Supplementary Table 1 - List of studies, ordered by alphabetical first author surname, retrieved in our systematic review of the literature on 35-years of *in situ* aerosols-PBAPs research in Brazil (from 1986 until 31st December 2021).

Study Number	Authors	Journal	Year	Title
1	Adachi et al., 2020	Atmospheric Chemistry and Physics	2020	Mixing states of Amazon basin aerosol particles transported over long distances using transmission electron microscopy
2	Ahlm et al., 2009	Atmospheric Chemistry and Physics	2009	Aerosol number fluxes over the Amazon rain forest during the wet season
3	Ahlm et al., 2010a	Atmospheric Chemistry and Physics	2010	A comparison of dry and wet season aerosol number fluxes over the Amazon rain forest
4	Ahlm et al., 2010b	Atmospheric Chemistry and Physics	2010	Emission and dry deposition of accumulation mode particles in the Amazon Basin
5	Almeida et al., 2014	Atmospheric Chemistry and Physics	2014	Measured and modelled cloud condensation nuclei (CCN) concentration in São Paulo, Brazil: the importance of aerosol size-resolved chemical composition on CCN concentration prediction
6	Alves et al., 2011	Ecotoxicology and Environmental Safety	2011	Genotoxicity and composition of particulate matter from biomass burning in the eastern Brazilian Amazon region
7	Alves et al., 2014	Environmental Research	2014	Genetic damage of organic matter in the Brazilian Amazon: a comparative study between intense and moderate biomass burning
8	Alves et al., 2015	Atmospheric Environment	2015	Biomass burning in the Amazon region: aerosol source apportionment and associated health risk assessment
9	Alves et al., 2017	Scientific Reports	2017	Biomass burning in the Amazon region causes DNA damage and cell death in human lung cells
10	Alves et al., 2018	Brazilian Journal of Botany	2018	Airborne palynomorphs on Trindade Island, South Atlantic Ocean, Brazil
11	Andreae et al., 1988	Journal of Geophysical Research	1988	Biomass-burning emissions and associated haze layers over Amazonia
12	Andreae et al., 2001	Geophysical Research Letters	2001	Transport of biomass burning smoke to the upper troposphere by deep convection in the equatorial region
13	Andreae et al., 2002	Journal of Geophysical Research	2002	Biogeochemical cycling of carbon, water, energy, trace gases, and aerosols in Amazonia: the LBA-EUSTACH experiments
14	Andreae et al., 2004	Science	2004	Smoking rain clouds over the Amazon

15	Andreae et al., 2012	Atmospheric Chemistry and Physics	2012	Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and dry seasons
16	Andreae et al., 2018	Atmospheric Chemistry and Physics	2018	Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin
17	Arana & Artaxo, 2014	Química Nova	2014	Composição elementar do aerossol atmosférico na região central da Bacia Amazônica
18	Arana et al., 2014	X-Ray Spectrometry	2014	Optimized energy dispersive X-ray fluorescence analysis of atmospheric aerosols collected at pristine and perturbed Amazon Basin sites
19	Araujo et al., 2019	Scientific Reports	2019	Survival and ice nucleation activity of *Pseudomonas syringae* strains exposed to simulated high-altitude atmospheric conditions
20	Artaxo & Hansson, 1995	Atmospheric Environment	1995	Size distribution of biogenic aerosol particles from the Amazon Basin
21	Artaxo & Orsini, 1987	Nuclear Instruments and Methods in Physics Research B	1987	PIXE and receptor models applied to remote aerosol source apportionment in Brazil
22	Artaxo et al., 1988	Journal of Geophysical Research	1988	Composition and Sources of Aerosols From the Amazon Basin
23	Artaxo et al., 1990	Journal of Geophysical Research	1990	Aerosol characteristics and sources for the Amazon Basin during the wet season
24	Artaxo et al., 1992	Nuclear Instruments and Methods in Physics Research B	1992	A new technique to measure trace elements in individual aerosol particles through scanning proton microprobe
25	Artaxo et al., 1993a	Nuclear Instruments and Methods in Physics Research B	1993	Elemental composition of aerosol particles from two atmospheric monitoring stations in the Amazon Basin
26	Artaxo et al., 1993b	Nuclear Instruments and Methods in Physics Research B	1993	Nuclear microprobe analysis and source apportionment of individual atmospheric aerosol particles
27	Artaxo et al., 1994	Journal of Geophysical Research	1994	Fine mode aerosol composition at three long-term atmospheric monitoring sites in the Amazon Basin
28	Artaxo et al., 1998	Journal of Geophysical Research	1998	Large-scale aerosol source apportionment in Amazonia
29	Artaxo et al., 1999	Nuclear Instruments and Methods in Physics Research B	1999	Analysis of atmospheric aerosols by PIXE: the importance of real time and complementary measurements
30	Artaxo et al., 2000	Atmospheric Environment	2000	Large scale mercury and trace element measurements in the Amazon basin
31	Artaxo et al., 2002	Journal of Geophysical Research	2002	Physical and chemical properties of aerosols in the wet and dry seasons in Rondônia, Amazonia

32	Artaxo et al., 2013	Faraday Discussions	2013	Atmospheric aerosols in Amazonia and land use change: from natural biogenic to biomass burning conditions
33	Backman et al., 2012	Atmospheric Chemistry and Physics	2012	On the diurnal cycle of urban aerosols, black carbon and the occurrence of new particle formation events in springtime São Paulo, Brazil
34	Barreiros et al., 2015	Mycoses	2015	Effect of the implosion and demolition of a hospital building on the concentration of fungi in the air
35	Bateman et al., 2015	Nature Geoscience	2015	Sub-micrometre particulate matter is primarily in liquid form over Amazon rainforest
36	Bateman et al., 2017	Atmospheric Chemistry and Physics	2017	Anthropogenic influences on the physical state of submicron particulate matter over a tropical forest
37	Ben-Ami et al., 2010	Atmospheric Chemistry and Physics	2010	Transport of North African dust from the Bodélé depression to the Amazon Basin: a case study
38	Bernardi & Nascimento, 2005	Arquivos do Instituto Biológico	2005	Airborne fungi at Laranjal Beach, Pelotas, Rio Grande do Sul, Brazil
39	Bezerra et al., 2014	Revista da Sociedade Brasileira de Medicina Tropical	2014	Diversity and dynamics of airborne fungi in São Luis, State of Maranhão, Brazil
40	Blazsó et al., 2003	Journal of Analytical and Applied Pyrolysis	2003	Study of tropical organic aerosol by thermally assisted alkylation-gas chromatography mass spectrometry
41	Braga et al., 2017a	Atmospheric Chemistry and Physics	2017	Comparing parameterized versus measured microphysical properties of tropical convective cloud bases during the ACRIDICON–CHUVA campaign
42	Braga et al., 2017b	Atmospheric Chemistry and Physics	2017	Further evidence for CCN aerosol concentrations determining the height of warm rain and ice initiation in convective clouds over the Amazon basin
43	Brickus et al.,1998	Indoor and Built Environment	1998	Occurrence of airborne bacteria and fungi in bayside offices in Rio de Janeiro, Brazil
44	Brito et al., 2014	Atmospheric Chemistry and Physics	2014	Ground-based aerosol characterization during the South American Biomass Burning Analysis (SAMBBA) field experiment
45	Brito et al., 2018	Scientific Reports	2018	Disentangling vehicular emission impact on urban air pollution using ethanol as a tracer
46	Browell et al., 1988	Journal of Geophysical Research	1988	Tropospheric ozone and aerosol distributions across the Amazon Basin
47	Cançado et al., 2006	Environmental Health Perspectives	2006	The impact of sugar cane burning emissions on the respiratory system of children and elderly

48	Castanho et al., 2001	Atmospheric Environment	2001	Wintertime and summertime São Paulo aerosol source apportionment study
49	Cecchini et al., 2014	Atmospheric Research	2014	Droplet size distributions as a function of rainy system type and cloud condensation nuclei concentrations
50	Cecchini et al., 2016	Atmospheric Chemistry and Physics	2016	Impacts of the Manaus pollution plume on the microphysical properties of Amazonian warm-phase clouds in the wet season
51	Cecchini et al., 2017a	Atmospheric Chemistry and Physics	2017	Illustration of microphysical processes in Amazonian deep convective clouds in the gamma phase space: introduction and potential applications
52	Cecchini et al., 2017b	Atmospheric Chemistry and Physics	2017	Sensitivities of Amazonian clouds to aerosols and updraft speed
53	Chand et al., 2006	Atmospheric Chemistry and Physics	2006	Optical and physical properties of aerosols in the boundary layer and free troposphere over the Amazon Basin during the biomass burning season
54	Chen et al., 2009	Geophysical Research Letters	2009	Mass spectral characterization of submicron biogenic organic particles in the Amazon Basin
55	Chen et al., 2015	Atmospheric Chemistry and Physics	2015	Submicron particle mass concentrations and sources in the Amazonian wet season (AMAZE-08)
56	China et al., 2016	Environmental Science and Technology	2016	Rupturing of biological spores as a source of secondary particles in Amazonia
57	China et al., 2018	Nature Communications	2018	Fungal spores as a source of sodium salt particles in the Amazon basin
58	Cirino et al., 2018	Atmospheric Environment	2018	Observations of Manaus urban plume evolution and interaction with biogenic emissions in GoAmazon 2014/5
59	Claeys et al., 2004	Science	2004	Formation of secondary organic aerosols through photooxidation of isoprene
60	Claeys et al., 2010	Atmospheric Chemistry and Physics	2010	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
61	Croce et al., 2003	Revista Brasileira de Alergia e Imunopatologia	2003	Study of fungi in the air of Botucatu, Brazil and their correlation with sensitization in patients with respiratory allergic diseases

62	Darbyshire et al., 2019	Atmospheric Chemistry and Physics	2019	The vertical distribution of biomass burning pollution over tropical South America from aircraft in situ measurements during SAMBBA
63	Decesari et al., 2006	Atmospheric Chemistry and Physics	2006	Characterization of the organic composition of aerosols from Rondônia, Brazil, during the LBA-SMOCC 2002 experiment and its representation through model compounds
64	Degobbi et al., 2011	Atmospheric Environment	2011	Correlation of fungi and endotoxin with $PM_{2.5}$ and meteorological parameters in atmosphere of São Paulo, Brazil
65	Ebben et al., 2011	Atmospheric Chemistry and Physics	2011	Contrasting organic aerosol particles from boreal and tropical forests during HUMPPA-COPEC-2010 and AMAZE-08 using coherent vibrational spectroscopy
66	Ebben et al., 2012	Journal of Physical Chemistry	2012	Organic constituents on the surfaces of aerosol particles from Southern Finland, Amazonia, and California studied by vibrational sum frequency generation
67	Echalar et al., 1995	Geophysical Research Letters	1995	Aerosol emissions by tropical forest and savanna biomass burning: characteristic trace elements and fluxes
68	Echalar et al., 1998	Geophysical Research Letters	1998	Long-term monitoring of atmospheric aerosols in the Amazon Basin: source identification and apportionment
69	Eck et al., 2003	Geophysical Research Letters	2003	High aerosol optical depth biomass burning events: a comparison of optical properties for different source regions
70	Ekström et al., 2010	Biogeosciences	2010	A possible role of ground-based microorganisms on cloud formation in the atmosphere
71	Emygdio et al., 2018a	Science of the Total Environment	2018	Biomarkers as indicators of fungal biomass in the atmosphere of São Paulo, Brazil
72	Emygdio et al., 2018b	Journal of Aerosol Science	2018	One year of temporal characterization of fungal spore concentration in São Paulo metropolitan area, Brazil
73	Falkovich et al., 2005	Atmospheric Chemistry and Physics	2005	Low molecular weight organic acids in aerosol particles from Rondônia, Brazil, during the biomass-burning, transition and wet periods
74	Fan et al., 2018	Science	2018	Substantial convection and precipitation enhancements by ultrafine aerosol particles
75	Farmer et al., 2013	Aerosol Science and Technology	2013	Chemically resolved particle fluxes over tropical and temperate forests
76	Folloni et al., 2012	Molecular Ecology Resources	2012	Detection of airborne genetically modified maize pollen by real-time PCR

77	Formenti et al., 2001	Journal of Geophysical Research	2001	Saharan dust in Brazil and Suriname during the Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA) - Cooperative LBA Regional Experiment (CLAIRE) in March 1998
78	Fraund et al., 2017	Atmosphere	2017	Elemental mixing state of aerosol particles collected in Central Amazonia during GoAmazon2014/15
79	Freud et al., 2008	Atmospheric Chemistry and Physics	2008	Robust relations between CCN and the vertical evolution of cloud drop size distribution in deep convective clouds
80	Fröhlich-Nowoisky et al., 2012	Biogeosciences	2012	Biogeography in the air: fungal diversity over land and oceans
81	Fuzzi et al., 2007	Journal of Geophysical Research	2007	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
82	Galvão et al., 2018	Environmental Pollution	2018	Biomass burning particles in the Brazilian Amazon region: mutagenic effects of nitro and oxy-PAHs and assessment of health risks
83	Gerab et al., 1998a	Nuclear Instruments and Methods in Physics Research B	1998	PIXE, PIGE and ion chromatography of aerosol particles from northeast Amazon Basin
84	Gerab et al., 1998b	Nuclear Instruments and Methods in Physics Research B	1998	Scanning proton microprobe applied to analysis of individual aerosol particles from Amazon Basin
85	Gilardoni et al., 2011	Atmospheric Chemistry and Physics	2011	Sources of carbonaceous aerosol in the Amazon basin
86	Glicker et al., 2019	Atmospheric Chemistry and Physics	2019	Chemical composition of ultrafine aerosol particles in central Amazonia during the wet season
87	Godoy et al., 2005	Atmospheric Environment	2005	Aerosol source apportionment around a large coal fired power plant - Thermoelectric Complex Jorge Lacerda, Santa Catarina, Brazil
88	Godoy et al., 2009	Atmospheric Environment	2009	Coarse and fine aerosol source apportionment in Rio de Janeiro, Brazil
89	Gonçalves et al., 2010	International Journal of Biometeorology	2010	Indoor and outdoor atmospheric fungal spores in the São Paulo metropolitan area (Brazil): species and numeric concentrations
90	Gonçalves et al., 2018	Atmospheric Environment	2018	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

91	González et al., 2014	Environmental Science: Processes & Impacts	2014	Primary and secondary organics in the tropical Amazonian rainforest aerosols: chiral analysis of 2-methyltetraols
92	Graham et al., 2002	Journal of Geophysical Research	2002	Water-soluble organic compounds in biomass burning aerosols over Amazonia - 1. Characterization by NMR and GC-MS
93	Graham et al., 2003a	Journal of Geophysical Research	2003	Composition and diurnal variability of the natural Amazonian aerosol
94	Graham et al., 2003b	Journal of Geophysical Research	2003	Organic compounds present in the natural Amazonian aerosol: characterization by gas chromatography–mass spectrometry
95	Gunthe et al., 2009	Atmospheric Chemistry and Physics	2009	Cloud condensation nuclei in pristine tropical rainforest air of Amazonia: size-resolved measurements and modeling of atmospheric aerosol composition and CCN activity
96	Guyon et al., 2003a	Atmospheric Chemistry and Physics	2003	Physical properties and concentration of aerosol particles over the Amazon tropical forest during background and biomass burning conditions
97	Guyon et al., 2003b	Journal of Aerosol Science	2003	Refractive indexof aerosol particles over the Amazon tropical forest during LBA-EUSTACH 1999
98	Guyon et al., 2004	Atmospheric Environment	2004	Sources of optically active aerosol particles over the Amazon forest
99	Guyon et al., 2005	Atmospheric Chemistry and Physics	2005	Airborne measurements of trace gas and aerosol particle emissions from biomass burning in Amazonia
100	Hodgson et al., 2018	Atmospheric Chemistry and Physics	2018	Near-field emission profiling of tropical forest and Cerrado fires in Brazil during SAMBBA 2012
101	Hoffer et al., 2006a	Atmospheric Chemistry and Physics	2006	Diel and seasonal variations in the chemical composition of biomass burning aerosol
102	Hoffer et al., 2006b	Atmospheric Chemistry and Physics	2006	Optical properties of humic-like substances (HULIS) in biomass-burning aerosols
103	Holanda et al., 2020	Atmospheric Chemistry and Physics	2020	Influx of African biomass burning aerosol during the Amazonian dry season through layered transatlantic transport of black carbon-rich smoke
104	Holben et al., 1996	Journal of Geophysical Research	1996	Effect of dry-season biomass burning on Amazon basin aerosol concentrations and optical properties, 1992–1994

105	Huffman et al., 2012	Atmospheric Chemistry and Physics	2012	Size distributions and temporal variations of biological aerosolvparticles in the Amazon rainforest characterized by microscopy and real-time UV-APS fluorescence techniques during AMAZE-08
106	Isaacman-VanWertz et al., 2016	Environmental Science and Technology	2016	Ambient gas-particle partitioning of tracers for biogenic oxidation
107	Jacobson et al., 2012	Environmental Research	2012	Association between fine particulate matter and the peak expiratory flow of school children in the Brazilian subequatorial Amazon: a panel study
108	Jacobson et al., 2014	PLoS ONE	2014	Acute effects of particulate matter and black carbon from seasonal fires on peak expiratory flow of schoolchildren in the Brazilian Amazon
109	Johnson et al., 2016	Atmospheric Chemistry and Physics	2016	Evaluation of biomass burning aerosols in the HadGEM3 climate model with observations from the SAMBBA field campaign
110	Kubátová et al., 2000	Atmospheric Environment	2000	Carbonaceous aerosol characterization in the Amazon basin, Brazil: novel dicarboxylic acids and related compounds
111	Kuhn et al., 2010	Atmospheric Chemistry and Physics	2010	Impact of Manaus City on the Amazon Green Ocean atmosphere: ozone production, precursor sensitivity and aerosol load
112	Lara et al., 2005	Atmospheric Environment	2005	Properties of aerosols from sugar-cane burning emissions in Southeastern Brazil
113	Löbs et al., 2020	Atmospheric Measurement Techniques	2020	Aerosol measurement methods to quantify spore emissions from fungi and cryptogamic covers in the Amazon
114	Longo et al., 1999	Journal of Geophysical Research	1999	Correlation between smoke and tropospheric ozone concentration in Cuiabá´ during Smoke, Clouds, and Radiation-Brazil (SCAR-B)
115	Macchione et al., 1999	Environmental Health Perspectives	1999	Acute effects of inhalable particles on the frog palate mucociliary epithelium
116	Mace et al., 2003	Journal of Geophysical Research	2003	Water-soluble organic nitrogen in Amazon Basin aerosols during the dry (biomass burning) and wet seasons
117	Maenhaut et al., 2002	Nuclear Instruments and Methods in Physics Research B	2002	Two-year study of atmospheric aerosols in Alta Floresta, Brazil: Multielemental composition and source apportionment

118	Mahowald et al., 2005	Global Biogeochemical Cycles	2005	Impacts of biomass burning emissions and land use change on Amazonian atmospheric phosphorus cycling and deposition
119	Martin et al., 2010	Atmospheric Chemistry and Physics	2010	An overview of the Amazonian Aerosol Characterization Experiment 2008 (AMAZE-08)
120	Martinelli et al., 2002	Atmospheric Environment	2002	Stable carbon and nitrogen isotopic composition of bulk aerosol particles in a C4 plant landscape of southeast Brazil
121	Martins et al., 2009	Geophysical Research Letters	2009	Spectral absorption properties of aerosol particles from 350–2500nm
122	Mayol-Bracero et al., 2002	Journal of Geophysical Research	2002	Water-soluble organic compounds in biomass burning aerosols over Amazonia 2. Apportionment of the chemical composition and importance of the polyacidic fraction
123	Mei et al., 2020	Atmospheric Measurement Techniques	2020	Comparison of aircraft measurements during GoAmazon2014/5 and ACRIDICON-CHUVA
124	Menezes et al., 2004a	Jornal Brasileiro de Patologia e Medicina Laboratorial	2004	Airborne fungi causing respiratory allergy in patients from Fortaleza, Ceará, Brazil
125	Menezes et al., 2004b	Revista do Instituto de Medicina Tropical de São Paulo	2004	Airborne fungi isolated from Fortaleza city, State of Ceará, Brazil
126	Mezzari et al., 2002	Revista do Instituto de Medicina Tropical de São Paulo	2002	Airborne fungi in the city of Porto Alegre, Rio Grande do Sul, Brazil
127	Miranda et al., 2017	Environmental Monitoring and Assessment	2017	The relationship between aerosol particles chemical composition and optical properties to identify the biomass burning contribution to fine particles concentration: a case study for São Paulo city, Brazil
128	Mircea et al., 2005	Atmospheric Chemistry and Physics	2005	Importance of the organic aerosol fraction for modeling aerosol hygroscopic growth and activation: a case study in the Amazon Basin
129	Moraes et al., 2010	Jornal de Pediatria	2010	Wheezing in children and adolescents living next to a petrochemical plant in Rio Grande do Norte, Brazil
130	Moran-Zuloaga et al., 2018	Atmospheric Chemistry and Physics	2018	Long-term study on coarse mode aerosols in the Amazon rain forest with the frequent intrusion of Saharan dust plumes
131	Morgan et al., 2020	Atmospheric Chemistry and Physics	2020	Transformation and ageing of biomass burning carbonaceous aerosol over tropical South America from aircraft in situ measurements during SAMBBA

132	Oliveira et al., 1993	Revista de Microbiologia	1993	Airborne fungi isolated from Natal, State of Rio Grande do Norte-Brazil
133	Oliveira et al., 2007	Tellus	2007	The effects of biomass burning aerosols and clouds on the CO_2 flux in Amazonia
134	Oliveira et al., 2012	Environmental Health	2012	Risk assessment of $PM_{2.5}$ to child residents in Brazilian Amazon region with biofuel production
135	Oliveira et al., 2018	Journal of Environmental Protection	2018	Environmental exposure associated with oxidative stress biomarkers in children and adolescents residents in Brazilian Western Amazon
136	Orsini et al., 1986	Atmospheric Environment	1986	Characteristics of fine and coarse particles of natural and urban aerosols of Brazil
137	Palm et al., 2018	Atmospheric Chemistry and Physics	2018	Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia
138	Pauliquevis et al., 2012	Atmospheric Chemistry and Physics	2012	Aerosol and precipitation chemistry measurements in a remote site in Central Amazonia: the role of biogenic contribution
139	Pereira et al., 1996	Journal of Geophysical Research	1996	Airborne measurements of aerosols from burning biomass in Brazil related to the TRACE A experiment
140	Pereira et al., 2013	Revista Eletrônica de Biologia	2013	Anemophilus fungi isolated in the city of Belém, State of Pará - Brazil
141	Pöhlker et al., 2012	Science	2012	Biogenic potassium salt particles as seeds for secondary organic aerosol in the Amazon
142	Pöhlker et al., 2014	Geophysical Research Letters	2014	Efflorescence upon humidification? X-ray microspectroscopic in situ observation of changes in aerosol microstructure and phase state upon hydration
143	Pöhlker et al., 2016a	Atmospheric Chemistry and Physics	2016	Long-term observations of cloud condensation nuclei in the Amazon rain forest – Part 1: Aerosol size distribution, hygroscopicity, and new model parametrizations for CCN prediction
144	Pöhlker et al., 2016b	Atmospheric Chemistry and Physics	2016	Long-term observations of cloud condensation nuclei over the Amazon rain forest – Part 2: Variability and characteristics of biomass burning, long-range transport, and pristine rain forest aerosols
145	Pöschl et al., 2010	Science	2010	Rainforest aerosols as biogenic nuclei of clouds and precipitation in the Amazon

146	Prass et al., 2021	Biogeosciences	2021	Bioaerosols in the Amazon rain forest: Temporal variations and vertical profiles of Eukarya, Bacteria and Archaea
147	Prenni et al., 2009	Nature Geoscience	2009	Relative roles of biogenic emissions and Saharan dust as ice nuclei in the Amazon basin
148	Reddington et al., 2015	Nature Geoscience	2015	Air quality and human health improvements from reductions in deforestation-related fire in Brazil
149	Reddington et al., 2016	Atmospheric Chemistry and Physics	2016	Analysis of particulate emissions from tropical biomass burning using a global aerosol model and long-term surface observations
150	Reid et al., 1998	Journal of Geophysical Research	1998	Physical, chemical, and optical properties of regional hazes dominated by smoke in Brazil
151	Rissler et al., 2004	Atmospheric Chemistry and Physics	2004	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
152	Rissler et al., 2006	Atmospheric Chemistry and Physics	2006	Size distribution and hygroscopic properties of aerosol particles from dry-season biomass burning in Amazonia
153	Rizzo et al., 2010	Atmospheric Environment	2010	Aerosol properties, in-canopy gradients, turbulent fluxes and VOC concentrations at a pristine forest site in Amazonia
154	Rizzo et al., 2011	Atmospheric Chemistry and Physics	2011	Spectral dependence of aerosol light absorption over the Amazon Basin
155	Rizzo et al., 2013	Atmospheric Chemistry and Physics	2013	Long term measurements of aerosol optical properties at a primary forest site in Amazonia
156	Rizzo et al., 2018	Atmospheric Chemistry and Physics	2018	Multi-year statistical and modeling analysis of submicrometer aerosol number size distributions at a rain forest site in Amazonia
157	Rizzolo et al., 2017	Atmospheric Chemistry and Physics	2017	Soluble iron nutrients in Saharan dust over the central Amazon rainforest
158	Roberts et al., 2001	Journal of Geophysical Research	2001	Cloud condensation nuclei in the Amazon Basin: "Marine" conditions over a continent?
159	Roberts et al., 2002	Journal of Geophysical Research	2002	Sensitivity of CCN spectra on chemical and physical properties of aerosol: a case study from the Amazon Basin
160	Sá et al., 2017	Atmospheric Chemistry and Physics	2017	Influence of urban pollution on the production of organic particulate matter from isoprene epoxydiols in central Amazonia
161	Sá et al., 2018	Atmospheric Chemistry and Physics	2018	Urban influence on the concentration and composition of submicron particulate matter in central Amazonia

162	Sá et al., 2019	Atmospheric Chemistry and Physics	2019	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
163	Salvo et al., 2017	Nature Communications	2017	Reduced ultrafine particle levels in São Paulo's atmosphere during shifts from gasoline to ethanol use
164	Santos et al., 2016	Atmospheric Environment	2016	Ambient concentrations and insights on organic and elemental carbon dynamics in São Paulo, Brazil
165	Santos et al., 2021	Atmospheric Chemistry and Physics	2021	Physical and chemical properties of urban aerosols in São Paulo, Brazil: Links between composition and size distribution of submicron particles
166	Saturno et al., 2017	Atmospheric Measurement Techniques	2017	Comparison of different Aethalometer correction schemes and a reference multi-wavelength absorption technique for ambient aerosol data
167	Saturno et al., 2018	Atmospheric Chemistry and Physics	2018	Black and brown carbon over central Amazonia: long-term aerosol measurements at the ATTO site
168	Schafer et al., 2002a	Journal of Geophysical Research	2002	Atmospheric effects on insolation in the Brazilian Amazon: observed modification of solar radiation by clouds and smoke and derived single scattering albedo of fire aerosols
169	Schafer et al., 2002b	Geophysical Research Letters	2002	Observed reductions of total solar irradiance by biomass-burning aerosols in the Brazilian Amazon and Zambian Savanna
170	Schafer et al., 2008	Journal of Geophysical Research	2008	Characterization of the optical properties of atmospheric aerosols in Amazônia from long-term AERONET monitoring (1993–1995 and 1999–2006)
171	Schkolnik et al., 2005	Environmental Science and Technology	2005	New analytical method for the determination of levoglucosan polyhydroxy compounds, and 2-methylerythritol and its application to smoke and rainwater samples
172	Schmale et al., 2018	Atmospheric Chemistry and Physics	2018	Long-term cloud condensation nuclei number concentration, particle number size distribution and chemical composition measurements at regionally representative observatories
173	Schmid et al., 2006	Atmospheric Chemistry and Physics	2006	Spectral light absorption by ambient aerosols influenced by biomass burning in the Amazon Basin. I: comparison and field calibration of absorption measurement techniques

174	Schneider et al., 2011	Atmospheric Chemistry and Physics	2011	Mass-spectrometric identification of primary biological particle markers and application to pristine submicron aerosol measurements in Amazonia
175	Schoenlein-Crusius et al., 2001	Brazilian Journal of Microbiology	2001	Airbone Fungi in the Region of Cubatão São Paulo, Brazil
176	Schrod et al., 2020	Atmospheric Chemistry and Physics	2020	Long-term deposition and condensation ice-nucleating particle measurements from four stations across the globe
177	Schulz et al., 2018	Atmospheric Chemistry and Physics	2018	Aircraft-based observations of isoprene-epoxydiol-derived secondary organic aerosol (IEPOX-SOA) in the tropical upper troposphere over the Amazon region
178	Shilling et al., 2018	Atmospheric Chemistry and Physics	2018	Aircraft observations of the chemical composition and aging of aerosol in the Manaus urban plume during GoAmazon 2014/5
179	Silva et al., 2016	Revista de Saúde Pública	2016	High risk of respiratory diseases in children in the fire period in Western Amazon
180	Silva et al., 2020	Heliyon	2020	Air pollution and its impact on the concentration of airborne fungi in the megacity of São Paulo, Brazil
181	Soto-García et al., 2011	Atmospheric Chemistry and Physics	2011	Evaluation of the carbon content of aerosols from the burning of biomass in the Brazilian Amazon using thermal, optical and thermal-optical analysis method
182	Souza et al., 2019	Science of the Total Environment	2019	Uncovering prokaryotic biodiversity within aerosols of the pristine Amazon forest
183	Souza et al., 2021	Science of the Total Environment	2021	Influence of seasonality on the aerosol microbiome of the Amazon rainforest
184	Spektor et al., 1991	Environmental Health Perspectives	1991	Effects of heavy industrial pollution on respiratory function in the children of Cubatão, Brazil: a preliminary report
185	Swap et al., 1992	Tellus	1992	Saharan dust in the Amazon Basin
186	Tabacniks et al., 1987	Nuclear Instruments and Methods in Physics Research B	1987	PIXE analysis for air pollution source apportionment in urban areas of Brazil
187	Talbot et al., 1990	Journal of Geophysical Research	1990	Aerosol chemistry during the wet season in central Amazonia: the influence of long-range transport
188	Thalman et al., 2017	Atmospheric Chemistry and Physics	2017	CCN activity and organic hygroscopicity of aerosols downwind of an urban region in central Amazonia: seasonal and diel variations and impact of anthropogenic emissions
189	Tong et al., 2019	Environmental Science and Technology	2019	Radical formation by fine particulate matter associated with highly oxygenated molecules

190	Trebs et al., 2005	Journal of Geophysical Research	2005	The NH_4^+-NO_3^--Cl^--SO_4^{2-}-H_2O aerosol system and its gas phase precursors at a pasture site in the Amazon Basin: how relevant are mineral cations and soluble organic acids?
191	Trebs et al., 2006	Atmospheric Chemistry and Physics	2006	Dry and wet deposition of inorganic nitrogen compounds to a tropical pasture site (Rondonia, Brazil)
192	Trebs et al., 2008	Aerosol Science and Technology	2008	Aerosol inorganic composition at a tropical site: discrepancies between filter-based sampling and a semi-continuous method
193	Trebs et al., 2012	Journal of Geophysical Research	2012	Impact of the Manaus urban plume on trace gas mixing ratios near the surface in the Amazon Basin: Implications for the NO-NO_2-O_3 photostationary state and peroxy radical levels
194	Vasconcellos et al., 1998	Química Nova	1998	Determinação dos hidrocarbonetos saturados e policíclicos aromáticos presentes no material particulado da atmosfera amazônica
195	Vestin et al., 2007	Journal of Geophysical Research	2007	Cloud-nucleating properties of the Amazonian biomass burning aerosol: cloud condensation nuclei measurements and modeling
196	Villas-Boas et al., 2008	Chemical Engineering Transactions	2008	Study of the relation between the inorganic and organic material in the air pollution of the city of Caxias do Sul
197	Wang et al., 2016	Nature	2016	Amazon boundary layer aerosol concentration sustained by vertical transport during rainfall
198	Ward et al., 1992	Journal of Geophysical Research	1992	Smoke and fire characteristics for Cerrado and deforestation burns in Brazil: BASE-B experiment
199	Whitehead et al., 2016	Atmospheric Chemistry and Physics	2016	Biogenic cloud nuclei in the central Amazon during the transition from wet to dry season
200	Wikuats et al., 2020	Scientific Reports	2020	Assessment of airborne particles and bioaerosols concentrations in a waste recycling environment in Brazil
201	Williams et al., 2002	Journal of Geophysical Research	2002	Contrasting convective regimes over the Amazon: implications for cloud electrification
202	Wimmer et al., 2018	Atmospheric Chemistry and Physics	2018	Ground-based observation of clusters and nucleation-mode particles in the Amazon
203	Womack et al., 2015	Biogeosciences	2015	Characterization of active and total fungal communities in the atmosphere over the Amazon rainforest
204	Wouters et al., 1993	Atmospheric Environment	1993	Laser microprobe mass analysis of Amazon Basin aerosols

205	Yamasoe et al., 1998	Journal of Geophysical Research	1998	Retrieval of the real part of the refractive index of smoke particles from sun/sky measurements during SCAR-B
206	Yamasoe et al., 2000	Atmospheric Environment	2000	Chemical composition of aerosol particles from direct emissions of vegetation fires in the Amazon Basin: water-soluble species and trace element
207	Yee et al., 2018	Atmospheric Chemistry and Physics	2018	Observations of sesquiterpenes and their oxidation products in central Amazonia during the wet and dry seasons
208	Yee et al., 2020	Environmental Science and Technology	2020	Natural and anthropogenically influenced isoprene oxidation in southeastern United States and Central Amazon
209	Yokelson et al., 2007	Atmospheric Chemistry and Physics	2007	The Tropical Forest and Fire Emissions Experiment: overview and airborne fire emission factor measurements
210	Zdráhal et al., 2001	Journal of Mass Specrometry	2001	Characterization of novel di- and tricarboxylic acids in fine tropical aerosols
211	Zhou et al., 2002	Journal of Geophysical Research	2002	Submicrometer aerosol particle size distribution and hygroscopic growth measured in the Amazon rain forest during the wet season
212	Zoppas et al., 2006	Aerobiologia	2006	Fungal spores prevalent in the aerosol of the city of Caxias do Sul, Rio Grande do Sul, Brazil, over a 2-year period (2001–2002)