

Jürgen Kesselmeier

List of Publications by Year in descending order

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153
papers

9,671
citations

41258

49
h-index

66788

78
g-index

196
all docs

196
docs citations

196
times ranked

7342
citing authors

#	ARTICLE	IF	CITATIONS
1	Biogenic Volatile Organic Compounds (VOC): An Overview on Emission, Physiology and Ecology. , 1999, 33, 23-88.		1,504
2	Central Amazonian Floodplain Forests: Tree Adaptations in a Pulsing System. Botanical Review, The, 2004, 70, 357-380.	1.7	245
3	Emission of short chained organic acids, aldehydes and monoterpenes from <i>Quercus ilex</i> L. and <i>Pinus pinea</i> L. in relation to physiological activities, carbon budget and emission algorithms. Atmospheric Environment, 1997, 31, 119-133.	1.9	218
4	The Amazon Tall Tower Observatory (ATTO): overview of pilot measurements on ecosystem ecology, meteorology, trace gases, and aerosols. Atmospheric Chemistry and Physics, 2015, 15, 10723-10776.	1.9	218
5	Emission of monoterpenes and isoprene from a Mediterranean oak species <i>Quercus ilex</i> L. measured within the BEMA (Biogenic Emissions in the Mediterranean Area) project. Atmospheric Environment, 1996, 30, 1841-1850.	1.9	184
6	Global budget of atmospheric carbonyl sulfide: Temporal and spatial variations of the dominant sources and sinks. Journal of Geophysical Research, 2002, 107, ACH 25-1.	3.3	182
7	Isoprene and monoterpene fluxes from Central Amazonian rainforest inferred from tower-based and airborne measurements, and implications on the atmospheric chemistry and the local carbon budget. Atmospheric Chemistry and Physics, 2007, 7, 2855-2879.	1.9	181
8	Estimations of isoprenoid emission capacity from enclosure studies: measurements, data processing, quality and standardized measurement protocols. Biogeosciences, 2011, 8, 2209-2246.	1.3	166
9	Atmospheric volatile organic compounds (VOC) at a remote tropical forest site in central Amazonia. Atmospheric Environment, 2000, 34, 4063-4072.	1.9	164
10	Volatile organic compound emissions in relation to plant carbon fixation and the terrestrial carbon budget. Global Biogeochemical Cycles, 2002, 16, 73-1-73-9.	1.9	155
11	Consumption of carbonyl sulphide (COS) by higher plant carbonic anhydrase (CA). Atmospheric Environment, 1996, 30, 3151-3156.	1.9	142
12	Patterns of CO ₂ exchange in biological soil crusts of successional age. Soil Biology and Biochemistry, 2000, 32, 959-966.	4.2	135
13	Emissions of volatile organic compounds from <i>Quercus ilex</i> L. measured by Proton Transfer Reaction Mass Spectrometry under different environmental conditions. Journal of Geophysical Research, 2000, 105, 20573-20579.	3.3	135
14	The leaf-level emission factor of volatile isoprenoids: caveats, model algorithms, response shapes and scaling. Biogeosciences, 2010, 7, 1809-1832.	1.3	135
15	Exchange of Short-Chain Oxygenated Volatile Organic Compounds (VOCs) between Plants and the Atmosphere: A Compilation of Field and Laboratory Studies. Journal of Atmospheric Chemistry, 2001, 39, 219-233.	1.4	128
16	ACRIDICONâ€“CHUVA Campaign: Studying Tropical Deep Convective Clouds and Precipitation over Amazonia Using the New German Research Aircraft HALO. Bulletin of the American Meteorological Society, 2016, 97, 1885-1908.	1.7	124
17	Seasonal differences in isoprene and light-dependent monoterpene emission by Amazonian tree species. Global Change Biology, 2004, 10, 663-682.	4.2	119
18	Global uptake of carbonyl sulfide (COS) by terrestrial vegetation: Estimates corrected by deposition velocities normalized to the uptake of carbon dioxide (CO ₂). Biogeosciences, 2005, 2, 125-132.	1.3	116

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19	Nitrogen dioxide (NO ₂) uptake by vegetation controlled by atmospheric concentrations and plant stomatal aperture. <i>Atmospheric Environment</i> , 2011, 45, 5742-5750.	1.9	109
20	Controlling variables for the uptake of atmospheric carbonyl sulfide by soil. <i>Journal of Geophysical Research</i> , 1999, 104, 11577-11584.	3.3	106
21	An overview of the Castelporziano experiments. <i>Atmospheric Environment</i> , 1997, 31, 5-17.	1.9	105
22	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. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 15709-15740.	1.9	105
23	Impact of Manaus City on the Amazon Green Ocean atmosphere: ozone production, precursor sensitivity and aerosol load. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 9251-9282.	1.9	103
24	Enzymatic Pathways for the Consumption of Carbonyl Sulphide (COS) by Higher Plants*. <i>Botanica Acta</i> , 1992, 105, 206-212.	1.6	101
25	Exchange of atmospheric formic and acetic acids with trees and crop plants under controlled chamber and purified air conditions. <i>Atmospheric Environment</i> , 1998, 32, 1765-1775.	1.9	100
26	Effect of elevated CO ₂ on monoterpene emission of young <i>Quercus ilex</i> trees and its relation to structural and ecophysiological parameters. <i>Tree Physiology</i> , 2001, 21, 437-445.	1.4	99
27	Net ecosystem fluxes of isoprene over tropical South America inferred from Global Ozone Monitoring Experiment (GOME) observations of HCHO columns. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	99
28	Concentrations and species composition of atmospheric volatile organic compounds (VOCs) as observed during the wet and dry season in Rondônia (Amazonia). <i>Journal of Geophysical Research</i> , 2002, 107, LBA 20-1.	3.3	98
29	Reviews and syntheses: Carbonyl sulfide as a multi-scale tracer for carbon and water cycles. <i>Biogeosciences</i> , 2018, 15, 3625-3657.	1.3	98
30	Carbonyl sulfide exchange on an ecosystem scale: soil represents a dominant sink for atmospheric COS. <i>Atmospheric Environment</i> , 1999, 33, 995-1008.	1.9	92
31	Isoprene and monoterpene emissions of Amazonian tree species during the wet season: Direct and indirect investigations on controlling environmental functions. <i>Journal of Geophysical Research</i> , 2002, 107, LBA 38-1.	3.3	92
32	Emission of Volatile Organic Compounds After Herbivory from <i>Trifolium pratense</i> (L.) Under Laboratory and Field Conditions. <i>Journal of Chemical Ecology</i> , 2009, 35, 1335-1348.	0.9	91
33	Diel and seasonal changes of biogenic volatile organic compounds within and above an Amazonian rainforest. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3359-3378.	1.9	83
34	Strong correlation between isoprene emission and gross photosynthetic capacity during leaf phenology of the tropical tree species <i>Hymenaea courbaril</i> with fundamental changes in volatile organic compounds emission composition during early leaf development. <i>Plant, Cell and Environment</i> , 2004, 27, 1469-1485.	2.8	82
35	Coupling processes and exchange of energy and reactive and non-reactive trace gases at a forest site – results of the EGER experiment. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1923-1950.	1.9	81
36	Impact of drought on seasonal monoterpene emissions from <i>Quercus ilex</i> in southern France. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 15-1-ACH 15-9.	3.3	78

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37	A kinetic analysis of leaf uptake of COS and its relation to transpiration, photosynthesis and carbon isotope fractionation. <i>Biogeosciences</i> , 2010, 7, 333-341.	1.3	78
38	Methanol emissions from deciduous tree species: dependence on temperature and light intensity. <i>Plant Biology</i> , 2008, 10, 65-75.	1.8	77
39	Significant light and temperature dependent monoterpene emissions from European beech (<i>Fagus</i>) Tj ETQq1 1 0.784314 rgBT /Overlo <i>Geophysical Research</i> , 2006, 111, .	3.3	75
40	Biosphere/Atmosphere interactions: Integrated research in a European coniferous forest ecosystem. <i>Atmospheric Environment Part A General Topics</i> , 1992, 26, 171-189.	1.3	74
41	Unexpected seasonality in quantity and composition of Amazon rainforest air reactivity. <i>Nature Communications</i> , 2016, 7, 10383.	5.8	74
42	Within-canopy sesquiterpene ozonolysis in Amazonia. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	73
43	Emissions of putative isoprene oxidation products from mango branches under abiotic stress. <i>Journal of Experimental Botany</i> , 2013, 64, 3669-3679.	2.4	72
44	Exchange of carbonyl sulfide (COS) between agricultural plants and the atmosphere: Studies on the deposition of COS to peas, corn and rapeseed. <i>Biogeochemistry</i> , 1993, 23, 47.	1.7	67
45	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. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10289-10331.	1.9	64
46	Exchange of short-chain monocarboxylic acids by vegetation at a remote tropical forest site in Amazonia. <i>Journal of Geophysical Research</i> , 2002, 107, LBA 36-1.	3.3	61
47	EXCHANGE OF SHORT-CHAIN ALDEHYDES BETWEEN AMAZONIAN VEGETATION AND THE ATMOSPHERE. , <i>Journal of Geophysical Research</i> , 2004, 109, 4177-4186.		61
48	Use of the isoprene algorithm for predicting the monoterpene emission from the Mediterranean holm oak <i>Quercus ilex</i> L.: Performance and limits of this approach. <i>Journal of Geophysical Research</i> , 1997, 102, 23319-23328.	3.3	60
49	Soil atmosphere exchange of carbonyl sulfide (COS) regulated by diffusivity depending on water-filled pore space. <i>Biogeosciences</i> , 2008, 5, 475-483.	1.3	59
50	Dimethyl sulfide in the Amazon rain forest. <i>Global Biogeochemical Cycles</i> , 2015, 29, 19-32.	1.9	58
51	Opposite OH reactivity and ozone cycles in the Amazon rainforest and megacity Beijing: Subversion of biospheric oxidant control by anthropogenic emissions. <i>Atmospheric Environment</i> , 2016, 125, 112-118.	1.9	56
52	Strong sesquiterpene emissions from Amazonian soils. <i>Nature Communications</i> , 2018, 9, 2226.	5.8	55
53	How Does the Exchange of One Oxygen Atom with Sulfur Affect the Catalytic Cycle of Carbonic Anhydrase?. <i>Chemistry - A European Journal</i> , 2004, 10, 3091-3105.	1.7	54
54	Exchange fluxes of NO ₂ and O ₃ at soil and leaf surfaces in an Amazonian rain forest. <i>Journal of Geophysical Research</i> , 2002, 107, LBA 27-1.	3.3	53

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55	Relationships between Normalized Difference Vegetation Index (NDVI) and carbon fluxes of biologic soil crusts assessed by ground measurements. <i>Journal of Arid Environments</i> , 2006, 64, 651-669.	1.2	53
56	The effect of flooding on the exchange of the volatile C<sub>2</sub>-compounds ethanol, acetaldehyde and acetic acid between leaves of Amazonian floodplain tree species and the atmosphere. <i>Biogeosciences</i> , 2008, 5, 1085-1100.	1.3	52
57	Plant-specific volatile organic compound emission rates from young and mature leaves of Mediterranean vegetation. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	52
58	Terpene emissions from European beech (shape <i>Fagus sylvatica</i> ~L.): Pattern and Emission Behaviour Over two Vegetation Periods. <i>Journal of Atmospheric Chemistry</i> , 2006, 55, 81-102.	1.4	51
59	Simultaneous field measurements of terpene and isoprene emissions from two dominant mediterranean oak species in relation to a North American species. <i>Atmospheric Environment</i> , 1998, 32, 1947-1953.	1.9	50
60	Monoterpene chemical speciation in a tropical rainforest:variation with season, height, and time of dayat the Amazon Tall Tower Observatory (ATTO). <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 3403-3418.	1.9	50
61	Exchange of reduced sulfur gases between lichens and the atmosphere. <i>Biogeochemistry</i> , 1994, 26, 25-39.	1.7	49
62	The CO<sub>2</sub> exchange of biological soil crusts in a semiarid grass-shrubland at the northern transition zone of the Negev desert, Israel. <i>Biogeosciences</i> , 2008, 5, 1411-1423.	1.3	49
63	Reduced sulfur compound exchange between the atmosphere and tropical tree species in southern Cameroon. <i>Biogeochemistry</i> , 1993, 23, 23.	1.7	48
64	The Missing Link in COS Metabolism: A Model Study on the Reactivation of Carbonic Anhydrase from its Hydrosulfide Analogue. <i>ChemBioChem</i> , 2007, 8, 530-536.	1.3	48
65	Sulfur Fertilization and Fungal Infections Affect the Exchange of H₂S and COS from Agricultural Crops. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 7588-7596.	2.4	48
66	Separation and quantitation of molecular species from plant lipids by high-performance liquid chromatography. <i>Analytical Biochemistry</i> , 1985, 144, 319-328.	1.1	47
67	High Performance Liquid Chromatography of Molecular Species from Free Sterols and Sterylglycosides Isolated from Oat Leaves and Seeds1. <i>Plant and Cell Physiology</i> , 1985, 26, 463-471.	1.5	46
68	Cryogenic trapping of reduced sulfur compounds using a nafion drier and cotton wadding as an oxidant scavenger. <i>Atmospheric Environment Part A General Topics</i> , 1992, 26, 2445-2449.	1.3	46
69	Field investigations of nitrogen dioxide (NO<sub>2</sub>) exchange between plants and the atmosphere. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 773-790.	1.9	46
70	Leaf level emissions of volatile organic compounds (VOC) from some Amazonian and Mediterranean plants. <i>Biogeosciences</i> , 2013, 10, 5855-5873.	1.3	46
71	Effects of the hydroedaphic gradient on tree species composition and aboveground wood biomass of oligotrophic forest ecosystems in the central Amazon basin. <i>Folia Geobotanica</i> , 2015, 50, 185-205.	0.4	46
72	Consumption of Carbonyl Sulphide byChlamydomonas reinhardtiiwith Different Activities of Carbonic Anhydrase (CA) Induced by Different CO2Growing Regimes. <i>Botanica Acta</i> , 1995, 108, 445-448.	1.6	44

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73	The dynamic chamber method: trace gas exchange fluxes (NO _x) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 752 Td (NO<sub>2</sub> plants and the atmosphere in the laboratory and in the field. Atmospheric Measurement Techniques, 2012, 5, 955-989.	1.2	43
74	Factors controlling the emissions of volatile organic acids from leaves of Quercus ilex L. (Holm oak). Atmospheric Environment, 1999, 33, 1347-1355.	1.9	42
75	A new mechanistic framework to predict OCS fluxes from soils. Biogeosciences, 2016, 13, 2221-2240.	1.3	41
76	Subcellular localization of saponins in green and etiolated leaves and green protoplasts of oat (Avena sativa L.). Protoplasma, 1983, 114-114, 133-140.	1.0	40
77	Amazonian biogenic volatile organic compounds under global change. Global Change Biology, 2020, 26, 4722-4751.	4.2	38
78	COS and H ₂ S fluxes over a wet meadow in relation to photosynthetic activity: An analysis of measurements made on 6 September 1990. Atmospheric Environment Part A General Topics, 1993, 27, 1851-1864.	1.3	37
79	Seasonal measurements of total OH reactivity emission rates from Norway spruce in 2011. Biogeosciences, 2013, 10, 4241-4257.	1.3	37
80	Atmospheric mixing ratios of methyl ethyl ketone (2-butanone) in tropical, boreal, temperate and marine environments. Atmospheric Chemistry and Physics, 2016, 16, 10965-10984.	1.9	37
81	Ecosystem-scale compensation points of formic and acetic acid in the central Amazon. Biogeosciences, 2011, 8, 3709-3720.	1.3	36
82	Identification of Saponins as Structural Building Units in Isolated Prolamellar Bodies from Etioplasts of Avena sativa L.. Zeitschrift FÄ¼r Pflanzenphysiologie, 1979, 91, 333-344.	1.4	35
83	Formaldehyde and acetaldehyde exchange during leaf development of the Amazonian deciduous tree species Hymenaea courbaril. Atmospheric Environment, 2005, 39, 2275-2279.	1.9	35
84	Volatile organic compounds (VOCs) in photochemically aged air from the eastern and western Mediterranean. Atmospheric Chemistry and Physics, 2017, 17, 9547-9566.	1.9	35
85	Apoplastic Solute Concentrations of Organic Acids and Mineral Nutrients in the Leaves of Several Fagaceae. Plant and Cell Physiology, 1999, 40, 604-612.	1.5	33
86	Enzymatic consumption of carbonyl sulfide (COS) by marine algae. Biogeochemistry, 2000, 48, 185-197.	1.7	33
87	Exchange of reduced volatile sulfur compounds between leaf litter and the atmosphere. Atmospheric Environment, 2002, 36, 4679-4686.	1.9	33
88	The diversification of terpene emissions in Mediterranean oaks: lessons from a study of Quercus suber, Quercus canariensis and its hybrid Quercus afares. Tree Physiology, 2012, 32, 1082-1091.	1.4	32
89	From emissions to ambient mixing ratios: online seasonal field measurements of volatile organic compounds over a Norway spruce-dominated forest in central Germany. Atmospheric Chemistry and Physics, 2014, 14, 6495-6510.	1.9	32
90	Cryogenic trapping of atmospheric organic acids under laboratory and field conditions. Atmospheric Environment, 1997, 31, 1275-1284.	1.9	31

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91	Title is missing!. Biogeochemistry, 2000, 48, 199-216.	1.7	29
92	Impact of the Manaus urban plume on trace gas mixing ratios near the surface in the Amazon Basin: Implications for the NO ₂ /NO ₃ photostationary state and peroxy radical levels. Journal of Geophysical Research, 2012, 117, .	3.3	29
93	Environmental variables controlling the uptake of carbonyl sulfide by lichens. Journal of Geophysical Research, 2000, 105, 26783-26792.	3.3	28
94	Tropical and Boreal Forest – Atmosphere Interactions: A Review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 74, 24.	0.8	27
95	Field measurements on the exchange of carbonyl sulfide between lichens and the atmosphere. Atmospheric Environment, 2000, 34, 4867-4878.	1.9	26
96	High Performance Liquid Chromatographic Analysis of Steroidal Saponins from Avena sativa L. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1981, 36, 1072-1074.	0.6	25
97	Natural volatile organic compound emissions from plants and their roles in oxidant balance and particle formation. Geophysical Monograph Series, 2009, , 183-206.	0.1	25
98	Quantitative and enantioselective analysis of monoterpenes from plant chambers and in ambient air using SPME. Atmospheric Measurement Techniques, 2010, 3, 1615-1627.	1.2	25
99	Steroidal saponins in etiolated, greening and green leaves and in isolated etioplasts and chloroplasts of Avena sativa. Protoplasma, 1982, 112, 127-132.	1.0	24
100	Ground and space spectral measurements for assessing the semi-arid ecosystem phenology related to CO ₂ fluxes of biological soil crusts. Remote Sensing of Environment, 2006, 101, 1-12.	4.6	24
101	Root anoxia effects on physiology and emissions of volatile organic compounds (VOC) under short-and long-term inundation of trees from Amazonian floodplains. SpringerPlus, 2012, 1, 9.	1.2	24
102	Investigation of the influence of liquid surface films on O ₃ and PAN deposition to plant leaves coated with organic/inorganic solution. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,239.	1.2	24
103	5-Oxo-prolinase in Nicotiana tabacum: catalytic properties and subcellular localization. Physiologia Plantarum, 1981, 52, 211-224.	2.6	23
104	Characterization of a membrane bound Î ² -glucosidase responsible for the activation of oat leaf saponins. Phytochemistry, 1985, 24, 1941-1943.	1.4	22
105	Observations of atmospheric monoaromatic hydrocarbons at urban, semi-urban and forest environments in the Amazon region. Atmospheric Environment, 2016, 128, 175-184.	1.9	22
106	The uptake of gaseous sulphur dioxide by non-gelatinous lichens. New Phytologist, 1997, 135, 595-602.	3.5	21
107	Relations between Saponin Concentration and Prolamellar Body Structure in Etioplasts of Avena sativa during Greening and Re-Etiolating and in Etioplasts of Hordeum vulgare and Pisum sativum. Zeitschrift für Pflanzenphysiologie, 1979, 93, 171-184.	1.4	20
108	Comparing forward and inverse models to estimate the seasonal variation of hemisphere-integrated fluxes of carbonyl sulfide. Atmospheric Chemistry and Physics, 2002, 2, 343-361.	1.9	20

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109	Lagrangian dispersion of 222Rn, H2O and CO2 within Amazonian rain forest. <i>Agricultural and Forest Meteorology</i> , 2005, 132, 286-304.	1.9	20
110	Biological activities of furostanol saponins from <i>Nicotiana tabacum</i> . <i>Phytochemistry</i> , 1990, 29, 2485-2490.	1.4	18
111	The Amazonian boundary layer and mesoscale circulations. <i>Geophysical Monograph Series</i> , 2009, , 163-181.	0.1	18
112	Twin-cuvette measurement technique for investigation of dry deposition of O<sub>3</sub> and PAN to plant leaves under controlled humidity conditions. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 599-617.	1.2	18
113	Influence of drainage status on soil and water chemistry, litter decomposition and soil respiration in central Amazonian forests on sandy soils. <i>Revista Ambiente & Água</i> , 2011, 6, 6-29.	0.1	18
114	Sterols and sterylglycosides of oats (<i>Avena sativa</i>). Distribution in the leaf tissue and medium-induced glycosylation of sterols during protoplast isolation. <i>Physiologia Plantarum</i> , 1987, 70, 610-616.	2.6	17
115	Volatile organic compounds in the biosphere"atmosphere system: a preface. <i>Plant Biology</i> , 2008, 10, 2-7.	1.8	17
116	Exchange of carbonyl sulfide (OCS) between soils and atmosphere under various CO₂ concentrations. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1343-1358.	1.3	17
117	Soil CO2 exchange in seven pristine Amazonian rain forest sites in relation to soil temperature. <i>Agricultural and Forest Meteorology</i> , 2014, 192-193, 96-107.	1.9	16
118	Design and field application of an automated cartridge sampler for VOC concentration and flux measurements. <i>Journal of Environmental Monitoring</i> , 2005, 7, 568.	2.1	15
119	Observations of the uptake of carbonyl sulfide (COS) by trees under elevated atmospheric carbon dioxide concentrations. <i>Biogeosciences</i> , 2012, 9, 2935-2945.	1.3	15
120	Development of chloro-etoplasts containing prolamellar bodies and steroidal saponins in suspension cultures of <i>Nicotiana tabacum</i> . <i>Protoplasma</i> , 1980, 104, 295-306.	1.0	14
121	Automated in situ analysis of volatile sulfur gases using a Sulfur Gas Analyser (SUGAR) based on cryogenic trapping and gas-chromatographic separation. <i>International Journal of Environmental Analytical Chemistry</i> , 2008, 88, 303-315.	1.8	14
122	Total OH Reactivity Changes Over the Amazon Rainforest During an El Niño Event. <i>Frontiers in Forests and Global Change</i> , 2018, 1, .	1.0	14
123	Aerosol measurement methods to quantify spore emissions from fungi and cryptogamic covers in the Amazon. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 153-164.	1.2	14
124	Biochemical and Cytological Observations on Chloroplast Development V. Reaggregations of Prolamellar Body Tubules without Protein Participation. <i>Zeitschrift F&uuml;r Pflanzenphysiologie</i> , 1978, 90, 101-110.	1.4	13
125	Coupling isoprene and monoterpene emissions from Amazonian tree species with physiological and environmental parameters using a neural network approach. <i>Plant, Cell and Environment</i> , 2005, 28, 287-301.	2.8	13
126	Preface "Earth observation for land-atmosphere interaction science". <i>Biogeosciences</i> , 2013, 10, 261-266.	1.3	13

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127	Isoprenoid emissions of trees in a tropical rainforest in Xishuangbanna, SW China. <i>Atmospheric Environment</i> , 2007, 41, 3748-3757.	1.9	12
128	Bioaerosols in the Amazon rain forest: temporal variations and vertical profiles of Eukarya, Bacteria, and Archaea. <i>Biogeosciences</i> , 2021, 18, 4873-4887.	1.3	12
129	Induction of steroidal hydroxylase activity by plant defence compounds in the filamentous fungus <i>Cochliobolus lunatus</i> . <i>Chemosphere</i> , 1999, 38, 853-863.	4.2	11
130	Biochemical and Cytological Observations on Chloroplast Development. <i>Zeitschrift für Pflanzenphysiologie</i> , 1977, 85, 327-340.	1.4	10
131	Emission of Sulfur Compounds from Vegetation and Global-Scale Extrapolation. , 1991, , 261-265.		10
132	First measurements of the C1- and C2-organic acids and aldehydes exchange between boreal lichens and the atmosphere. <i>Physics and Chemistry of the Earth</i> , 1999, 24, 725-728.	0.3	10
133	Exchange of Sulfur Gases between the Biosphere and the Atmosphere. , 1997, , 167-198.		10
134	Soil CO ₂ efflux in central Amazonia: environmental and methodological effects. <i>Acta Amazonica</i> , 2012, 42, 173-184.	0.3	10
135	Microclimatic conditions and water content fluctuations experienced by epiphytic bryophytes in an Amazonian rain forest. <i>Biogeosciences</i> , 2020, 17, 5399-5416.	1.3	10
136	Some Observations on the Saponin Accumulation in Oat Seedlings and on the Transformation of the Avenacosides to the Antibiotic 26-Desgluco-avenacosides. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1982, 37, 1095-1099.	0.6	9
137	[59] Separation of molecular species of plant glycolipids and phospholipids by high-performance liquid chromatography. <i>Methods in Enzymology</i> , 1987, 148, 650-661.	0.4	9
138	Coupled carbon-water exchange of the Amazon rain forest, II. Comparison of predicted and observed seasonal exchange of energy, CO ₂ , isoprene and ozone at a remote site in Rondônia. <i>Biogeosciences</i> , 2005, 2, 255-275.	1.3	9
139	Coupled carbon-water exchange of the Amazon rain forest, I. Model description, parameterization and sensitivity analysis. <i>Biogeosciences</i> , 2005, 2, 231-253.	1.3	9
140	Microbial community responses determine how soil-atmosphere exchange of carbonyl sulfide, carbon monoxide, and nitric oxide responds to soil moisture. <i>Soil</i> , 2019, 5, 121-135.	2.2	8
141	Saponin distribution in the etiolated leaf tissue and subcellular localization of steroidal saponins in etiolated protoplasts of oat (<i>Avena sativa</i> L.). <i>Protoplasma</i> , 1983, 118, 121-123.	1.0	7
142	Chapter 6: Biogeochemical Cycles in the Amazon. , 2021, , .		7
143	Prolamellar bodies of oat, wheat, and rye: Structure, lipid composition, and adsorption of saponins. <i>Protoplasma</i> , 1988, 146, 1-9.	1.0	6
144	C4-like photosynthesis and the effects of leaf senescence on C4-like physiology in <i>Sesuvium sesuvioides</i> (Aizoaceae). <i>Journal of Experimental Botany</i> , 2019, 70, 1553-1565.	2.4	6

#	ARTICLE	IF	CITATIONS
145	Prolamellar-body structure, composition of molecular species and amount of galactolipids in etiolated, greening and reetiolated primary leaves of oat, wheat and rye. <i>Planta</i> , 1986, 168, 453-460.	1.6	5
146	The relation of H ₂ S release to SO ₂ , fumigation of lichens. <i>New Phytologist</i> , 1997, 136, 703-711.	3.5	4
147	Biosphere – Atmosphere Exchange of Ammonia. , 1997, , 15-44.		3
148	Biological Mechanisms involved in the Exchange of Trace Gases. , 1997, , 117-133.		3
149	Editorial Note “Effects of water discharge and sediment load on evolution of modern Yellow River Delta, China, over the period from 1976 to 2009” published in <i>Biogeosciences</i> , 8, 2427-2435, 2011. <i>Biogeosciences</i> , 2011, 8, 2867-2867.	1.3	2
150	Assessing a New Clue to How Much Carbon Plants Take Up. <i>Eos</i> , 2017, , .	0.1	2
151	Ammonia Exchange between Terrestrial Plants and the Atmosphere Controlled by Plant Physiology: Compensation Point and CO ₂ Exchange. , 1997, , 445-449.		1
152	QUALITY CONTROL IN BIOGEOSCIENCES AND OTHER INTERACTIVE JOURNALS OF THE EUROPEAN GEOSCIENCES UNION. <i>Limnology and Oceanography Bulletin</i> , 2004, 13, 36-37.	0.2	0
153	Some Observations on the Artificial Adsorption of Monodesmosidic Steroidal Saponins to Prolamellar Bodies. , 1984, , 623-626.		0