Francis X. Johnson, Stephen Kaffka, Angela Karp, Manoel Regis L. V. Leal, Stephen P. Long, Lee R. Lynd, Isaias de Carvalho Macedo, Rubens Maciel Filho, André M. Nassar, Francisco E. B. Nigro, Patricia Osseweijer, Tom L. Richard, Jack N. Saddler, Jon Samseth, Vikram Seebaluck, Chris R. Somerville, Luuk van der Wielen, Marie-Anne Van Sluys, Jeremy Woods, and Heather Youngs. In: *SCOPE Bioenergy & Sustainability Technical Summary*. In: *Bioenergy & Sustainability: bridging the gaps* / edited by Glaucia Mendes Souza, Reynaldo L. Victoria, Carlos A. Joly, and Luciano M. Verdade. Scientific Committee on Problems of the Environment (SCOPE) Volume 72. ISBN: 978-2-9545557-0-6, 2015.
- 301)** Glaucia M. Souza, Reynaldo L. Victoria, Luciano M. Verdade, Carlos A. Joly, Paulo Artaxo, Heitor Cantarella, Helena L. Chum, Rocio Diaz-Chavez, Erick Fernandes, Geoff Fincher, José Goldemberg, Luiz Augusto Horta Nogueira, Brian J. Huntley, Francis X. Johnson, Angela Karp, Manoel Regis L. V. Leal, Lee R. Lynd, Isaias de Carvalho Macedo, Rubens Maciel Filho, Mariana P. Massafra, André M. Nassar, Francisco E. B. Nigro, Patricia Osseweijer, Tom L. Richard, Jack N. Saddler, Jon Samseth, Vikram Seebaluck, Chris R. Somerville, Luuk van der Wielen, Marie-Anne Van Sluys, Jeremy Woods, and Heather Youngs. *Bioenergy Numbers*. In *SCOPE Bioenergy & Sustainability Technical Summary*. In: *Bioenergy & Sustainability: bridging the gaps* / edited by Glaucia M. Souza, Reynaldo L. Victoria, Carlos A. Joly, and Luciano M. Verdade. Scientific Committee on Problems of the Environment (SCOPE) Volume 72. pp 29-57, ISBN: 978-2-9545557-0-6, 2015.
- 302)** Karp, Angela, Paulo Artaxo, Göran Berndes, Heitor Cantarella, Hosny El-Lakany, Tiago Egger Moellwal, Duque Estrada, André Faaij, Geoffrey B. Fincher, Brian J. Huntley, N.H. Ravindranath, Marie-Anne Van Sluys, Luciano M. Verdade, and Heather Young. *Environmental and Climate Security*. In: *Bioenergy & Sustainability: bridging the gaps* / edited by Glaucia Mendes Souza, Reynaldo L. Victoria, Carlos A. Joly, and Luciano M. Verdade. Scientific Committee on Problems of the Environment (SCOPE) Volume 72. ISBN: 978-2-9545557-0-6, 2015.
- 303)** Artaxo, P. e Sonia Maria Viggiani Coutinho. Complexidade científica das mudanças climáticas e os acordos internacionais. In: *Temas atuais em mudanças climáticas: para os*
- 
-

- ensinos fundamental e médio. Organizadores: Pedro Roberto Jacobi, Edson Grandisoli, Sonia Maria Viggiani Coutinho, Roberta de Assis Maia e Renata Ferraz de Toledo. – São Paulo: IEE – USP, 2015. 112p., ISBN 978-85-86923-41-8. Pg. 7-11, 2015.
- 304)** Suni, T.; A. Guenther H.C. Hansson M. Kulmala M.O. Andreae A. Arneth P. Artaxo E. Blyth M. Brus L. Ganzeveld, P. Kabat, N de Noblet-Ducoudré M. Reichstein A. Reissell, D. Rosenfeld, S. Seneviratne. The significance of land-atmosphere interactions in the Earth system—iLEAPS achievements and perspectives. *Anthropocene*, doi:10.1016/j.ancene.2015.12.001, Web site: <http://www.sciencedirect.com/science/article/pii/S2213305415300254>, 2015.
- 305)** SANTOS, A. C. A.; NOGUEIRA, J. S.; ARANA, A. A.; RIZZO, L. V.; ARTAXO NETTO, Paulo Eduardo; MARQUES, R. Análise de Unidades de Conservação na Eco região do Pantanal Mato-grossense: a Representatividade no Município de Poconé-MT. In: Onélia Carmem Rosseto; Nely Tocantins. (Org.). AMBIENTE AGRÁRIO DO PANTANAL BRASILEIRO: SOCIOECONOMIA & CONSERVAÇÃO DA BIODIVERSIDADE. 1ed. Porto Alegre - RS: Compasso Lugar-Cultura, 2015, v. 1, p. 531-557. 2015.
- 306)** Wang, J., R. Krejci, S. Giangrande, C. Kuang, H. M. J. Barbosa, J. Brito, S. Carbone, X. Chi, J. Comstock, F. Ditas, J. Lavric, H. E. Manninen, F. Mei, D. Moran-Zuloaga, C. Pöhlker, M. L. Pöhlker, J. Saturno, B. Schmid, R. A. F. Souza, S. R. Springston, J. M. Tomlinson, T. Toto, D. Walter, D. Wimmer, J. N. Smith, M. Kulmala, L. A. T. Machado, P. Artaxo, M. O. Andreae, T. Petäjä, and S. T. Martin. Amazon boundary layer aerosol concentration sustained by vertical transport during rainfall. *Nature*, Vol. 539, Pg. 416-419, doi:10.1038/nature19819, 2016.
- 307)** Reddington, C. L., D. V. Spracklen, P. Artaxo, D. Ridley, L. V. Rizzo, and A. Arana. Analysis of particulate emissions from tropical biomass burning using a global aerosol model and long-term surface observations. *Atmos. Chem. Phys.*, 16, 11083-11106, 2016. <http://www.atmos-chem-phys.net/16/11083/2016/>, doi:10.5194/acp-16-11083-2016.
- 308)** Yingjun L., J. Brito, M. Dorris, J. C. Rivera-Rios, R. Seco, K. H. Bates, P. Artaxo, S. Duvoisin Junior, F. N. Keutsch, S. Kim, A. H. Goldstein, A. Guenther, A. Manzi, R. de Souza, S. R. Springston, T. B. Watson, K. A. McKinney, S. T. Martin. Isoprene Photochemistry over the Amazon Rain Forest. *PNAS - Proceedings of the National Academy of Sciences*, vol. 113, no. 22, pg. 6125–6130, doi: 10.1073/pnas.1524136113, <http://www.pnas.org/content/113/22/6125.abstract>, 2016.
- 309)** Cecchini, Micael A., Luiz A. T Machado, Jennifer M. Comstock, Fan Mei, Jian Wang, Jiwen Fan, Jason M. Tomlinson, Beat Schmid, Rachel Albrecht, Scot T. Martin, and Paulo Artaxo. Impacts of the Manaus pollution plume on the microphysical properties of Amazonian warm-phase clouds in the wet season. *Atmos. Chem. Phys.*, 16, 7029–7041, 2016. [www.atmos-chem-phys.net/16/7029/2016/](http://www.atmos-chem-phys.net/16/7029/2016/). doi:10.5194/acp-16-7029-2016.
- 310)** Stijn Hantson, Almut Arneth, Sandy P. Harrison, I. Douglas, I. Kelley, I. Colin Prentice, Sam S. Rabin, Sally Archibald, Florent Mouillot, Stephen R. Arnold, Paulo Artaxo, Dominique Bachelet, Philippe Ciais, Matthew Forrest, Pierre Friedlingstein, Thomas Hickler, Jed Kaplan, Silvia Kloster, Wolfgang Knorr, Gitta Lasslop, Fang Li, Joe R. Melton, Andrea Meyn, Stephen Sitch, Allan Spessa, Guido R. van der Werf, Apostolos Voulgarakis, Chao Yue. The

- status and challenge of global fire modelling. *Biogeosciences*, 13, 3359–3375, 2016, [www.biogeosciences.net/13/3359/2016/](http://www.biogeosciences.net/13/3359/2016/), doi:10.5194/bg-13-3359-2016.
- 311)** Whitehead, James D., Eoghan Darbyshire, Joel Brito, Henrique M. J. Barbosa, Ian Crawford, Rafael Stern, Martin W. Gallagher, Paul H. Kaye, James D. Allan, Hugh Coe, Paulo Artaxo, and Gordon McFiggans. Biogenic cloud nuclei in the central Amazon during the transition from wet to dry season. *Atmos. Chem. Phys.*, 16, 9727–9743, 2016. [www.atmos-chem-phys.net/16/9727/2016/](http://www.atmos-chem-phys.net/16/9727/2016/). doi:10.5194/acp-16-9727-2016.
- 312)** Marengo, F., Johnson, B., Langridge, J. M., Mulcahy, J., Benedetti, A., Remy, S., Jones, L., Szpek, K., Haywood, J., Longo, K., and Artaxo, P. On the vertical distribution of smoke in the Amazonian atmosphere during the dry season. *Atmos. Chem. Phys.*, 16, 2155–2174, 2016 doi:10.5194/acp-16-2155-2016, [www.atmos-chem-phys.net/16/2155/2016/](http://www.atmos-chem-phys.net/16/2155/2016/). <https://www.atmos-chem-phys.net/16/2155/2016/acp-16-2155-2016.pdf>.
- 313)** Johnson, Ben T., J. M. Haywood, J. M. Langridge, E. Darbyshire, W. T. Morgan, K. Szpek, J. Brooke, F. Marengo, H. Coe, P. Artaxo, K. M. Longo, J. Mulcahy, G. Mann, M. Dalvi, and N. Bellouin. Evaluation of biomass burning aerosols in the HadGEM3 climate model with observations from the SAMBBA field campaign. *Atmos. Chem. Phys.*, 16, series 22, 14657–14685, 2016, [www.atmos-chem-phys.net/16/14657/2016/](http://www.atmos-chem-phys.net/16/14657/2016/), doi:10.5194/acp-16-14657-2016.
- 314)** Daniel Rosenfeld, Youtong Zheng, Eyal Hashimshoni, Mira L. Pöhlker, Anne Jefferson, Christopher Pöhlker, Xing Yu, Y. Zhu, G. Liu, Z. Yue, Baruch Fischman, Zhanqing Li, David Giguzin, Tom Goren, Paulo Artaxo, Henrique M. J. Barbosa, Ulrich Pöschl, Meinrat O. Andreae. Satellite retrieval of cloud condensation nuclei concentrations by using clouds as CCN chambers. *PNAS – Proceedings of the National Academy of Sciences*, vol. 113 no. 21, 5828–5834, <http://www.pnas.org/content/113/21/5828>, doi: 10.1073/pnas.1514044113, 2016.
- 315)** Alves, E. G., Jardine, K., Tota, J., Jardine, A., Yáñez-Serrano, A. M., Karl, T., Tavares, J., Nelson, B., Gu, D., Stavrakou, T., Martin, S., Artaxo, P., Manzi, A., and Guenther, A.: Seasonality of isoprenoid emissions from a primary rainforest in central Amazonia, *Atmos. Chem. Phys.*, 16, 3903–3925, doi:10.5194/acp-16-3903-2016, <http://www.atmos-chem-phys.net/16/3903/2016/> 2016.
- 316)** Wendisch; Manfred, U. Pöschl; M. O. Andreae; L. A. L. Machado; R. Albrecht; H. Schlager; D. Rosenfeld; S. T. Martin; A. Abdelmonem; A. Afchine; A. Araujo; P. Artaxo; H. Aufmhoff; H. M. J. Barbosa; S. Borrmann; R. Braga; B. Buchholz; M. A. Cecchini; A. Costa; J. Curtius; M. Dollner; Marcel Dorf; Volker Dreiling; Volker Ebert; Andre Ehrlich; Florian Ewald; Gilberto Fisch; Andreas Fix; Fabian Frank; Daniel Fuetterer; Christopher Heckl; Fabian Heidelberg; Tilman Hueeneke; Evelin Jaekel; Emma Jaervinen; Tina Jurkat; Sandra Kanter; Udo Kaestner; Mareike Kenntner; Juergen Kesselmeier; Thomas Klimach; Matthias Knecht; Rebecca Kohl; Tobias Koelling; Martina Kraemer; Mira Krueger; Trismono C. Krisna; Jost V. Lavric; Karla Longo; Christoph Mahnke; Antonio O. Manzi; Bernhard Mayer; Stephan Mertes; Andreas Minikin; Sergej Molleker; Steffen Muench; Bjoern Nillius; Klaus Pfeilsticker; C. Poehlker; A. Roiger; D. Rose; D. Rosenow; D. Sauer; M. Schnaiter; J. Schneider; C. Schulz; R. A. F. de Souza; A. Spanu; Paul Stock; D. Vila; C. Voigt; A. Walser; D. Walter; R. Weigel; B. Weinzierl; F. Werner; M. A. Yamasoe; H. Ziereis; T. Zinner; M. Zoeger.
- 
-

- The ACRIDICON-CHUVA campaign: Studying tropical deep convective clouds and precipitation over Amazonia using the new German research aircraft HALO. *Bull. Amer. Meteor. Soc.*, Vol. 97, No. 10, Pg. 1885-1908, doi:10.1175/BAMS-D-14-00255.1, <http://dx.doi.org/10.1175/BAMS-D-14-00255.1>, Web: <http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-14-00255.1>, October 2016.
- 317)** Yañez-Serrano, A. M., A. C. Nölscher, E. Bourtsoukidis, B. Destroff, N. Zannoni, V. Gros, C. Boissard, M. Lanza, J. Brito, S. M. Noe, E. House, C. N. Hewitt, K. Jardine, T. Behrendt, J. Williams, P. Artaxo, M. O. Andreae, J. Kesselmeier. Atmospheric mixing ratios of methyl ethyl ketone (2-butanone) in tropical, boreal, temperate, and marine environments. *Atmos. Chem. Phys.*, 16, 10965–10984, 2016. [www.atmos-chem-phys.net/16/10965/2016/](http://www.atmos-chem-phys.net/16/10965/2016/). doi:10.5194/acp-16-10965-2016.
- 318)** Silva, Pâmela Rodrigues de Souza, Eliane Ignotti, Beatriz Fátima Alves de Oliveira, Washington Leite Junger, Fernando Morais, Paulo Artaxo, Sandra Hacon, High risk of respiratory diseases in children in the fire period in Western Amazon. *Revista de Saúde Pública*, vol. 50, 29, DOI:10.1590/S1518-8787.2016050005667, <http://www.scielo.br/pdf/rsp/v50/0034-8910-rsp-S1518-87872016050005667.pdf>, 2016.
- 319)** Pöhlker, Mira L., Christopher Pöhlker, Thomas Klimach, Isabella Hrabec de Angelis, Henrique M. J. Barbosa, Joel Brito, Samara Carbone, Xuguang Chi, Yafang Cheng, Florian Ditas, Reiner Ditz, Sachin S. Gunthe, Jürgen Kesselmeier, Tobias Könemann, Jošt V. Lavrič, Scot T. Martin, Daniel Moran-Zuloaga, Diana Rose, Jorge Saturno, Hang Su, Ryan Thalman, David Walter, Jian Wang, Stefan Wolff, Paulo Artaxo, Meinrat O. Andreae, and Ulrich Pöschl. Long-term observations of atmospheric aerosol, cloud condensation nuclei concentration, and hygroscopicity in the Amazon rain forest: Part 1: Size-resolved characterization and new model parameterizations for CCN prediction. *Atmos. Chem. Phys.*, 16, 15709–15740, [www.atmos-chem-phys.net/16/15709/2016/](http://www.atmos-chem-phys.net/16/15709/2016/), doi:10.5194/acp-16-15709-2016, 2016.
- 320)** Sprovieri, F., N. Pirrone, M. Bencardino, F. D'Amore, F. Carbone, S. Cinnirella, V. Mannarino, M. Landis, R. Ebinghaus, A. Weigelt, E.-G. Brunke, C. Labuschagne, L. Martin, J. Munthe, I. Wängberg, P. Artaxo, F. Morais, H. M. J. Barbosa, J. Brito, W. Cairns, C. Barbante, M. D. C. Diéguez, P. E. Garcia, A. Dommergue, H. Angot, O. Magand, H. Skov, M. Horvat, J. Kotnik, K. A. Read, L. M. Neves, B. M. Gawlik, F. Sena, N. Mashyanov, V. A. Obolkin, D. Wip, X. B. Feng, H. Zhang, X. Fu, R. Ramachandran, D. Cossa, J. Knoery, N. Maruschak, M. Nerentorp, and C. Norstrom. Atmospheric Mercury Concentrations observed at ground-based monitoring sites globally distributed in the framework of the GMOS network. *Atmospheric Chemistry and Physics*, 16, 11915–11935. [www.atmos-chem-phys.net/16/11915/2016/](http://www.atmos-chem-phys.net/16/11915/2016/). doi:10.5194/acp-16-11915-2016. 2016.
- 321)** Santos, Djacinto A. Monteiro dos Santos, Joel F. Brito, José Marcus Godoy, P. Artaxo. Ambient concentrations and insights on organic and elemental carbon dynamics in São Paulo, Brazil. *Atmospheric Environment*, Vol. 144, Pg. 226–233, <http://dx.doi.org/10.1016/j.atmosenv.2016.08.081>, <http://www.sciencedirect.com/science/article/pii/S1352231016306872>, 2016.
- 322)** Isaacman-VanWertz, Gabriel; Yee, Lindsay; Kreisberg, Nathan; Wernis, Rebecca; Moss, Joshua; Hering, Susanne; de Sa, Suzanne; Martin, Scot; Alexander, Lizabeth; Palm, Brett;



- Hu, Weiwei; Campuzano-Jost, Pedro; Day, Douglas; Jimenez, Jose; Riva, Matthieu; Surratt, Jason; Viegas, Juarez; Manzi, Antonio; Edgerton, Eric; Baumann, Karsten; Souza, Rodrigo; Artaxo, Paulo; Goldstein, Allen. Ambient gas-particle partitioning of tracers for biogenic oxidation. *Environmental Science & Technology*, Vol: 50, issue: 18 pg.: 9952 - 9962, <https://pubs.acs.org/doi/10.1021/acs.est.6b01674>, DOI: 10.1021/acs.est.6b01674, 2016.
- 323)** Wang, Xuan, Colette L. Heald, Arthur J. Sedlacek, Suzanne S. de Sá, Scot T. Martin, M. Elizabeth Alexander, Thomas B. Watson, Allison C. Aiken, Stephen R. Springston, and Paulo Artaxo. Deriving Brown Carbon from Multi-Wavelength Absorption Measurements: Method and Application to AERONET and Surface Observations. *Atmos. Chem. Phys.*, 16, 12733-12752, 2016, [www.atmos-chem-phys.net/16/12733/2016/](http://www.atmos-chem-phys.net/16/12733/2016/) , doi:10.5194/acp-16-12733-2016.
- 324)** China, Swarup; Wang, Bingbing; Weis, Johannes; Rizzo, Luciana; Brito, Joel; Cirino, Glauber; Kovarik, Libor; Artaxo, Paulo; Gilles, Mary; Laskin, Alexander. Rupturing of biological spores as a source of secondary particles in Amazonia. *Environmental Science and Technology*. Manuscript ID: es-2016-02896q, Vol. 50, DOI: 10.1021/acs.est.6b02896, <https://pubs.acs.org/doi/pdf/10.1021/acs.est.6b02896>, 2016.
- 325)** Holger Baars, Thomas Kanitz, Ronny Engelmann, Dietrich Althausen, Birgit Heese, Mika Komppula, Jana Preißler, Matthias Tesche, Albert Ansmann, Ulla Wandinger, Jae-Hyun Lim, Joon Young Ahn, Iwona S. Stachlewska, Vassilis Amiridis, Eleni Marinou, Patric Seifert, Julian Hofer, Annett Skupin, Florian Schneider, Stephanie Bohlmann, Andreas Foth, Sebastian Bley, Anne Pfüller, Eleni Giannakaki, Heikki Lihavainen, Yrjö Viisanen, Rakesh Kumar Hooda, Sérgio Nepomuceno Pereira, Daniele Bortoli, Frank Wagner, Ina Mattis, Lucja Janicka, Krzysztof M. Markowicz, Peggy Achtert, Paulo Artaxo, Theotonio Pauliquevis, Rodrigo A. F. Souza, Ved Prakesh Sharma, Pieter Gideon van Zyl, Johan Paul Beukes, Junying Sun, Erich G. Rohwer, Ruru Deng, Rodanthi-Elisavet Mamouri, and Felix Zamorano. An overview of the first decade of PollyNET: an emerging network of automated Raman-polarization lidars for continuous aerosol profiling. *Atmos. Chem. Phys.*, 16, 5111–5137, 2016, [www.atmos-chem-phys.net/16/5111/2016/](http://www.atmos-chem-phys.net/16/5111/2016/) , doi:10.5194/acp-16-5111-2016.
- 326)** Scot Martin; Paulo Artaxo; Luiz Machado; Antônio Manzi; Rodrigo Souza; Courtney Schumacher; Jian Wang; Joel Brito; Kolby Jardine; Adam Medeiros; Suzane de Sa; Thiago Biscaro; Alan Calheiros; Bruno Portela; Kouji Adachi; Alison Aiken; Rachel Albrecht; Liz Alexander; Meinrat Andreae; Henrique Barbosa; Peter Buseck; Duli Chand; Jennifer Comstock; Douglas Day; Manvendra Dubey; Jiwen Fan; Jerome Fast; Gilberto Fisch; Edward Fortner; Scott Giangrande; Mary Gilles; Allen Goldstein; Alex Guenther; John Hubbe; Michael Jensen; Jose Jimenez; Frank Keutsch; Saewung Kim; Chongai Kuang; Alexander Laskin; Karena McKinney; Fan Mei; Mark Miller; Rosa Nascimento; Theotonio Pauliquevis; Mikhail Pekour; Jean Peres; Tuukka Petäjä; Christopher Pöhlker; Ulrich Pöschl; Luciana Rizzo; Beat Schmid; John Shilling; Maria Assunção Silva Dias; James Smith; Jason Tomlinson; Júlio Tóta; Manfred Wendisch. The Green Ocean Amazon Experiment (GoAmazon2014/5) Observes Pollution Affecting Gases, Aerosols, Clouds, and Rainfall over the Rain Forest. *BAMS – Bulletin of the American Meteorological Society*. doi: 10.1175/BAMS-D-15-00221.1, 2016.

- 327)** Qiaoqiao Wang, Jorge Saturno, Xuguang Chi, David Walter, Jost Lavric, Daniel Moran, Florian Ditas, Christopher Pöhlker, Joel Brito, Samara Carbone, Paulo Artaxo, Meinrat O. Andreae. Modeling investigation of light-absorbing aerosols in the central Amazon during the wet season. *Atmos. Chem. Phys.*, 16, 14775–14794, 2016, [www.atmos-chem-phys.net/16/14775/2016/](http://www.atmos-chem-phys.net/16/14775/2016/), doi:10.5194/acp-16-14775-2016, 2016.
- 328)** Jorge Saturno, Christopher Pöhlker, Dario Massabò, Joel Brito, Samara Carbone, Yafang Cheng, Xuguang Chi, Florian Ditas, Isabella Hrabě de Angelis, Daniel Morán-Zuloaga, Mira L. Pöhlker, Luciana V. Rizzo, David Walter, Qiaoqiao Wang, Paulo Artaxo, Paolo Prati, and Meinrat O. Andreae. Comparison of different Aethalometer correction schemes and a reference multi-wavelength absorption technique for ambient aerosol data. *Atmos. Meas. Tech. Discuss.*, doi:10.5194/amt-2016-361, <http://www.atmos-meas-tech-discuss.net/amt-2016-361/amt-2016-361.pdf>, 2016.
- 329)** Martin, S. T., Artaxo, P., Machado, L. A. T., Manzi, A. O., Souza, R. A. F., Schumacher, C., Wang, J., Andreae, M. O., Barbosa, H. M. J., Fan, J., Fisch, G., Goldstein, A. H., Guenther, A., Jimenez, J. L., Pöschl, U., Silva Dias, M. A., Smith, J. N., and Wendisch, M.: Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5), *Atmos. Chem. Phys.*, 16, 4785-4797, <https://doi.org/10.5194/acp-16-4785-2016>, 2016. <https://www.atmos-chem-phys.net/16/4785/2016/acp-16-4785-2016.pdf>
- 330)** van Marle, M. J. E., R. D. Field, G. R. van der Werf, I. A. Estrada de Wagt, R. A. Houghton, L. V. Rizzo, P. Artaxo, and K. Tsigaridis (2016). Fire and deforestation dynamics in Amazonia (1973-2014). *Global Biogeochemical Cycles*, Vol. 31, Issue 1, pg. 24-38, doi: 10.1002/2016GB005445. 2016.
- 331)** Isaacman-VanWertz, Gabriel, Lindsay D. Yee, Nathan M. Kreisberg, Rebecca Wernis, Joshua A. Moss, Susanne V. Hering, Suzane S. de Sá, Scot T. Martin, Liz Alexander, Brett B. Palm, Weiwei Hu, Pedro Campuzano-Jost, Douglas A. Day, Jose L. Jimenez, Matthieu Riva, Jason D. Surratt, Juarez Viegas, Antônio Manzi, Eric Edgerton, Karsten Baumann, Rodrigo Souza, Paulo Artaxo, Allen H. Goldstein. Observational constraints on ambient gas-particle partitioning of biogenic oxidation products. Submitted for publication at PNAS – Proceedings of the National Academy of Sciences, 15 de Outubro de 2015.
- 332)** Ignotti, Eliane, Ludmilla da Silva Viana Jacobson, Sandra Hacon, Hermano Albuquerque de Castro. Air pollution effect on school absenteeism in the southern Amazon. Submetido para publicação em Cadernos de Saúde Pública (CSP), manuscrito número CSP\_1703/16. outubro de 2016.
- 333)** Nagy, Lazlo, Bruce Forsberg, Paulo Artaxo (eds). *Interactions Between Biosphere, Atmosphere and Human Land Use in the Amazon Basin*. Springer Verlag, Berlin, Ecological Studies: Analysis and Synthesis 227, Pages: 478, Library of Congress Control Number:2016944616, Hard Cover ISBN 978-3-662-49902-3, 227. DOI: 10.1007/978-3-662-49902-3. 2016.
- 334)** Nagy, Lazlo, Paulo Artaxo, Bruce Forsberg. *Interactions Between Biosphere, Atmosphere, and Human Land Use in the Amazon Basin: An Introduction*. Chapter 1 in: *Interactions between Biosphere, Atmosphere and Human Land Use in the Amazon Basin*. Springer
- 
-

- 
- Verlag, Berlin, Ecological Studies 227, Pg. 3-15, Hard Cover ISBN 978-3-662-49902-3, DOI: 10.1007/978-3-662-49902-3. 2016.
- 335)** Artaxo, Paulo, Nagy, Lazlo, Bruce Forsberg. Amazonia in Perspective as a Changing Environment, Pgs. 465-469. In: Interactions between Biosphere, Atmosphere and Human Land Use in the Amazon Basin. Springer Verlag, Berlin, Ecological Studies 227, Pg. 3-15, Hard Cover ISBN 978-3-662-49902-3, DOI: 10.1007/978-3-662-49902-3. 2016.
- 336)** Artaxo, P., H. M. J. Barbosa, J. F. Brito, E. T. Sena, L. V. Rizzo, G. G. Cirino, A. M. Yáñez Serrano. A Amazonia em processo de mudanças ambientais. Em: Ciência das mudanças climáticas e sua interdisciplinaridade. Editado por Tercio Ambrizzi, Livia Dutra, Pedro Jacobi. 272 páginas, Editora Annablume, ISBN: 978-85-391-0714-8, pg. 39-55, 2016.
- 337)** Jeffrey Q. Chambers and Paulo Artaxo. Deforestation size influences rainfall. *Nature Climate Change*. <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate3238.html>. Vol. 7, 175-176 (2017) doi:10.1038/nclimate3238.
- 338)** Dasa Gu, A. Guenther, H. Yu, J. Shilling, Q. Yang, M. Huang, C. Zhao, S. Martin, P. Artaxo, S. Kim, R. Seco, T. Stavrou, K. Longo, J. Tóta, R. Souza, O. Vega, E. Alves, Y. Liu, M. Shrivastava, F. Cavalcante, G. Leng, Z. Hu. Airborne observations reveal an elevational gradient in tropical forest isoprene emissions. *Nature Communications*, **8**, 15541 doi: 10.1038/ncomms15541, 2017. <https://www.nature.com/articles/ncomms15541>
- 339)** Salvo, Alberto, Joel Brito, Paulo Artaxo, Franz M. Geiger. Reduced ultrafine particle levels in São Paulo's atmosphere during shifts from gasoline to ethanol use. *Nature Communications*, Vol. 8, Issue 1, Pg, 77-93. DOI: 10.1038/s41467-017-00041-5. <https://www.nature.com/articles/s41467-017-00041-5>.
- 340)** Alves, N. O., A. T. Vessoni, A. Quinet, R. Fortunato, G. S. Kajitani, M. S. Peixoto, S. Hacon, P. Artaxo, P. Saldiva, C. Menck, and S. R. B. de Medeiros. Biomass burning in the Amazon region causes DNA damage and cell death in human lung cells. *Nature Scientific Reports*, Vol. 7, Article number 10937, 2017. DOI:10.1038/s41598-017-11024-3. <https://www.nature.com/articles/s41598-017-11024-3.pdf>
- 341)** de Sá, S. S., Palm, B. B., Campuzano-Jost, P., Day, D. A., Newburn, M. K., Hu, W., Isaacman-VanWertz, G., Yee, L. D., Thalman, R., Brito, J., Carbone, S., Artaxo, P., Goldstein, A. H., Manzi, A. O., Souza, R. A. F., Mei, F., Shilling, J. E., Springston, S. R., Wang, J., Surratt, J. D., Alexander, M. L., Jimenez, J. L., and Martin, S. T.: Influence of urban pollution on the production of organic particulate matter from isoprene epoxydiols in central Amazonia. *Atmospheric Chemistry and Physics*, **17**, 6611-6629, 2017, <https://doi.org/10.5194/acp-17-6611-2017>.
- 342)** Bateman, A., Z. Gong, T. Harder, S. de Sá, B. Wang, P. Castillo, S. China, Y. Liu, R. O'Brien, B. Palm, H.-W. Shiu, G. da Silva, R. Thalman, K. Adachi, M. L. Alexander, P. Artaxo, A. Bertram, P. Buseck, M. Gilles, J. Jimenez, A. Laskin, A. Manzi, A. Sedlacek, R. Souza, J. Wang, R. Zaveri, and S. Martin. Anthropogenic influences on the physical state of submicron particulate matter over a tropical forest. *Atmos. Chem. Phys.*, **17**, 1759–1773, 2017. **Error!**
- 
-

- Hyperlink reference not valid.**doi:10.5194/acp-17-1759-2017, 2017. <https://www.atmos-chem-phys.net/17/1759/2017/>.
- 343)** Simone, F. de, P. Artaxo, M. Bencardino, S. Cinnirella, F. Carbone, F. D'Amore, A. Dommergue, X. Bin Feng, C. N. Gencarelli, I. M. Hedgecock, M. S. Landis, F. Sprovieri, N. Suzuki, I. Wängberg, and N. Pirrone. Particulate-phase mercury emissions from biomass burning and impact on resulting deposition: a modelling assessment. *Atmos. Chem. Phys.*, 17, 1881–1899, 2017, [www.atmos-chem-phys.net/17/1881/2017/](http://www.atmos-chem-phys.net/17/1881/2017/) , doi:10.5194/acp-17-1881-2017.
- 344)** Gouveia, D. A., B. Barja, H. M. J. Barbosa, P. Seifert, H. Baars, T. Pauliquevis and P. Artaxo. Optical and geometrical properties of cirrus clouds in Amazonia derived from 1 year of ground-based lidar measurements. *Atmos. Chem. Phys.*, 17, 3619–3636, 2017, [www.atmos-chem-phys.net/17/3619/2017/](http://www.atmos-chem-phys.net/17/3619/2017/) , doi:10.5194/acp-17-3619-2017.
- 345)** Rizzolo, J. A., C. G. G. Barbosa, G. C. Borillo, A. F. L. Godoi, R. A. F. Souza, R. V. Andreoli, A. O. Manzi, M. O. Sá, E. G. Alves, C. Pöhlker, I. H. Angelis, F. Ditas, J. Saturno, D. Moran-Zuloaga, L. V. Rizzo, N. E. Rosário, T. Pauliquevis, R. M. N. Santos, C. I. Yamamoto, M. O. Andreae, P. Artaxo, P. E. Taylor, and R. H. M. Godoi. Soluble iron nutrients in Saharan dust over the central Amazon rainforest. *Atmos. Chem. Phys.*, Vol. 17, no. 4, pg. 2673–2687. [www.atmos-chem-phys.net/17/2673/2017/](http://www.atmos-chem-phys.net/17/2673/2017/) . doi:10.5194/acp-17-2673-2017, 2017.
- 346)** Thalman, R., de Sá, S. S., Palm, B. B., Barbosa, H. M. J., Pöhlker, M. L., Alexander, M. L., Brito, J., Carbone, S., Castillo, P., Day, D. A., Kuang, C., Manzi, A., Ng, N. L., Sedlacek III, A. J., Souza, R., Springston, S., Watson, T., Pöhlker, C., Pöschl, U., Andreae, M. O., Artaxo, P., Jimenez, J. L., Martin, S. T., and Wang, J.: CCN activity and organic hygroscopicity of aerosols downwind of an urban region in central Amazonia: seasonal and diel variations and impact of anthropogenic emissions, *Atmos. Chem. Phys.*, 17, 11779-11801, <https://doi.org/10.5194/acp-17-11779-2017>.
- 347)** Travnikov, O., Angot, H., Artaxo, P., Bencardino, M., Bieser, J., D'Amore, F., Dastoor, A., De Simone, F., Diéguez, M. D. C., Dommergue, A., Ebinghaus, R., Feng, X. B., Gencarelli, C. N., Hedgecock, I. M., Magand, O., Martin, L., Matthias, V., Mashyanov, N., Pirrone, N., Ramachandran, R., Read, K. A., Ryjkov, A., Selin, N. E., Sena, F., Song, S., Sprovieri, F., Wip, D., Wängberg, I., and Yang, X.: Multi-model study of mercury dispersion in the atmosphere: atmospheric processes and model evaluation, *Atmos. Chem. Phys.*, 17, 5271-5295, <https://doi.org/10.5194/acp-17-5271-2017>, 2017. Home page: <https://www.atmos-chem-phys.net/17/5271/2017/>
- 348)** Andrade Filho, V. S. de, P. E. Artaxo Netto, S. de S. Hacon, C. N. do Carmo. Distribuição espacial de queimadas e mortalidade em idosos em região da Amazônia Brasileira, 2001 – 2012. *Ciênc. Saúde Coletiva*, vol. 22, n. 1, pp. 245-253. ISSN 1413-8123. <http://dx.doi.org/10.1590/1413-81232017221.09622015> . 2017.
- 349)** Braga, R. C., Rosenfeld, D., Weigel, R., Jurkat, T., Andreae, M. O., Wendisch, M., Pöhlker, M. L., Klimach, T., Pöschl, U., Pöhlker, C., Voigt, C., Mahnke, C., Borrmann, S., Albrecht, R. I., Molleker, S., Vila, D. A., Machado, L. A. T., and Artaxo, P.: Comparing parameterized versus measured microphysical properties of tropical convective cloud bases during the ACRIDICON–CHUVA campaign, *Atmos. Chem. Phys.*, 17, 7365-7386,

- <https://doi.org/10.5194/acp-17-7365-2017>, 2017. <http://www.atmos-chem-phys.net/17/7365/2017/acp-17-7365-2017.pdf>
- 350)** Cecchini, M. A., Machado, L. A. T., Andreae, M. O., Martin, S. T., Albrecht, R. I., Artaxo, P., Barbosa, H. M. J., Borrmann, S., Fütterer, D., Jurkat, T., Mahnke, C., Minikin, A., Molleker, S., Pöhlker, M. L., Pöschl, U., Rosenfeld, D., Voigt, C., Weinzierl, B., and Wendisch, M.: Sensitivities of Amazonian clouds to aerosols and updraft speed. *Atmos. Chem. Phys.*, Vol. 17, no. 6, 10037-10050, <https://doi.org/10.5194/acp-17-10037-2017>, 2017, <https://www.atmos-chem-phys.net/17/10037/2017/acp-17-10037-2017.pdf>.
- 351)** Eugene Mikhailov, Svetlana Mironova, Gregory Mironov, Sergey Vlasenko, Alexey Panov, Xuguang Chi, David Walter, Samara Carbone, Paulo Artaxo, Ulrich Pöschl, and Meinrat Andreae. Long-term measurements (2010 - 2014) of carbonaceous aerosol and carbon monoxide at the Zotino Tall Tower Observatory (ZOTTO) in central Siberia. *Atmos. Chem. Phys.*, 17, 14365–14392, 2017. <https://doi.org/10.5194/acp-17-14365-2017>, <https://www.atmos-chem-phys.net/17/14365/2017/acp-17-14365-2017.pdf>
- 352)** Cecchini, M. A., Machado, L. A. T., Wendisch, M., Costa, A., Krämer, M., Andreae, M. O., Afchine, A., Albrecht, R. I., Artaxo, P., Borrmann, S., Fütterer, D., Klimach, T., Mahnke, C., Martin, S. T., Minikin, A., Molleker, S., Pardo, L. H., Pöhlker, C., Pöhlker, M. L., Pöschl, U., Rosenfeld, D., and Weinzierl, B.: Illustration of microphysical processes in Amazonian deep convective clouds in the Gamma phase space: Introduction and potential applications. *Atmos. Chem. Phys.*, Vol. 17, series 23, 14727-14746, doi:10.5194/acp-2017-185, 2017. <http://www.atmos-chem-phys-discuss.net/acp-2017-185/acp-2017-185.pdf>. 2017.
- 353)** Saturno, Jorge, Christopher Pöhlker, Dario Massabò, Joel Brito, Samara Carbone, Yafang Cheng, Xuguang Chi, Florian Ditas, Isabella Hrab de Angelis, Daniel Morán-Zuloaga, Mira L. Pöhlker, Luciana V. Rizzo, David Walter, Qiaoqiao Wang, Paulo Artaxo, Paolo Prati, and Meinrat O. Andreae. Comparison of different Aethalometer correction schemes and a reference multi-wavelength absorption technique for ambient aerosol data. *Atmos. Meas. Tech.*, 10, 2837–2850, 2017. <https://doi.org/10.5194/amt-10-2837-2017>. <https://www.atmos-meas-tech.net/10/2837/2017/>.
- 354)** Natália Girão Rodrigues de Mello, Paulo Artaxo. Evolução do Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal. *Revista do Instituto de Estudos Brasileiros*, Vol. 66, 108-129, 2017.
- 355)** Fraund, M.; Pham, D.Q.; Bonanno, D.; Harder, T.H.; Wang, B.; Brito, J.; de Sá, S.S.; Carbone, S.; China, S.; Artaxo, P.; Martin, S.T.; Pöhlker, C.; Andreae, M.O.; Laskin, A.; Gilles, M.K.; Moffet, R.C. Elemental Mixing State of Aerosol Particles Collected in Central Amazonia during GoAmazon2014/15. *Atmosphere*, 8, issue 9, 173. doi:[10.3390/atmos8090173](https://doi.org/10.3390/atmos8090173) , <http://www.mdpi.com/2073-4433/8/9/173> , 2017.
- 356)** Schultz, MG, Schröder, S, Lyapina, O, Cooper, OR, Galbally, I, Petropavlovskikh, I, von Schneidmesser, E, Tanimoto, H, Elshorbany, Y, Naja, M, Seguel, RJ, Dauert, U, Eckhardt, P, Feigenspan, S, Fiebig, M, Hjellbrekke, A-G, Hong, Y-D, Kjeld, PC, Koide, H, Lear, G, Tarasick, D, Ueno, M, Wallasch, M, Baumgardner, D, Chuang, M-T, Gillett, R, Lee, M, Molloy, S, Moolla, R, Wang, T, Sharps, K, Adame, JA, Ancellet, G, Apadula, F, Artaxo, P,
- 
-

- Barlasina, ME, Bogucka, M, Bonasoni, P, Chang, L, Colomb, A, Cuevas-Agulló, E, Cupeiro, M, Degorska, A, Ding, A, Fröhlich, M, Frolova, M, Gadhavi, H, Gheusi, F, Gilge, S, Gonzalez, MY, Gros, V, Hamad, SH, Helmig, D, Henriques, D, Hermansen, O, Holla, R, Hueber, J, Im, U, Jaffe, DA, Komala, N, Kubistin, D, Lam, K-S, Laurila, T, Lee, H, Levy, I, Mazzoleni, C, Mazzoleni, LR, McClure-Begley, A, Mohamad, M, Murovec, M, Navarro-Comas, M, Nicodim, F, Parrish, D, Read, KA, Reid, N, Ries, L, Saxena, P, Schwab, JJ, Scorgie, Y, Senik, I, Simmonds, P, Sinha, V, Skorokhod, AI, Spain, G, Spangl, W, Spoor, R, Springston, SR, Steer, K, Steinbacher, M, Suharguniyawan, E, Torre, P, Trickl, T, Weili, L, Weller, R, Xiaobin, X, Xue, L and Zhiqiang, M. Tropospheric Ozone Assessment Report: Database and metrics data of global surface ozone observations. *Elementa Science of the Anthropocene*, Vol. 5: 58, DOI: <https://doi.org/10.1525/elementa.244>, 2017.
- 357)** Jorge Saturno, Bruna A. Holanda, Christopher Pöhlker, Florian Ditas, Qiaoqiao Wang, Daniel Moran-Zuloaga, Joel Brito, Samara Carbone, Yafang Cheng, Xuguang Chi, Jeannine Ditas, Thorsten Hoffmann, Isabella Hrabé de Angelis, Tobias Könemann, Jošt V. Lavrič, Nan Ma, Jing Ming, Hauke Paulsen, Mira L. Pöhlker, Luciana V. Rizzo, Patrick Schlag, Hang Su, David Walter, Stefan Wolff, Yuxuan Zhang, Paulo Artaxo, Ulrich Pöschl, and Meinrat O. Andreae. Black and brown carbon over central Amazonia: Long-term aerosol measurements at the ATTO site. *Atmospheric Chemistry and Physics Discussions*, MS No.: acp-2017-1097. <https://doi.org/10.5194/acp-2017-1097>, 26/Nov/2017.
- 358)** Oliveira Galvão, Marcos Felipe de, Nilmara de Oliveira Alves, Paula Anastácia Ferreira Sofia Caumo, Pérola de Castro Vasconcellos, Paulo Artaxo, Sandra de Souza Hacon, Deborah Arnsdorff Roubicek, Silvia Regina Batistuzzo de Medeiros, Biomass burning particles in the Brazilian Amazon region: Mutagenic effects of nitro and oxy-PAHs and assessment of health risks. *Environmental Pollution*, Vol. 23, 960-970, <https://www.sciencedirect.com/science/article/pii/S0269749117311259>, <https://doi.org/10.1016/j.envpol.2017.09.068>, 2017.
- 359)** Sandra Hacon, Cristovam Barcellos, Diego Ricardo Xavier, Renata Gracie, Beatriz Fátima Alves de Oliveira, Paulo Artaxo, Eliane Ignotti. Mudanças climáticas e impactos na saúde. In: *Mudanças Climáticas em Rede – um olhar interdisciplinar - Contribuições do Instituto Nacional de Ciência e Tecnologia para Mudanças Climáticas*. Pag. Ed. Carlos Nobre e José Marengo, ISBN 978-85-7917-463-6. 608 pag. 165-188, 2017.
- 360)** Mello, Natália Girão Rodrigues de; ARTAXO, Paulo. Evolução do Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal. *Revista do Instituto de Estudos Brasileiros*, Brasil, n. 66, p. 108-129, abr. 2017. DOI: <http://dx.doi.org/10.11606/issn.2316-901X.v0i66p108-129>. <https://www.revistas.usp.br/rieb/article/view/133109/129176>
- 361)** Saturno, J., Ditas, F., Penning de Vries, M., Holanda, B. A., Pöhlker, M. L., Carbone, S., Walter, D., Bobrowski, N., Brito, J., Chi, X., Gutmann, A., Hrabé de Angelis, I., Machado, L. A. T., Moran-Zuloaga, D., Rüdiger, J., Schneider, J., Schulz, C., Wang, Q., Wendisch, M., Artaxo, P., Wagner, T., Pöschl, U., Andreae, M. O., and Pöhlker, C.: African volcanic emissions influencing atmospheric aerosols over the Amazon rain forest, *Atmos. Chem. Phys.*, 18, 10391-10405, <https://doi.org/10.5194/acp-18-10391-2018>, <https://www.atmos-chem-phys.net/18/10391/2018/>, 2018.
- 
-

- 362)** Scott, C. E., S. A. Monks, D. V. Spracklen, S. R. Arnold, P. M. Forster, A. Rap, M. Äijälä, P. Artaxo, K. S. Carslaw, M. P. Chipperfield, M. Ehn, S. Gilardoni, L. Heikkinen, M. Kulmala, T. Petäjä, C. L. S. Reddington, L. V. Rizzo, E. Swietlicki, E. Vignati, C. Wilson. Impact on short-lived climate forcers increases projected warming due to deforestation. *Nature Communications*, Vol. 9, 157, doi:10.1038/s41467-017-02412-4, <https://www.nature.com/articles/s41467-017-02412-4>, 2018.
- 363)** Jiwen Fan, Daniel Rosenfeld, Yuwei Zhang, Scott E. Giangrande, Zhanqing Li, Luiz A. T. Machado, Scot T. Martin, Yan Yang, Jian Wang, Paulo Artaxo, Henrique M. J. Barbosa, Ramon C. Braga, Jennifer M. Comstock, Zhe Feng, Wenhua Gao, Helber B. Gomes, Fan Mei, Christopher Pöhlker, Mira L. Pöhlker, Ulrich Pöschl, Rodrigo A. F. de Souza. Substantial Convection and Precipitation Enhancements by Ultrafine Aerosol Particles. *Science*, Vol. 359, Issue 6374, pp 411-418, <http://science.sciencemag.org/content/359/6374/411>, DOI: 10.1126/science.aan8461, 2018.
- 364)** Rahman. A. A., P. Artaxo. A. Asrat, A. Parker. Developing countries must lead on solar geoengineering research. *Nature*, Vol. 556, Issue 7699, Pg. 22-24, <https://www.nature.com/articles/d41586-018-03917-8>, 2018.
- 365)** Yingjun L., R. Seco, S. Kim, A. Guenther, A. H. Goldstein, F. N. Keutsch, S. R. Springston, T. B. Watson, P. Artaxo, R. A. F. Souza, K. A. McKinney, and S. T. Martin. Isoprene photo-oxidation products quantify the effect of pollution on hydroxyl radicals over Amazonia. *Sciences Advances*, Vol. 4, No. 4, eaar2547, DOI: 10.1126/sciadv.aar2547, <http://advances.sciencemag.org/content/4/4/eaar2547.full>, 2018.
- 366)** Efstratios Bourtsoukidis, Thomas Behrendt, Ana Yañez-Serrano, Heidi Hellén, Efstathios Diamantopoulos, Elisa Catão, Kirsti Ashworth, Andrea Pozzer, Carlos Quesada, Demetrius Martins, Marta Sá, Alessandro Araujo, Joel Brito, Paulo Artaxo, Jürgen Kesselmeier, Jos Lelieveld, Jonathan Williams. Strong sesquiterpene emissions from Amazonian soils. *Nature Communications*, 9, 2226, <https://www.nature.com/articles/s41467-018-04658-y> DOI: 10.1038/s41467-018-04658-y. 2018.
- 367)** Joel Brito, Samara Carbone, Djacinto A. Monteiro dos Santos, Pamela Dominutti, Nilmara de Oliveira Alves, Luciana V. Rizzo, and Paulo Artaxo. Disentangling vehicular emission impact on urban air pollution using ethanol as a tracer. *Scientific Reports*, 8:10679, DOI:10.1038/s41598-018-29138-7. <https://www.nature.com/articles/s41598-018-29138-7>. 2018.
- 368)** Swarup China, Susannah M. Burrows, Bingbing Wang, Tristan H. Harder, Johannes Weis, Meryem Tanarhte, Luciana V. Rizzo, Joel Brito, Glauber G. Cirino, Po-Lun Ma, John Cliff, Paulo Artaxo, Mary K. Gilles & Alexander Laskin. Fungal spores as a source of sodium salt particles in the Amazon basin. *Nature Communications*, vol. 9, Article number: 4793, <https://www.nature.com/articles/s41467-018-07066-4>, <https://doi.org/10.1038/s41467-018-07066-4>, 2018.
- 369)** Saarikoski, S., Teinilä, K., Timonen, H., Aurela, M., Laaksovirta, T., Reyes, F., Vásques, Y., Oyola, P., Artaxo, P., Pennanen, A. S., Junntila, S., Linnainmaa, M., Salonen, R. O. & Hillamo, R. (2017): Particulate matter characteristics, dynamics, and sources in an underground mine, *Aerosol Science and Technology*, Vol 52, Vol. 1, Pg. 114-122, DOI:

10.1080/02786826.2017.1384788.

<http://www.tandfonline.com/doi/full/10.1080/02786826.2017.1384788>, 2018.

- 370)** Palm, B. B., de Sá, S. S., Day, D. A., Campuzano-Jost, P., Hu, W., Seco, R., Sjostedt, S. J., Park, J.-H., Guenther, A. B., Kim, S., Brito, J., Wurm, F., Artaxo, P., Thalman, R., Wang, J., Yee, L. D., Wernis, R., Isaacman-VanWertz, G., Goldstein, A. H., Liu, Y., Springston, S. R., Souza, R., Newburn, M. K., Alexander, M. L., Martin, S. T., and Jimenez, J. L.: Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia, *Atmos. Chem. Phys.*, Vol. 18, Pg, 467-493, <https://doi.org/10.5194/acp-18-467-2018>, <https://www.atmos-chem-phys.net/18/467/2018/>, 2018.
- 371)** Rocha-Lima, A., Martins, J. V., Remer, L. A., Todd, M., Marsham, J. H., Engelstaedter, S., Ryder, C. L., Cavazos-Guerra, C., Artaxo, P., Colarco, P., and Washington, R.: A detailed characterization of the Saharan dust collected during the Fennec campaign in 2011: in situ ground-based and laboratory measurements. *Atmos. Chem. Phys.*, 18, 1023–1043, <https://doi.org/10.5194/acp-18-1023-2018>. 2018.
- 372)** Andreae, M. O., Afchine, A., Albrecht, R., Holanda, B. A., Artaxo, P., Barbosa, H. M. J., Borrmann, S., Cecchini, M. A., Costa, A., Dollner, M., Fütterer, D., Järvinen, E., Jurkat, T., Klimach, T., Konemann, T., Knote, C., Krämer, M., Krisna, T., Machado, L. A. T., Mertes, S., Minikin, A., Pöhlker, C., Pöhlker, M. L., Pöschl, U., Rosenfeld, D., Sauer, D., Schlager, H., Schnaiter, M., Schneider, J., Schulz, C., Spanu, A., Sperling, V. B., Voigt, C., Walser, A., Wang, J., Weinzierl, B., Wendisch, M., and Ziereis, H.: Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin. *Atmospheric Chemistry and Physics*, 18, 921–961, 2018. <https://doi.org/10.5194/acp-18-921-2018>, <https://www.atmos-chem-phys.net/18/921/2018/>.
- 373)** de Oliveira Galvao, Marcos Felipe; Alves, Nilmara de Oliveira; Ferreira, Paula Anastácia; Caumo, Sofia; Vasconcellos, Perola de Castro; Artaxo, Paulo; Hacon, Sandra de Souza; Roubicek, Deborah Arnsdorff; Batistuzzo de Medeiros, Silvia Regina. Biomass burning particles in the Brazilian Amazon region: Mutagenic effects of nitro and oxy-PAHs and assessment of health risks. *Environmental Pollution*, Vol 233, 960-970, 10.1016/j.envpol.2017.09.068, <https://reader.elsevier.com/reader/sd/pii/S0269749117311259?token=935FF33F2C42219EE81C03A12C07EF417424C35E71E85487F2B3440DC2EE3DC890DC0A02F59DA1469A4F29887F833A1B>, 2018.
- 374)** Rizzo, L. V., Roldin, P., Brito, J., Backman, J., Swietlicki, E., Krejci, R., Tunved, P., Petäjä, T., Kulmala, M., and Artaxo, P.: Multi-year statistical and modeling analysis of submicrometer aerosol number size distributions at a rain forest site in Amazonia, *Atmos. Chem. Phys.*, 18, 10255-10274, <https://doi.org/10.5194/acp-18-10255-2018>, 2018. <https://www.atmos-chem-phys.net/18/10255/2018/>. <https://doi.org/10.5194/acp-18-10255-2018>
- 375)** Pöhlker, M. L., Ditas, F., Saturno, J., Klimach, T., Hrabě de Angelis, I., Araújo, A., Brito, J., Carbone, S., Cheng, Y., Chi, X., Ditz, R., Gunthe, S. S., Kandler, K., Kesselmeier, J., Könemann, T., Lavrič, J. V., Martin, S. T., Mikhailov, E., Moran-Zuloaga, D., Rizzo, L. V., Rose, D., Su, H., Thalman, R., Walter, D., Wang, J., Wolff, S., Barbosa, H. M. J., Artaxo, P., Andreae, M. O., Pöschl, U., and Pöhlker, C.: Long-term observations of cloud condensation nuclei in the Amazon rain forest – Part 2: Variability and characteristic differences under near-pristine,



- biomass burning, and long-range transport conditions. *Atmos. Chem. Phys.*, 18, Series 14, 10289-10331, 2018. <https://doi.org/10.5194/acp-18-10289-2018>. <https://www.atmos-chem-phys.net/18/10289/2018/>, 2018.
- 376)** Schmale, J., Silvia Henning, Bas Henzing, Helmi Keskinen, Mikhail Paramonov, Karine Sellegri, Jurgita Ovadnevaite, Mira Pöhlker, Joel Brito, Aikaterini Bougiatioti, Nikos Kalivitis, Iasonas Stavroulas, Samara Carbone, Anne Jefferson, Minsu Park, Patrick Schlag, Adam Kristensson, Yoko Iwamoto, Pasi Aalto, Mikko Äijälä, Nicolas Bukowiecki, Stefano Decesari, Mikael Ehn, Göran Frank, Roman Fröhlich, Arnoud Frumau, Erik Herrmann, Rupert Holzinger, Gerard Kos, Markku Kulmala, Nikolaos Mihalopoulos, Athanasios Nenes, Colin O'Dowd, Tuukka Petäjä, David Picard, Laurent Poulain, André Prévôt, Erik Swietlicki, Ulrich Pöschl, Paulo Artaxo, Alfred Wiedensohler, John Ogren, Atsushi Matsuki, Seong Soo Yum, Frank Stratmann, Urs Baltensperger, and Martin Gysel. Long-term cloud condensation nuclei number concentration, particle number size distribution and chemical composition measurements at regionally representative observatories. *Atmospheric Chemistry and Physics*, Vol., 18, No.4, pp. 2853–2881, <https://doi.org/10.5194/acp-18-2853-2018>, <https://www.atmos-chem-phys.net/18/2853/2018/acp-18-2853-2018.pdf>. 2018.
- 377)** Hodgson, Amy, Will Morgan, Sebastian O'Shea, Stephane Bauguitte, James Allan, Eoghan Darbyshire, Michael Flynn, Dantong Liu, James Lee, Ben Johnson, Jim Haywood, Karla Longo, Paulo Artaxo, and Hugh Coe. Near-field emission profiling of Rainforest and Cerrado fires in Brazil during SAMBBA 2012. *Atmospheric Chemistry and Physics*, 18, 8, 5619–5638, 2018, doi: 10.5194/acp-18-5619-2018, <https://www.atmos-chem-phys.net/18/5619/2018/>, 2018.
- 378)** Machado, L. A. T., Calheiros, A. J. P., Biscaro, T., Giangrande, S., Silva Dias, M. A. F., Cecchini, M. A., Albrecht, R., Andreae, M. O., Araujo, W. F., Artaxo, P., Borrmann, S., Braga, R., Burleyson, C., Eichholz, C. W., Fan, J., Feng, Z., Fisch, G. F., Jensen, M. P., Martin, S. T., Pöschl, U., Pöhlker, C., Pöhlker, M. L., Ribaud, J.-F., Rosenfeld, D., Saraiva, J. M. B., Schumacher, C., Thalman, R., Walter, D., and Wendisch, M.: Overview: Precipitation characteristics and sensitivities to environmental conditions during GoAmazon2014/5 and ACRIDICON-CHUVA, *Atmos. Chem. Phys.*, 18, 6461-6482, <https://doi.org/10.5194/acp-18-6461-2018>, <https://www.atmos-chem-phys.net/18/6461/2018/acp-18-6461-2018.pdf>, 2018.
- 379)** Cirino, G., Brito, J., Barbosa, H.M.J., Rizzo, L.V., Tunved, P., de Sá, S.S., Jimenez, J.L., Palm, B.B., Carbone, S., Lavric, J., Souza, R.A.F., Wolff, S., Walter, D., Tota, Jú., Oliveira, M.B.L., Martin, S.T., Artaxo, P., Observations of Manaus urban plume evolution and interaction with biogenic emissions in GoAmazon 2014/5, *Atmospheric Environment* Vol. 191, Pg. 513 - 524, <https://doi.org/10.1016/j.atmosenv.2018.08.031>, doi: 10.1016/j.atmosenv.2018.08.031. 2018.
- 380)** de Sá, S. S., Palm, B. B., Campuzano-Jost, P., Day, D. A., Hu, W., Isaacman-VanWertz, G., Yee, L. D., Brito, J., Carbone, S., Ribeiro, I. O., Cirino, G. G., Liu, Y., Thalman, R., Sedlacek, A., Funk, A., Schumacher, C., Shilling, J. E., Schneider, J., Artaxo, P., Goldstein, A. H., Souza, R. A. F., Wang, J., McKinney, K. A., Barbosa, H., Alexander, M. L., Jimenez, J. L., and Martin, S. T.: Urban influence on the concentration and composition of submicron particulate matter in central Amazonia, *Atmos. Chem. Phys.*, Vol. 18, 16, 12185-12206,

- <https://doi.org/10.5194/acp-18-12185-2018>, 2018. <https://doi.org/10.5194/acp-18-12185-2018>, <https://www.atmos-chem-phys.net/18/12185/2018/>.
- 381)** Shilling, J. E., Pekour, M. S., Fortner, E. C., Artaxo, P., de Sá, S., Hubbe, J. M., Longo, K. M., Machado, L. A. T., Martin, S. T., Springston, S. R., Tomlinson, J., and Wang, J.: Aircraft observations of the chemical composition and aging of aerosol in the Manaus urban plume during GoAmazon 2014/5, *Atmos. Chem. Phys.*, 18, 10773-10797, <https://doi.org/10.5194/acp-18-10773-2018>, 2018. <https://www.atmos-chem-phys.net/18/10773/2018/>.
- 382)** Yee, L. D., Isaacman-VanWertz, G., Wernis, R. A., Meng, M., Rivera, V., Kreisberg, N. M., Hering, S. V., Bering, M. S., Glasius, M., Upshur, M. A., Gray Bé, A., Thomson, R. J., Geiger, F. M., Offenberg, J. H., Lewandowski, M., Kourtchev, I., Kalberer, M., de Sá, S., Martin, S. T., Alexander, M. L., Palm, B. B., Hu, W., Campuzano-Jost, P., Day, D. A., Jimenez, J. L., Liu, Y., McKinney, K. A., Artaxo, P., Viegas, J., Manzi, A., Oliveira, M. B., de Souza, R., Machado, L. A. T., Longo, K., and Goldstein, A. H.: Observations of sesquiterpenes and their oxidation products in central Amazonia during the wet and dry seasons, *Atmos. Chem. Phys.*, 18, 10433-10457, <https://doi.org/10.5194/acp-18-10433-2018>, <https://www.atmos-chem-phys.net/18/10433/2018/acp-18-10433-2018.pdf>, 2018.
- 383)** Schulz, C., Schneider, J., Amorim Holanda, B., Appel, O., Costa, A., de Sá, S. S., Dreiling, V., Fütterer, D., Jurkat-Witschas, T., Klimach, T., Knote, C., Krämer, M., Martin, S. T., Mertes, S., Pöhlker, M. L., Sauer, D., Voigt, C., Walser, A., Weinzierl, B., Ziereis, H., Zöger, M., Andreae, M. O., Artaxo, P., Machado, L. A. T., Pöschl, U., Wendisch, M., and Borrmann, S.: Aircraft-based observations of isoprene-epoxydiol-derived secondary organic aerosol (IEPOX-SOA) in the tropical upper troposphere over the Amazon region, *Atmos. Chem. Phys.*, 18, 14979-15001, <https://doi.org/10.5194/acp-18-14979-2018>, <https://www.atmos-chem-phys.net/18/14979/2018/>, 2018.
- 384)** de Oliveira, B.F.A., de Carvalho, L.V.B., de Souza Mourão, D., de Cássia Oliveira da Costa Mattos, R., de Castro, H.A., Artaxo, P., Junger, W.L. and Hacon, S. (2018) Environmental Exposure Associated with Oxidative Stress Biomarkers in Children and Adolescents Residents in Brazilian Western Amazon. *Journal of Environmental Protection*, 9, n 4, 347-367. <https://doi.org/10.4236/jep.2018.94023>, <http://www.scirp.org/Journal/PaperInformation.aspx?PaperID=84205>, 2018.
- 385)** Gonçalves, Karen dos Santos; Winkler, Mirko; Benchimol-Barbosa, Paulo; de Hoogh, Kees; Artaxo, Paulo; Hacon, Sandra; Schindler, Christian; Künzli, Nino. Development of non-linear models predicting daily fine particle concentrations using aerosol optical depth retrievals and ground-based measurements at a municipality in the Brazilian Amazon region. *Atmospheric Environment*, Vol. 184, pg. 156 - 165, <https://doi.org/10.1016/j.atmosenv.2018.03.057>, 2018.
- 386)** Moran-Zuloaga, D., Ditas, F., Walter, D., Saturno, J., Brito, J., Carbone, S., Chi, X., Hrabě de Angelis, I., Baars, H., Godoi, R. H. M., Heese, B., Holanda, B. A., Lavrič, J. V., Martin, S. T., Ming, J., Pöhlker, M. L., Ruckteschler, N., Su, H., Wang, Y., Wang, Q., Wang, Z., Weber, B., Wolff, S., Artaxo, P., Pöschl, U., Andreae, M. O., and Pöhlker, C.: Long-term study on coarse mode aerosols in the Amazon rain forest with the frequent intrusion of Saharan dust plumes, *Atmos. Chem. Phys.*, 18, 10055-10088, <https://doi.org/10.5194/acp-18-10055->

---

2018 , <https://www.atmos-chem-phys.net/18/10055/2018/acp-18-10055-2018.pdf>.  
2018.

- 387)** Wimmer, D., Buenrostro Mazon, S., Manninen, H. E., Kangasluoma, J., Franchin, A., Nieminen, T., Backman, J., Wang, J., Kuang, C., Krejci, R., Brito, J., Goncalves Morais, F., Martin, S. T., Artaxo, P., Kulmala, M., Kerminen, V.-M., and Petäjä, T.: Ground-based observation of clusters and nucleation-mode particles in the Amazon, *Atmos. Chem. Phys.*, 18, 13245-13264, <https://doi.org/10.5194/acp-18-13245-2018>, 2018.  
<https://www.atmos-chem-phys.net/18/13245/2018/>
- 388)** Artaxo, P., Working together for Amazonia. Editorial Science Magazine, Vol. 363, Issue 6425, <http://science.sciencemag.org/content/363/6425/323> doi: 10.1126/science.aaw6986, 25 January 2019.
- 389)** Manish Shrivastava, Meinrat O. Andreae, Paulo Artaxo, Henrique M J Barbosa, Larry Berg, Joel Brito, Joseph Ching, Richard C Easter, Jiwen Fan, Jerome D Fast, Zhe Feng, Jose D Fuentes, Marianne Glasius, Allen H. Goldstein, Helber Barros Gomes, Dasa Gu, Alex B. Guenther, Shantanu H. Jathar, Saewung Kim, Ying Liu, Sijia Lou, Scot T Martin, V. Faye McNeill, Adan Medeiros, Suzane S de Sá, John E Shilling, Stephen R Springston, Rodrigo A. F. Souza, Joel A Thornton, Gabriel Isaacman-VanWertz, Lindsay D. Yee, Rita Ynoue, Rahul A Zaveri, Alla Zelenyuk, Chun Zhao. Urban pollution greatly enhances formation of natural aerosols over the Amazon rainforest. *Nature Communications*, Vol. 10, number: 1, pg. 1046, <https://doi.org/10.1038/s41467-019-08909-4>, <https://www.nature.com/articles/s41467-019-08909-4>. 2019.
- 390)** de Sá, S. S., Rizzo, L. V., Palm, B. B., Campuzano-Jost, P., Day, D. A., Yee, L. D., Wernis, R., Isaacman-VanWertz, G., Brito, J., Carbone, S., Liu, Y. J., Sedlacek, A., Springston, S., Goldstein, A. H., Barbosa, H. M. J., Alexander, M. L., Artaxo, P., Jimenez, J. L., and Martin, S. T.: Contributions of biomass-burning, urban, and biogenic emissions to the concentrations and light-absorbing properties of particulate matter in central Amazonia during the dry season, *Atmos. Chem. Phys.*, Vol. 19, No. 12, Pg. 7973-8001, <https://doi.org/10.5194/acp-19-7973-2019>, <https://www.atmos-chem-phys.net/19/7973/2019/>, 2019.
- 391)** Malavelle, F. F., Haywood, J. M., Mercado, L. M., Folberth, G. A., Bellouin, N., Sitch, S., and Artaxo, P.: Studying the impact of biomass burning aerosol radiative and climate effects on the Amazon rainforest productivity with an Earth system model, *Atmos. Chem. Phys.*, 19, 1301-1326, <https://doi.org/10.5194/acp-19-1301-2019>, <https://www.atmos-chem-phys.net/19/1301/2019/>, 2019.
- 392)** Carbone, Samara, Timonen, Hilka J., Rostedt, Antti, Happonen, Matti, Rönkkö, Topi, Keskinen, Jorma, Ristimäki, Jyrki, Korpi, Heikki, Artaxo, Paulo, Canagaratna, Manjula, Worsnop, Douglas, Canonaco, Francesco, Prévôt, Andre S. H., Hillamo, Risto, Saarikoski, Sanna. Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles. *Aerosol Science and Technology*, Vol. 17, doi: 10.1080/02786826.2019.1584389. <https://doi.org/10.1080/02786826.2019.1584389>, 2019.
- 393)** Darbyshire, E., Morgan, W. T., Allan, J. D., Liu, D., Flynn, M. J., Dorsey, J. R., O'Shea, S. J., Lowe, D., Szpek, K., Marenco, F., Johnson, B. T., Bauguitte, S., Haywood, J. M., Brito, J. F.,
-

- Artaxo, P., Longo, K. M., and Coe, H.: The vertical distribution of biomass burning pollution over tropical South America from aircraft in situ measurements during SAMBBA, *Atmos. Chem. Phys.*, Vol. 19, No. 9, 5771-5790, <https://doi.org/10.5194/acp-19-5771-2019>, <https://www.atmos-chem-phys.net/19/5771/2019/>, 2019.
- 394)** Glicker, H. S., Lawler, M. J., Ortega, J., de Sá, S. S., Martin, S. T., Artaxo, P., Vega Bustillos, O., de Souza, R., Tota, J., Carlton, A., and Smith, J. N.: Chemical composition of ultrafine aerosol particles in central Amazonia during the wet season, *Atmos. Chem. Phys.*, 19, 13053–13066, <https://doi.org/10.5194/acp-19-13053-2019>, <https://www.atmos-chem-phys.net/19/13053/2019/acp-19-13053-2019.pdf>, 2019.
- 395)** Tuet, Wing; Liu, Fobang; Alves, Nilmara; Fok, Shierly; Artaxo, Paulo; Vasconcellos, Perola; Champion, Julie; Ng, Nga Lee. Chemical oxidative potential and cellular oxidative stress from biomass burning aerosol. *Environmental Science & Technology Letters*, Vol. 6, 126-132, <https://pubs.acs.org/doi/pdf/10.1021/acs.estlett.9b00060>, DOI: 10.1021/acs.restless.9b00060, 2019.
- 396)** Pöhlker, C., David Walter, Hauke Paulsen, Tobias Könemann, Emilio Rodríguez-Caballero, Daniel Moran-Zuloaga, Joel Brito, Samara Carbone, Céline Degrendele, Viviane R. Després, Florian Ditas, Bruna A. Holanda, Johannes W. Kaiser, Gerhard Lammel, Jošt V. Lavrič, Jing Ming, Daniel Pickersgill, Mira L. Pöhlker, Maria Praß, Nina Ruckteschler, Jorge Saturno, Matthias Sörgel, Qiaoqiao Wang, Bettina Weber, Stefan Wolff, Paulo Artaxo, Ulrich Pöschl, and Meinrat O. Andreae. Land cover and its transformation in the backward trajectory footprint region of the Amazon Tall Tower Observatory. *Atmos. Chem. Phys.*, 19, 8425–8470, 2019, <https://doi.org/10.5194/acp-19-8425-2019>, <https://www.atmos-chem-phys.net/19/8425/2019/> 2019.
- 397)** Reddington, C. L., Morgan, W. T., Darbyshire, E., Brito, J., Coe, H., Artaxo, P., Scott, C. E., Marsham, J., and Spracklen, D. V.: Biomass burning aerosol over the Amazon: analysis of aircraft, surface and satellite observations using a global aerosol model, *Atmos. Chem. Phys.*, 19, 9125-9152, <https://www.atmos-chem-phys.net/19/9125/2019/>, <https://doi.org/10.5194/acp-19-9125-2019>, 2019.
- 398)** Paulo Artaxo e Délcio Rodrigues. As Bases Científicas das Mudanças Climáticas. Capítulo 1, pages 43-58. Livro Litigância climática no Brasil, editado por Joana Setzer, Kamyla Cunha, Amália Botter Fabbri. Editora Thomson Reuters - Revista dos Tribunais, 500 pages. ISBN 9788553214037, 2019.
- 399)** Jia, G., E. Shevliakova, P. Artaxo, N. De Noblet-Ducoudré, R. Houghton, J. House, K. Kitajima, C. Lennard, A. Popp, A. Sirin, R. Sukumar, L. Verchot, 2019: Land–climate interactions. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

- 400)** Academy of Science of South Africa, et al. Air Pollution and Health – A Science-Policy Initiative. *Annals of Global Health*. 2019; 85(1): 140, 1–9. DOI: <https://doi.org/10.5334/aogh.2656>.
- 401)** Yee, Lindsay; Isaacman-VanWertz, Gabriel; Wernis, Rebecca; Kreisberg, Nathan; Glasius, Marianne; Riva, Matthieu; Surratt, Jason; de Sa, Suzane; Martin, Scot; Alexander, M. Elizabeth; Palm, Brett; Hu, Weiwei; Campuzano-Jost, Pedro; Day, Douglas; Jimenez, Jose L.; Liu, Yingjun; Misztal, Pawel; Artaxo, Paulo; Viegas, Juarez; Manzi, Antonio; Souza, Rodrigo; Edgerton, Eric; Baumann, Karsten; Goldstein, Allen. Natural and anthropogenically-influenced isoprene oxidation in the Southeastern U.S.A. and central Amazon. *Environmental Science & Technology*, 54 (10) 5980-5991, 2020. <https://pubs.acs.org/doi/abs/10.1021/acs.est.0c00805>, <https://doi.org/10.1021/acs.est.0c00805>.
- 402)** Morgan, William T., Eoghan Darbyshire, Dominick V. Spracklen, Paulo Artaxo & Hugh Coe. Non-deforestation drivers of fires are increasingly important sources of aerosol and carbon dioxide emissions across Amazonia. *Scientific Reports Nature* 9:16975 <https://doi.org/10.1038/s41598-019-53112-6>, 2019.
- 403)** Tong, Haijie; Zhang, Yun; Filippi, Alexander ; Wang, Ting; Li, Chenpei; Liu, Fobang; Leppla, Denis; Kourtchev, Ivan ; Wang, Kai; Keskinen, Helmi-Marja; Levula, Janne T. ; Arangio, Andrea M.; Shen, Fangxia; Ditas, Florian; Martin, Scot; Artaxo, Paulo; Godoi, Ricardo; Yamamoto, Carlos; Souza, Rodrigo; Huang, Ru-Jin ; Berkemeier, Thomas; Wang , Yueshe; Su, Hang; Cheng, Yafang; Pope, Francis; Fu, Pingqing; Yao, Maosheng; Poehlker, Christopher; Petäjä, Tuukka; Kulmala, Markku; Andreae, Meinrat O.; Shiraiwa, Manabu; Pöschl, Ulrich; Hoffmann, Thorsten; Kalberer, Markus. Radical Formation by Fine Particulate Matter Associated with Highly Oxygenated Molecules. *Environ. Sci. Technol.* 2019, 53, 21, 12506-12518, <https://doi.org/10.1021/acs.est.9b05149>, DOI: 10.1021/acs.est.9b05149, 2019.
- 404)** Pope, R. J., Arnold, S. R., Chipperfield, M. P., Reddington, C. L. S., Butt, E. W., Keslake, T. D., et al. (2020). Substantial increases in Eastern Amazon and Cerrado biomass burning-sourced tropospheric ozone. *Geophysical Research Letters*, 47, e2019GL084143. <https://doi.org/10.1029/2019GL084143>.
- 405)** Artaxo, P., Contribuição subnacional ao desafio das mudanças climáticas. in: *Planejando o futuro hoje: ODS 13, Adaptação e Mudanças Climáticas em São Paulo*. Ed. Pedro Jacobi, ISBN 978-85-86923-58-6, 135 páginas, pg. 9-12. setembro de 2019.
- 406)** Mouchel-Vallon, C., Lee-Taylor, J., Hodzic, A., Artaxo, P., Aumont, B., Cameron, M., Gurarie, D., Jimenez, J.-L., Lenschow, D. H., Martin, S. T., Nascimento, J., Orlando, J. J., Palm, B. B., Shilling, J. E., Shrivastava, M., and Madronich, S.: Impact of Urban Emissions on a Biogenic Environment during the wet season: Explicit Modeling of the Manaus Plume Organic Chemistry with GECKO-A, *Atmos. Chem. Phys.*, 20 (10), 5995-6014, 2020.
- 407)** Adachi, Kouji, Naga Oshima, Zhaoheng Gong, Suzane de Sá, Adam P Bateman, Scot T Martin, Joel F de Brito, Paulo Artaxo, Glauber G Cirino, Arthur J Sedlacek III, Peter R Buseck.
- 
-

- Mixing states of Amazon-basin aerosol particles transported over long distances using transmission electron microscopy. *Atmos. Chem. Phys.*, 20, 11923–11939, <https://doi.org/10.5194/acp-20-11923-2020> 2020.
- 408)** Löbs, N., Barbosa, C. G. G., Brill, S., Walter, D., Ditas, F., de Oliveira Sá, M., de Araújo, A. C., de Oliveira, L. R., Godoi, R. H. M., Wolff, S., Piepenbring, M., Kesselmeier, J., Artaxo, P., Andreae, M. O., Pöschl, U., Pöhlker, C., and Weber, B.: Aerosol measurement methods to quantify spore emissions from fungi and cryptogamic covers in the Amazon, *Atmos. Meas. Tech.*, 13, Serie 1, 153–164, <https://doi.org/10.5194/amt-13-153-2020>, 2020.
- 409)** Holanda, B. A., Pöhlker, M. L., Walter, D., Saturno, J., Sörgel, M., Ditas, J., Ditas, F., Schulz, C., Franco, M. A., Wang, Q., Donth, T., Artaxo, P., Barbosa, H. M. J., Borrmann, S., Braga, R., Brito, J., Cheng, Y., Dollner, M., Kaiser, J. W., Klimach, T., Knote, C., Krüger, O. O., Fütterer, D., Lavrič, J. V., Ma, N., Machado, L. A. T., Ming, J., Morais, F. G., Paulsen, H., Sauer, D., Schlager, H., Schneider, J., Su, H., Weinzierl, B., Walser, A., Wendisch, M., Ziereis, H., Zöger, M., Pöschl, U., Andreae, M. O., and Pöhlker, C.: Influx of African biomass burning aerosol during the Amazonian dry season through layered transatlantic transport of black carbon-rich smoke, *Atmos. Chem. Phys.*, 20, 4757–4785, <https://doi.org/10.5194/acp-20-4757-2020>, <https://www.atmos-chem-phys.net/20/4757/2020/acp-20-4757-2020.pdf> 2020.
- 410)** Mei, F., Wang, J., Comstock, J. M., Weigel, R., Krämer, M., Mahnke, C., Shilling, J. E., Schneider, J., Schulz, C., Long, C. N., Wendisch, M., Machado, L. A. T., Schmid, B., Krisna, T., Pekour, M., Hubbe, J., Giez, A., Weinzierl, B., Zoeger, M., Pöhlker, M. L., Schlager, H., Cecchini, M. A., Andreae, M. O., Martin, S. T., de Sá, S. S., Fan, J., Tomlinson, J., Springston, S., Pöschl, U., Artaxo, P., Pöhlker, C., Klimach, T., Minikin, A., Afchine, A., and Borrmann, S.: Comparison of aircraft measurements during GoAmazon2014/5 and ACRIDICON-CHUVA, *Atmos. Meas. Tech.*, 13, 661–684, <https://doi.org/10.5194/amt-13-661-2020>, 2020.
- 411)** Morgan, W. T., Allan, J. D., Bauguitte, S., Darbyshire, E., Flynn, M. J., Lee, J., Liu, D., Johnson, B., Haywood, J., Longo, K. M., Artaxo, P. E., and Coe, H.: Transformation and aging of biomass burning carbonaceous aerosol over tropical South America from aircraft in situ measurements during SAMBBA, *Atmos. Chem. Phys.*, 20, 5309 – 5326, <https://doi.org/10.5194/acp-20-5309-2020>, <https://www.atmos-chem-phys.net/20/5309/2020/>, 2020.
- 412)** Yee, Lindsay D., Gabriel Isaacman-VanWertz, Rebecca Wernis, Nathan M Kreisberg, Marianne Glasius, Matthieu Riva, Jason Douglas Surratt, Suzane S de Sa, Scot T. Martin, M. Elizabeth Alexander, Brett B Palm, Weiwei Hu, Pedro Campuzano-Jost, Douglas A. Day, Jose L. Jimenez, Yingjun Liu, Pawel K. Misztal, Paulo Artaxo, Juarez Viegas, Antonio Manzi, Rodrigo Augusto Ferreira de Souza, Eric S. Edgerton, Karsten Baumann, and Allen H. Goldstein. Natural and anthropogenically-influenced isoprene oxidation in the Southeastern U.S.A. and central Amazon. *Environ. Sci. Technol.* 2020, 54, 10, 5980–5991. <https://doi.org/10.1021/acs.est.0c00805>. 2020.
- 413)** Yáñez-Serrano, Ana; Bourtsoukidis, Efstratios; Alves, Eliane; Bauwens, Maite; Stavrakou, Trissevgeni; Llusia, Joan; Filella, Iolanda; Guenther, Alex, Artaxo, Paulo; Kesselmeier, Juergen; Peñuelas, Josep. Amazonian BVOC emissions under global change: a review of
- 
-

---

current research, and future directions *Journal: Global Change Biology*, 26 (9), 4722-4751, DOI: 10.1111/gcb.15185, 2020.

- 414)** Schrod, J., Thomson, E. S., Weber, D., Kossmann, J., Pöhlker, C., Saturno, J., Ditas, F., Artaxo, P., Clouard, V., Saurel, J.-M., Ebert, M., Curtius, J., and Bingemer, H. G.: Long-term deposition and condensation ice-nucleating particle measurements from four stations across the globe, *Atmos. Chem. Phys.*, 20, 15983–16006, <https://doi.org/10.5194/acp-20-15983-2020>, 2020.
- 415)** Ramsay, R., Di Marco, C. F., Sörgel, M., Heal, M. R., Carbone, S., Artaxo, P., de Araújo, A. C., Sá, M., Pöhlker, C., Lavric, J., Andreae, M. O., and Nemitz, E.: Concentrations and biosphere-atmosphere fluxes of inorganic trace gases and associated ionic aerosol counterparts over the Amazon rainforest, *Atmos. Chem. Phys.*, 20, 15551-15584, <https://doi.org/10.5194/acp-20-15551-2020>, 2020.
- 416)** de Oliveira, G., Chen, J.M., Stark, S.C., Berenguer, E., Moutinho, P., Artaxo, P., Anderson, L.O., Aragão, L.E.O.C. Smoke pollution's impacts in Amazonia. *Science*, Vol. 369, issue 6504, pages 634-635, DOI: 10.1126/science.abd5942 , 2020.
- 417)** Butt, Edward; Conibear, Luke; Reddington, Carly; Darbyshire, Eoghan; Morgan, William; Coe, Hugh; Artaxo, Paulo; Brito, Joel; Knote, Christoph; Spracklen, Dominick. Large air quality and human health impacts due to Amazon Forest and vegetation fires. Article reference: ERC-100344. *Environmental Research Communications*, 2 (9) 095001. <https://doi.org/10.1088/2515-7620/abb0db>. 2020.
- 418)** Nilmara de Oliveira Alves, Guilherme Martins Pereira, Marlise Di Domenico, Giovanna Costanzo, Sarah Benevenuto, Adriana M. de Oliveira Fonoff, Natalia de Souza Xavier Costa, Gabriel Ribeiro Júnior, Gustavo Satoru Kajitani, Natália Cestari Moreno, Wesley Fotoran, Janaína Iannicelli Torres, Jailson Andrade, Mariana Veras, Paulo Artaxo, Carlos FM Menck, Perola Vasconcellos, Paulo Saldiva. Inflammation response and oxidative stress caused by urban air pollution exposure increase in the lack of DNA repair XPC protein. *Environmental International* 145, 106150, 2020. <https://doi.org/10.1016/j.envint.2020.106150>.
- 419)** Liu, L., Cheng, Y., Wang, S., Wei, C., Pöhlker, M. L., Pöhlker, C., Artaxo, P., Shrivastava, M., Andreae, M. O., Pöschl, U., and Su, H.: Impact of biomass burning aerosols on radiation, clouds, and precipitation over the Amazon: relative importance of aerosol-cloud and aerosol-radiation interactions, *Atmos. Chem. Phys.*, 20, 13283–13301, <https://doi.org/10.5194/acp-20-13283-2020>, 2020.
- 420)** Artaxo, P., As três emergências que nossa sociedade enfrenta: saúde, biodiversidade e mudanças climáticas. *Estudos Avançados*, vol. 34 no. 100 São Paulo. 2020. <https://doi.org/10.1590/s0103-4014.2020.34100.005>.
- 421)** Jia, G., E. Shevliakova, P. Artaxo, N. De Noblet-Ducoudré, R. Houghton, J. House, K. Kitajima, C. Lennard, A. Popp, A. Sirin, R. Sukumar, L. Verchot, 2019: Land-climate interactions. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen,
-

---

M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)). In press.

- 422)** Fernando G. Morais, Victor K. Sakano, Lucas N. de Lima, Marco A. Franco, Daniel Costa Reis, Liz M. Zanchetta, Fabio Jorge, Eduardo Landulfo, Luiz Henrique Catalani, Henrique M. J. Barbosa, Vanderley M. John & Paulo Artaxo (2021) Filtration efficiency of a large set of COVID-19 face masks commonly used in Brazil, *Aerosol Science and Technology*. <https://doi.org/10.1080/02786826.2021.1915466>.
- 423)** Nascimento, J. P., Bela, M. M., Meller, B., Banducci, A. L., Rizzo, L. V., Vara-Vela, A. L., Barbosa, H. M. J., Gomes, H., Rafee, S. A. A., Franco, M. A., Carbone, S., Cirino, G. G., Souza, R. A. F., McKeen, S. A., and Artaxo, P.: Aerosols from anthropogenic and biogenic sources and their interactions: modeling aerosol formation, optical properties, and impacts over the central Amazon Basin. *Atmos. Chem. Phys.*, 21, 6755–6779, 2021, <https://doi.org/10.5194/acp-21-6755-2021>. 2021.
- 424)** Aliaga, D., Sinclair, V. A., Andrade, M., Artaxo, P., Carbone, S., Kadantsev, E., Laj, P., Wiedensohler, A., Krejci, R., and Bianchi, F.: Identifying source regions of air masses sampled at the tropical high-altitude site of Chacaltaya using WRF-FLEXPART and cluster analysis, *Atmos. Chem. Phys.*, 21, 16453–16477, <https://doi.org/10.5194/acp-21-16453-2021>, 2021.
- 425)** Camarinha-Neto, G. F., J. C. P. Cohen, C. Q. Dias-Júnior, M. Sörgel, J. H. Cattanio, A. Araújo, S. Wolff, P. A. F. Kuhn, R. A.F. Souza, L. V. Rizzo, and P. Artaxo. The friagem event in the central Amazon and its influence on micrometeorological variables and atmospheric chemistry. *Atmospheric Chemistry and Physics*, 21, 339-356, 2021. <https://doi.org/10.5194/acp-21-339-2021>.
- 426)** Prass, M., Andreae, M. O., de Araújo, A. C., Artaxo, P., Ditas, F., Elbert, W., Förster, J.-D., Franco, M. A., Hrabě de Angelis, I., Kesselmeier, J., Klimach, T., Kremper, L. A., Thines, E., Walter, D., Weber, J., Weber, B., Fuchs, B. M., Pöschl, U., and Pöhlker, C.: Bioaerosols in the Amazon rain forest: temporal variations and vertical profiles of Eukarya, Bacteria, and Archaea. *Biogeosciences*, 18, n. 17, 4873–4887, <https://doi.org/10.5194/bg-18-4873-2021>, 2021.
- 427)** De Simoni, W. ANDRÉ SANT’ANNA, ANE ALENCAR, BERTA PINHEIRO, CARMEN ARAÚJO, EVANGELINA VORMITTAG, HELIO WICHER, KAMYLA BORGES, MARCEL FARIA, MARIA DE FÁTIMA ANDRADE, PAULINA PORTO, PAULO ARTAXO, RUDI ROCHA, TALITA ESTURBA. “O Estado da Qualidade do Ar no Brasil”. Working Paper. São Paulo, Brasil: WRI Brasil. Disponível online em <https://wribrasil.org.br/pt/publicacoes>, 2021.
- 428)** Monteiro dos Santos, D., Rizzo, L. V., Carbone, S., Schlag, P., and Artaxo, P.: Physical and chemical properties of urban aerosols in São Paulo, Brazil: Links between composition and size distribution of submicron particles, *Atmos. Chem. Phys.*, 21, Issue 11, 8761–8773, <https://doi.org/10.5194/acp-21-8761-2021>, 2021.
- 429)** Patade, S., Phillips, V. T. J., Amato, P., Bingemer, H. G., Burrows, S. M., DeMott, P. J., Goncalves, F. L. T., Knopf, D. A., Morris, C. E., Alwmark, C., Artaxo, P., Pöhlker, C., Schrod, J., & Weber, B. (2021). Empirical formulation for multiple groups of primary biological ice
- 
-



- nucleating particles from field observations over Amazonia, *Journal of the Atmospheric Sciences*. Vol. 78, Issue 7, 2195–2220, <https://doi.org/10.1175/JAS-D-20-0096.1>, 2021.
- 430)** Machado, L. A. T., Franco, M. A., Kremper, L. A., Ditas, F., Andreae, M. O., Artaxo, P., Cecchini, M. A., Holanda, B. A., Pöhlker, M. L., Saraiva, I., Wolff, S., Pöschl, U., and Pöhlker, C.: How weather events modify aerosol particle size distributions in the Amazon boundary layer, *Atmos. Chem. Phys.*, 21, Serie 23, 18065–18086, <https://doi.org/10.5194/acp-21-18065-2021>, 2021.
- 431)** Weber, J., Archer-Nicholls, S., Abraham, N. L., Shin, Y. M., Bannan, T. J., Percival, C. J., Bacak, A., Artaxo, P., Jenkin, M., Khan, M. A. H., Shallcross, D. E., Schwantes, R. H., Williams, J., and Archibald, A. T.: Improvements to the representation of BVOC chemistry-climate interactions in UKCA (v11.5) with the CRI-Strat 2 mechanism: incorporation and evaluation, *Geosci. Model Dev.*, 14, n. 8, 5239–5268, <https://doi.org/10.5194/gmd-14-5239-2021>, 2021.
- 432)** Ramsay, R., Di Marco, C. F., Heal, M. R., Sörgel, M., Artaxo, P., Andreae, M. O., and Nemitz, E.: Measurement and modeling of the dynamics of NH<sub>3</sub> surface-atmosphere exchange over the Amazonian rainforest, *Biogeosciences*, 18, n 9, 2809–2825, <https://doi.org/10.5194/bg-18-2809-2021>, 2021.
- 433)** Khan, M Anwar H., Thomas J. Bannan, Rayne Holland, Dudley E Shallcross, Alex T. Archibald, Emily Matthews, Asan Back, James Allan, Hugh Coe, Paulo Artaxo, and Carl J Percival. Impacts of hydroperoxymethyl thioformate on the global marine sulfur budget. *ACS Earth and Space Chemistry – Mario Molina Memorial Special Issue*, Vol. 5, 10, 2577–2586, doi: 10.1021/acsearthspacechem.1c00218, <https://doi.org/10.1021/acsearthspacechem.1c00218>, 2021.
- 434)** Artaxo, P., Saúde planetária, COVID-19 e mudanças climáticas, In: *Novos temas em emergência climática: para os ensinos fundamental e médio*. Ed. Organizadores: Edson Grandisoli; Pedro Henrique Campello Torres; Pedro Roberto Jacobi; Renata Ferraz de Toledo; Sonia Maria Viggiani Coutinho e Kauê Lopes dos Santos. ISBN 978-65-88109-08-3, DOI 10.11606/978-65-88109-08-3, São Paulo: IEE-USP, 2021pag. 13-19, 2021.
- 435)** Caravan, R. L., T.J. Bannan, F.A.F. Winiberg, M.A.H. Khan, A. Rousso, A.W. Jasper, S.J. Klippenstein, S.D. Worrall, A. Bacak, P. Artaxo, J. Brito, M. Priestly, S. Sander, J.D. Allan, H. Coe, Y. Ju, D.L. Osborn, N. Hansen, D.E. Shallcross, C.A. Taatjes & C.J. Percival. Oligomerization of Criegee Intermediates contributes to secondary organic aerosol formation in the Amazon. Submitted to *Science*, Manuscript Number: abh3819, 5 March 2021.
- 436)** Szopa, S., V. Naik, B. Adhikary, P. Artaxo, T. Berntsen, W.D. Collins, S. Fuzzi, L. Gallardo, A. Kiendler-Scharr, Z. Klimont, H. Liao, N. Unger, and P. Zanis, 2021: Short-Lived Climate Forcers. In *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA, pp. 817–922, doi:10.1017/9781009157896.008.
- 
-

- 437)** Nobre, C.A., A. Encalada, E. Anderson, F.H. Roca Alcazar, M. Bustamante, C. Mena, M. Peña-Claros, G. Poveda, J.P. Rodriguez, S. Saleska, S. Trumbore, A.L. Val, L. Villa Nova, R. Abramovay, A. Alencar, A.C.R. Alzza, D. Armenteras, P. Artaxo, S. Athayde, H.T. Barretto Filho, J. Barlow, E. Berenguer, F. Bortolotto, F.A. Costa, M.H. Costa, N. Cuvi, P.M. Fearnside, J. Ferreira, B.M. Flores, S. Frieri, L.V. Gatti, J.M. Guayasamin, S. Hecht, M. Hirota, C. Hoorn, C. Josse, D.M. Lapola, C. Larrea, D.M. Larrea-Alcazar, Z. Lehm Ardaya, Y. Malhi, J.A. Marengo, M.R. Moraes, P. Moutinho, M.R. Murmis, E.G. Neves, B. Paez, L. Painter, A. Ramos, M.C. Rosero-Peña, M. Schmink, P. Sist, H. ter Steege, P. Val, H. van der Voort, M. Varese, G. Zapata et al. (eds.) Science Panel for the Amazon (2021). Executive Summary of the Amazon Assessment Report 2021. United Nations Sustainable Development Solutions Network, New York, USA. DOI: 10.55161/RWSX6527, ISBN 9781734808001. 48 pages.
- 438)** Artaxo P, Almeida-Val VMF, Bilbao B, Brando P, Bustamante M, Coe MT, Correa SB, Cuesta F, Costa MH, Miralles–Wilhelm F, Salinas N, Silvério DV, Val AL. 2021. Chapter 23: Impacts of deforestation and climate change on biodiversity, ecological processes, and environmental adaptation. In: Nobre C, Encalada A, Anderson E, Roca Alcazar FH, Bustamante M, Mena C, Peña-Claros M, Poveda G, Rodriguez JP, Saleska S, Trumbore S, Val AL, Villa Nova L, Abramovay R, Alencar A, Rodríguez Alzza C, Armenteras D, Artaxo P, Athayde S, Barretto Filho HT, Barlow J, Berenguer E, Bortolotto F, Costa FA, Costa MH, Cuvi N, Fearnside PM, Ferreira J, Flores BM, Frieri S, Gatti LV, Guayasamin JM, Hecht S, Hirota M, Hoorn C, Josse C, Lapola DM, Larrea C, Larrea-Alcazar DM, Lehm Ardaya Z, Malhi Y, Marengo JA, Melack J, Moraes R M, Moutinho P, Murmis MR, Neves EG, Paez B, Painter L, Ramos A, Rosero-Peña MC, Schmink M, Sist P, ter Steege H, Val P, van der Voort H, Varese M, Zapata-Ríos G (Eds). Amazon Assessment Report 2021. United Nations Sustainable Development Solutions Network, New York, USA. Available from <https://www.theamazonwewant.org/spa-reports/>. ISBN 9781734808001. DOI: 10.55161/VKMN1905.
- 439)** Martins Pereira, Guilherme; Nogueira, Thiago; Kamigauti, Leonardo Yoshiaki; dos Santos, Djacinto; Nascimento, Emerson; Martins, José; Vicente, Ana; Artaxo, Paulo; Alves, Celia; Vasconcellos, Perola; Andrade, Maria de Fátima. Particulate matter fingerprints in biofuel impacted tunnels in South America’s largest metropolitan area. Submitted to Environmental Science & Technology. Manuscript ID: es-2021-08074w.
- 440)** Artaxo, P, Hansson, H-C, Andreae, MO, Bäck, J, Alves, EG, Barbosa, HMJ, Bender, F, Bourtsoukidis, E, Carbone, S, Chi, J, Decesari, S, Després, VR, Ditas, F, Ezhova, E, Fuzzi, S, Hasselquist, NJ, Heintzenberg, J, Holanda, BA, Guenther, A, Hakola, H, Heikkinen, L, Kerminen, V-M, Kontkanen, J, Krejci, R, Kulmala, M, Lavric, JV, de Leeuw, G, Lehtipalo, K, Machado, LAT, McFiggans, G, Franco, MAM, Meller, BB, Morais, FG, Mohr, C, Morgan, W, Nilsson, MB, Peichl, M, Petäjä, T, Praß, M, Pöhlker, C, Pöhlker, ML, Pöschl, U, Von Randow, C, Riipinen, I, Rinne, J, Rizzo, LV, Rosenfeld, D, Dias, MAFS, Sogacheva, L, Stier, P, Swietlicki, E, Sörgel, M, Tunved, P, Virkkula, A, Wang, J, Weber, B, Yáñez-Serrano, AM, Zieger, P, Mikhailov, E, Smith, JN and Kesselmeier, J. 2022. Tropical and Boreal Forest – Atmosphere Interactions: A Review. *Tellus B: Chemical and Physical Meteorology*, 74(2022), 24–163. DOI: <https://doi.org/10.16993/tellusb.34> . 2022.
- 441)** Bianchi, Federico; Victoria Sinclair; Diego Aliaga; Qiaozhi Zha; Wiebke Scholz; Cheng Wu; Liine Heikkinen; Robin Modini; Eva Partoll; Fernando Velarde; Isabel Moreno; Yvette Gramlich; Wei Huang; Marku Leiminger; Joonas Enroth; Otso Perakyla; Angela Marinoni;

- Xuemeng Chen; Luis Blacutt; Ricardo Forno; Rene Gutierrez; Patrick Ginot; Gaelle Uzu; Maria Cristina Facchini; Stefania Gilardoni; Martin Gysek; Runlong Cai; Tuukka Petaja; Matteo Rinaldi; Harald Saathoff; Karine Sellegri; Doug Worsnop; Paulo Artaxo; Armin Hansel; Markku Kulmala; Alfred Wiedensohler; Paolo Laj; Radovan Krejci; Samara Carbone; Marcos Andrade; Claudia Mohr. The SALTENA experiment: Comprehensive observations towards a better understanding of air quality and aerosol particles in the South American Andes. *BAMS – The Bulletin of the American Meteorological Society.*, Vol. 103, Issue 2, Pages E212-E229, <https://doi.org/10.1175/BAMS-D-20-0187.1>, 2022.
- 442)** Ponczek, M., Marco A.M. Franco, Samara Carbone, Luciana V. Rizzo, Djacinto Santos Junior, Fernando G. Morais, Alejandro Duarte, Henrique M. J. Barbosa, Paulo Artaxo. Linking chemical composition and optical properties of biomass burning aerosols in Amazonia. *Environmental Science: Atmospheres*, Royal Society of Chemistry, Issue 1, 2022. <https://doi.org/10.1039/D1EA00055A>, <https://pubs.rsc.org/en/content/articlepdf/2022/ea/d1ea00055a>, 2022.
- 443)** Silva, Luís F. O., Ismael L. Schneider, Paulo Artaxo, Yuleisy Núñez-Blanco, Diana Pinto, Érico M. M. Flores, Leandro Gómez-Plata, Omar Ramírez, Guilherme L. Dotto. Particulate matter geochemistry of a highly industrialized region in the Caribbean: Basis for future toxicological studies. *Geosciences Frontiers*, Vol. 13, Issue 1, 101115, <https://doi.org/10.1016/j.gsf.2020.11.012>. 2022.
- 444)** Blanco-Donado, Erika P., Ismael L. Schneider, Paulo Artaxo, Jesus Lozano-Osorio, Luana Portz, Marcos L. S. Oliveira. Source identification and global implications of black carbon. *Geosciences Frontiers*, Vol. 13, Issue 1, Page 101149, <https://doi.org/10.1016/j.gsf.2021.101149>, 2022.
- 445)** Duarte, Ana L., Ismael L. Schneider, Paulo Artaxo, Marcos L.S. Oliveira. Spatiotemporal assessment of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and ozone in a Caribbean urban coastal city. *Geoscience Frontiers*, Vol. 13, 1, pg. 101168, <https://doi.org/10.1016/j.gsf.2021.101168>. 2022.
- 446)** Palácios, R. da S., Artaxo, P., Cirino, G. G., Nakale, V., Morais, F. G., Rothmund, L. D., Biudes, M. S., Machado, N. G., Curado, L. F. A., Marques, J. B., & Nogueira, J. de S. (2021). Long-term measurements of aerosol optical properties and radiative forcing (2011-2017) over Central Amazonia. *Atmósfera*, 35 (1), 143–163. <https://doi.org/10.20937/ATM.52892> , 2022.
- 447)** Palácios, R., Romera, K., Rizzo, L., Cirino, G., Adams, D., Imbiriba, B., Nassarden, D., Rothmund, L., Siqueira, A., Basso, J., Rodrigues, T., Curado, L., Weber, A., Nogueira, J., Morais, F., Artaxo, P., Optical properties and spectral dependence of aerosol light absorption over the Brazilian Pantanal, *Atmospheric Pollution Research*, 13 (Issue 5) article number 101413, doi: <https://doi.org/10.1016/j.apr.2022.101413>, 2022.
- 448)** Palácios, R.; Nassarden, D.C.S.; Franco, M.A.; Morais, F.G.; Machado, L.A.T.; Rizzo, L.V.; Cirino, G.; Pereira, A.G.C.; Ribeiro, P.d.S.; Barros, L.R.C.; Biudes, M. S., Leone F. A. Curado, Thiago R. Rodrigues, Jorge Menezes, Eduardo Landulfo and Paulo Artaxo. Evaluation of MODIS Dark Target AOD Product with 3 and 10 km Resolution in Amazonia. *Atmosphere*
- 
-

---

2022, 13, 1742. <https://doi.org/10.3390/atmos13111742> . 2022.

- 449)** Langford, Ben, E. House, A. Valach, C. N. Hewitt, P. Artaxo, M. P. Barkley, J. Brito, E. Carnell, B. Davison, A. R. MacKenzie, E. A. Marais, M. J. Newland, A. R. Rickard, M. D. Shaw, A. M. Yáñez-Serrano, and E. Nemitz. Seasonality of isoprene emissions and oxidation products above the remote Amazon. *Environmental Science: Atmospheres*, Vol. 2, Issue 2, 230-240, DOI: 10.1039/d1ea00057h. <https://pubs.rsc.org/en/content/articlehtml/2022/ea/d1ea00057h> , 2022.
- 450)** Zaveri, Rahul A., Jian Wang, Jiwen Fan, Yuwei Zhang, John E. Shilling, Alla Zelenyuk, Fan Mei, Rob Newsom, Mikhail Pekour, Jason Tomlinson, Jennifer M. Comstock, Manish Shrivastava, Edward Fortner, Luiz A. T. Machado, Paulo Artaxo, and Scot T. Martin, Rapid growth of anthropogenic organic nanoparticles greatly alters cloud lifecycle in the Amazon rainforest. *Science Advances*, 8, number 2, eabj0329, <https://www.science.org/doi/epdf/10.1126/sciadv.abj0329>, 2022.
- 451)** Cecchini, M. A., de Bruine, M., Vilà-Guerau de Arellano, J., and Artaxo, P.: Quantifying vertical wind shear effects in shallow cumulus clouds over Amazonia, *Atmos. Chem. Phys. Discuss.* [preprint], <https://doi.org/10.5194/acp-2021-1060>, in review, 2022.
- 452)** Franco, M. A., Ditas, F., Kremper, L. A., Machado, L. A. T., Andreae, M. O., Araújo, A., Barbosa, H. M. J., de Brito, J. F., Carbone, S., Holanda, B. A., Morais, F. G., Nascimento, J. P., Pöhlker, M. L., Rizzo, L. V., Sá, M., Saturno, J., Walter, D., Wolff, S., Pöschl, U., Artaxo, P., and Pöhlker, C.: Occurrence and growth of sub-50 nm aerosol particles in the Amazonian boundary layer, *Atmos. Chem. Phys.*, 22, (5) 3469–3492, <https://doi.org/10.5194/acp-22-3469-2022>, 2022.
- 453)** Tsiligiannis, Epameinondas, Rongrong Wu, Ben H. Lee, Christian Mark Salvador, Michael Priestley, Philip T. M. Carlsson, Sungah Kang, Anna Novelli, Luc Vereecken, Hendrik Fuchs, Alfred W. Mayhew, Jacqueline F. Hamilton, Peter M. Edwards, Juliane L. Fry, Bellamy Brownwood, Steven S. Brown, Robert J. Wild, Thomas J. Bannan, Hugh Coe, James Allan, Jason D. Surratt, Asan Bacak, Paul Artaxo, Carl Percival, Song Guo, Min Hu, Tao Wang, Thomas F. Mentel, Joel A. Thornton, and Mattias Hallquist. A four carbon organonitrate as a significant product of secondary isoprene chemistry. *Geophysical Research Letters*, 49, e2021GL097366. <https://doi.org/10.1029/2021GL097366>. 2022.
- 454)** Efraim, A., Lauer, O., Rosenfeld, D., Braga, R. C., Franco, M. A., Kremper, L. A., Artaxo, P., C. Pöhlker, M. O. Andreae, and M. L. Pöhlker. Satellite-based detection of secondary droplet activation in convective clouds. *Journal of Geophysical Research: Atmospheres*, 127, series 12, e2022JD036519. <https://doi.org/10.1029/2022JD036519>. 2022.
- 455)** Janaina Nascimento, Henrique M J Barbosa, Alessandro Banducci, Luciana Rizzo, Angel Ludovino, Bruno Meller, Helber Barros Gomes, André Cezar, Marco Franco, Milena Ponczek, Stefan Wolff, Megan M. Bela, Paulo Artaxo. Urban pollution impacts ozone and aerosol production in the Amazon rainforest far from their source. *Environmental Science and Technology*, in press, June 2022.
- 
-

- 456)** Nascimento JP, Barbosa HMJ, Banducci AL, Rizzo LV, Vara-Vela AL, Meller BB, Gomes H, Cezar A, Franco MA, Ponczek M, Wolff S, Bela MM, Artaxo P. Major Regional-Scale Production of O<sub>3</sub> and Secondary Organic Aerosol in Remote Amazon Regions from the Dynamics and Photochemistry of Urban and Forest Emissions. *Environmental Science and Technology* 56 (14) 9924-9935, <https://doi.org/10.1021/acs.est.2c01358>, 2022.
- 457)** Liu, Yufan, Su, Hang, Wang, S., Wei, C., Tao, W., Pöhlker, M. L., Pöhlker, C., Holanda, B. A., Krüger, O. O., Hoffmann, T., Wendisch, M., Artaxo, P., Pöschl, U., Andreae, M. O., and Cheng, Y.: Strong particle production and condensational growth in the upper troposphere sustained by biogenic VOCs from the canopy of the Amazon Basin, *ACPD - Atmos. Chem. Phys. Discuss.*, <https://doi.org/10.5194/acp-2022-530>, 2022.
- 458)** Flávio A. F. D'Oliveira, Julia C. P. Cohen, Dominick V. Spracklen, Adan S. S. Medeiros, Glauber G. Cirino, Paulo Artaxo, Cleo Q. Dias-Júnior. Simulation of the effects of biomass burning in a mesoscale convective system in the central amazon. *Atmospheric Research*, Volume 278, 106345, <https://doi.org/10.1016/j.atmosres.2022.106345> <https://www.sciencedirect.com/science/article/pii/S0169809522003313>, 2022.
- 459)** Artaxo P, Hansson HC, Machado LAT, Rizzo LV (2022) Tropical forests are crucial in regulating the climate on Earth. *PLOS Climate* 1 (8) : e0000054. <https://doi.org/10.1371/journal.pclm.0000054>, 2022.
- 460)** Morais, F.G.; Franco, M.A.; Palácios, R.; Machado, L.A.T.; Rizzo, L.V.; Barbosa, H.M.J.; Jorge, F.; Schafer, J.S.; Holben, B.N.; Landulfo, E.; et al. Relationship between Land Use and Spatial Variability of Atmospheric Brown Carbon and Black Carbon Aerosols in Amazonia. *Atmosphere*, Vol. 13 (8), 1328. <https://doi.org/10.3390/atmos13081328>, 2022.
- 461)** Wiebke Scholz, Jiali Shen, Diego Aliaga, Cheng Wu, Samara Carbone, Isabel Moreno, Qiaozhi Zha, Wei Huang, Liine Heikkinen, Jean Luc Jaffrezo, Gaelle Uzu, Eva Partoll, Markus Leiminger, Fernando Velarde, Paolo Laj, Patrick Ginot, Paulo Artaxo, Alfred Wiedensohler, Markku Kulmala, Claudia Mohr, Marcos Andrade, Victoria Sinclair, Federico Bianchi, and Armin Hansel. Measurement Report: Long-range transport and fate of DMS-oxidation products in the free troposphere derived from observations at the high-altitude research station Chacaltaya (5240 m.a.s.l.) in the Bolivian Andes. *Atmospheric Chemistry and Physics Discussions*, <https://doi.org/10.5194/egusphere-2022-887>.
- 462)** Oliver Lauer, Leslie A. Kremper, Daniel Rosenfeld, Marco A. Franco, Meinrat O. Andreae, Paulo Artaxo, Ramon Campos Braga, Alessandro C. de Araújo, Florian Ditas, Avichay Efraim, Barbara Ervens, Bruna A. Holanda, Ovid O. Krüger, Luiz A. T. Machado, Lianet Hernández Pardo, Ulrich Pöschl, Guy Pulik, Youtong Zheng, Yannian Zhu, Christopher Pöhlker, and Mira L. Pöhlker. Biomass burning smoke changes the microphysics of Amazonian convective clouds. Submitted for publication in *Atmospheric Chemistry and Physics*, Feb. 2022.
- 463)** Guilherme M. Pereira, Thiago Nogueira, Leonardo Y. Kamigauti, Djacinto Monteiro dos Santos, Emerson Queiroz Mota do Nascimento, José Vinicius Martins, Ana Vicente, Paulo Artaxo, Célia Alves, Pérola de Castro Vasconcellos, Maria de Fátima Andrade. Particulate matter fingerprints in biofuel impacted tunnels in South America's largest metropolitan
- 
-

---

area. *Science of the Total Environment*, Vol. 856, Pages 159006, <https://doi.org/10.1016/j.scitotenv.2022.159006>, 2022.

- 464)** Schultz, Martin G; Schröder, Sabine; Lyapina, Olga; Cooper, Owen R; Galbally, Ian; Petropavlovskikh, Irina; von Schneidemesser, Erika; Tanimoto, Hiroshi; Elshorbany, Yasin; Naja, Manish; Seguel, Rodrigo J; Dauert, Ute; Eckhardt, Paul; Feigenspan, Stefan; Fiebig, Markus; Hjellbrekke, Anne-Gunn; Hong, You-Deog; Kjeld, Peter Christian; Koide, Hiroshi; Lear, Gary; Tarasick, David; Ueno, Mikio; Wallasch, Markus; Baumgardner, Darrel; Chuang, Ming-Tung; Gillett, Robert; Lee, Meehye; Molloy, Suzie; Moolla, Raeesa; Wang, Tao; Sharps, Katrina; Adame, Jose A; Ancellet, Gerard; Apadula, Francesco; Artaxo, Paulo; Barlasina, Maria E; Bogucka, Magdalena; Bonasoni, Paolo; Chang, Limseok; Colomb, Aurelie; Cuevas-Agulló, Emilio; Cupeiro, Manuel; Degorska, Anna; Ding, Aijun; Fröhlich, Marina; Frolova, Marina; Gadhavi, Harish; Gheusi, Francois; Gilge, Stefan; Gonzalez, Margarita Y; Gros, Valérie; Hamad, Samera. Tropospheric Ozone Assessment Report, links to Global surface ozone datasets. doi: 10.1594/PANGAEA.876108.
- 465)** Adriano D. Andricopulo, Marco Antonio Zago, Paulo Artaxo, Leonardo Luiz Gomes Ferreira, Marilia Valli et al., FAPESP 60 anos - A ciência no desenvolvimento nacional. Livro publicado pela Cubo Multimídia Ltda Me. ISBN 978-65-86819-28-1, 2022.
- 466)** Artaxo, P., M. Bustamante, D. M. Lapola, P. L. Silva Dias, G. M. di Giulio. Mudanças climáticas globais: seus impactos e estratégias de mitigação e adaptação. Capítulo 2 em: FAPESP 60 anos: A ciência no desenvolvimento nacional. Editado por Adriano D. Andricopulo, Marco A. Zago, Luiz Eugênio Melo, Hernan Chaimovich, Paulo Artaxo, Carlos A. Joly, Bernadette D. G. de Melo Franco, Claudia M. B. Medeiros, Sergio Adorno. 2022.
- 467)** Qiaozhi Zha, Diego Aliaga, Radovan Krejci, Victoria Sinclair, Cheng Wu, Wiebke Scholz, Liine Heikkinen, Eva Partoll, Yvette Gramlich, Wei Huang, Markus Leiminger, Joonas Enroth, Otso Peräkylä, Runlong Cai, Xuemeng Chen, Alkuin Maximilian Koenig, Fernando Velarde, Isabel Moreno, Tuukka Petäjä, Paulo Artaxo, Paolo Laj, Armin Hansel, Samara Carbone, Markku Kulmala, Marcos Andrade, Douglas Worsnop, Claudia Mohr, Federico Bianchi. Oxidized organic molecules in the tropical free troposphere over Amazonia. Submitted to *Nature Geoscience*, reference number: NGS-2022-06-01208-T. June 2022.
- 468)** Carl Percival, Rebecca Caravan, Thomas Bannan, Frank Winiberg, M. Anwar Khan, Aric Russo, Ahren Jasper, Stephen Worrall, Asan Bacak, Paulo Artaxo, Joel Brito, James Allan, Hugh Coe, Yiguang Ju, David Osborn, Nils Hansen, Steven Klippenstein, Dudley Shallcross, Craig Taatjes. Tropospheric Observation of Criegee Intermediate Oligomerization Reactions. Submitted to *Nature*, Manuscript 2021-08-13642A. March 2022.
- 469)** Victoria A. Sinclair, Paulo Artaxo, et al., Oxidized organic molecules in the tropical free troposphere over Amazonia. Submitted to *Sciences*, May 15, 2022.
- 470)** Franklin et al. Chemical Signatures of Seasonally Unique Anthropogenic Influences on Organic Aerosol Composition in the Central Amazon. Submitted to *PNAS*, 8 de Setembro de 2022. Tracking #: 2022-14841.
- 471)** Wang, X., Wang, Q., Prass, M., Pöhlker, C., Moran-Zuloaga, D., Artaxo, P., Gu, J., Yang, N., Yang, X., Tao, J., Hong, J., Ma, N., Cheng, Y., Su, H., and Andreae, M. O.: The export of
-

African mineral dust across the Atlantic and its impact over the Amazon Basin, Atmos. Chem. Phys. Discuss. <https://doi.org/10.5194/acp-2022-683> , in review, 2022., 2022.