JÃ¼rgen Kesselmeier

List of Publications by Year
in descending order

153 papers	9,671 citations	41344 49 h-index	66911 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.	3.9	245
3	Emission of short chained organic acids, aldehydes and monoterpenes from Quercus ilex L. and Pinus pinea L. in relation to physiological activities, carbon budget and emission algorithms. Atmospheric Environment, 1997, 31, 119-133.	4.1	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.	4.9	218
5	Emission of monoterpenes and isoprene from a Mediterranean oak species Quercus ilex L. measured within the BEMA (Biogenic Emissions in the Mediterranean Area) project. Atmospheric Environment, 1996, 30, 1841-1850.	4.1	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.	4.9	181
8	Estimations of isoprenoid emission capacity from enclosure studies: measurements, data processing, quality and standardized measurement protocols. Biogeosciences, 2011, 8, 2209-2246.	3.3	166
9	Atmospheric volatile organic compounds (VOC) at a remote tropical forest site in central Amazonia. Atmospheric Environment, 2000, 34, 4063-4072.	4.1	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.	4.9	155
11	Consumption of carbonyl sulphide (COS) by higher plant carbonic anhydrase (CA). Atmospheric Environment, 1996, 30, 3151-3156.	4.1	142
12	Patterns of CO2 exchange in biological soil crusts of successional age. Soil Biology and Biochemistry, 2000, 32, 959-966.	8.8	135
13	Emissions of volatile organic compounds fromQuercus ilexL. 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.	3.3	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.	3.2	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.	3.3	124
17	Seasonal differences in isoprene and light-dependent monoterpene emission by Amazonian tree species. Global Change Biology, 2004, 10, 663-682.	9.5	119
18	Global uptake of carbonyl sulfide (COS) by terrestrial vegetation: Estimates corrected by deposition velocities normalized to the uptake of carbon dioxide (CO₂). Biogeosciences, 2005, 2, 125-132.	3.3	116

#	Article	IF	Citations
19	Nitrogen dioxide (NO2) uptake by vegetation controlled by atmospheric concentrations and plant stomatal aperture. Atmospheric Environment, 2011, 45, 5742-5750.	4.1	109
20	Controlling variables for the uptake of atmospheric carbonyl sulfide by soil. Journal of Geophysical Research, 1999, 104, 11577-11584.	3.3	106
21	An overview of the Castelporziano experiments. Atmospheric Environment, 1997, 31, 5-17.	4.1	105
22	Long-term observations of cloud condensation nuclei in the Amazon rain forest â€“ Part 1: Aerosol size distribution, hygroscopicity, and new model parametrizations for CCN prediction. Atmospheric Chemistry and Physics, 2016, 16, 15709-15740.	4.9	105
23	Impact of Manaus City on the Amazon Green Ocean atmosphere: ozone production, precursor sensitivity and aerosol load. Atmospheric Chemistry and Physics, 2010, 10, 9251-9282.	4.9	103
24	Enzymatic Pathways for the Consumption of Carbonyl Sulphide (COS) by Higher Plants*. Botanica Acta, 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. Atmospheric Environment, 1998, 32, 1765-1775.	4.1	100
26	Effect of elevated CO2 on monoterpene emission of young Quercus ilex trees and its relation to structural and ecophysiological parameters. Tree Physiology, 2001, 21, 437-445.	3.1	99
27	Net ecosystem fluxes of isoprene over tropical South America inferred from Global Ozone Monitoring Experiment (GOME) observations of HCHO columns. Journal of Geophysical Research, 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 RondÃ´nia (Amazonia). Journal of Geophysical Research, 2002, 107, LBA 20-1.	3.3	98
29	Reviews and syntheses: Carbonyl sulfide as aÂmulti-scale tracer for carbon and water cycles. Biogeosciences, 2018, 15, 3625-3657.	3.3	98
30	Carbonyl sulfide exchange on an ecosystem scale: soil represents a dominant sink for atmospheric COS. Atmospheric Environment, 1999, 33, 995-1008.	4.1	92
31	Isoprene and monoterpene emissions of AmazÃ´nian tree species during the wet season: Direct and indirect investigations on controlling environmental functions. Journal of Geophysical Research, 2002, 107, LBA 38-1.	3.3	92
32	Emission of Volatile Organic Compounds After Herbivory from Trifolium pratense (L.) Under Laboratory and Field Conditions. Journal of Chemical Ecology, 2009, 35, 1335-1348.	1.8	91
33	Diel and seasonal changes of biogenic volatile organic compounds within and above an Amazonian rainforest. Atmospheric Chemistry and Physics, 2015, 15, 3359-3378.	4.9	83
34	Strong correlation between isoprene emission and gross photosynthetic capacity during leaf phenology of the tropical tree species Hymenaea courbaril with fundamental changes in volatile organic compounds emission composition during early leaf development. Plant, Cell and Environment, 2004, 27, 1469-1485.	5.7	82
35	Coupling processes and exchange of energy and reactive and non-reactive trace gases at a forest site â€“ results of the EGER experiment. Atmospheric Chemistry and Physics, 2012, 12, 1923-1950.	4.9	81
36	Impact of drought on seasonal monoterpene emissions from Quercus ilex in southern France. Journal of Geophysical Research, 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. Biogeosciences, 2010, 7, 333-341.	3.3	78
38	Methanol emissions from deciduous tree species: dependence on temperature and light intensity. Plant Biology, 2008, 10, 65-75.	3.8	77
39	Significant light and temperature dependent monoterpene emissions from European beech (Fagus) Tj ETQq1 1 0.784314 rgBT /Overlo Geophysical Research, 2006, 111, .	3.3	75
40	Biosphere/Atmosphere interactions: Integrated research in a European coniferous forest ecosystem. Atmospheric Environment Part A General Topics, 1992, 26, 171-189.	1.3	74
41	Unexpected seasonality in quantity and composition of Amazon rainforest air reactivity. Nature Communications, 2016, 7, 10383.	12.8	74
42	Within-canopy sesquiterpene ozonolysis in Amazonia. Journal of Geophysical Research, 2011, 116, .	3.3	73
43	Emissions of putative isoprene oxidation products from mango branches under abiotic stress. Journal of Experimental Botany, 2013, 64, 3669-3679.	4.8	72
44	Exchange of carbonyl sulfide (COS) between agricultural plants and the atmosphere: Studies on the deposition of COS to peas, corn and rapeseed. Biogeochemistry, 1993, 23, 47.	3.5	67
45	Long-term observations of cloud condensation nuclei over the Amazon rain forest â€" Part 2: Variability and characteristics of biomass burning, long-range transport, and pristine rain forest aerosols. Atmospheric Chemistry and Physics, 2018, 18, 10289-10331.	4.9	64
46	Exchange of short-chain monocarboxylic acids by vegetation at a remote tropical forest site in Amazonia. Journal of Geophysical Research, 2002, 107, LBA 36-1.	3.3	61
47	EXCHANGE OF SHORT-CHAIN ALDEHYDES BETWEEN AMAZONIAN VEGETATION AND THE ATMOSPHERE. , 2004, 14, 247-262.		61
48	Use of the isoprene algorithm for predicting the monoterpene emission from the Mediterranean holm oakQuercus ilex L.: Performance and limits of this approach. Journal of Geophysical Research, 1997, 102, 23319-23328.	3.3	60
49	Soil atmosphere exchange of carbonyl sulfide (COS) regulated by diffusivity depending on water-filled pore space. Biogeosciences, 2008, 5, 475-483.	3.3	59
50	Dimethyl sulfide in the Amazon rain forest. Global Biogeochemical Cycles, 2015, 29, 19-32.	4.9	58
51	Opposite OH reactivity and ozone cycles in the Amazon rainforest and megacity Beijing: Subversion of biospheric oxidant control by anthropogenic emissions. Atmospheric Environment, 2016, 125, 112-118.	4.1	56
52	Strong sesquiterpene emissions from Amazonian soils. Nature Communications, 2018, 9, 2226.	12.8	55
53	How Does the Exchange of One Oxygen Atom with Sulfur Affect the Catalytic Cycle of Carbonic Anhydrase?. Chemistry - A European Journal, 2004, 10, 3091-3105.	3.3	54
54	Exchange fluxes of NO2and O3at soil and leaf surfaces in an Amazonian rain forest. Journal of Geophysical Research, 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. Journal of Arid Environments, 2006, 64, 651-669.	2.4	53
56	The effect of flooding on the exchange of the volatile C₂-compounds ethanol, acetaldehyde and acetic acid between leaves of Amazonian floodplain tree species and the atmosphere. Biogeosciences, 2008, 5, 1085-1100.	3.3	52
57	Plant-specific volatile organic compound emission rates from young and mature leaves of Mediterranean vegetation. Journal of Geophysical Research, 2011, 116, .	3.3	52
58	Terpene emissions from European beech (shape Fagus sylvatica~L.): Pattern and Emission Behaviour Over two Vegetation Periods. Journal of Atmospheric Chemistry, 2006, 55, 81-102.	3.2	51
59	Simultaneous field measurements of terpene and isoprene emissions from two dominant mediterranean oak species in relation to a North American species. Atmospheric Environment, 1998, 32, 1947-1953.	4.1	50
60	Monoterpene chemical speciation in a tropical rainforest:variation with season, height, and time of dayat the Amazon Tall Tower Observatory (ATTO). Atmospheric Chemistry and Physics, 2018, 18, 3403-3418.	4.9	50
61	Exchange of reduced sulfur gases between lichens and the atmosphere. Biogeochemistry, 1994, 26, 25-39.	3.5	49
62	The CO₂ exchange of biological soil crusts in a semiarid grass-shrubland at the northern transition zone of the Negev desert, Israel. Biogeosciences, 2008, 5, 1411-1423.	3.3	49
63	Reduced sulfur compound exchange between the atmosphere and tropical tree species in southern Cameroon. Biogeochemistry, 1993, 23, 23.	3.5	48
64	The Missing Link in COS Metabolism: A Model Study on the Reactivation of Carbonic Anhydrase from its Hydrosulfide Analogue. ChemBioChem, 2007, 8, 530-536.	2.6	48
65	Sulfur Fertilization and Fungal Infections Affect the Exchange of H₂S and COS from Agricultural Crops. Journal of Agricultural and Food Chemistry, 2012, 60, 7588-7596.	5.2	48
66	Separation and quantitation of molecular species from plant lipids by high-performance liquid chromatography. Analytical Biochemistry, 1985, 144, 319-328.	2.4	47
67	High Performance Liquid Chromatography of Molecular Species from Free Sterols and Sterylglycosides Isolated from Oat Leaves and Seeds1. Plant and Cell Physiology, 1985, 26, 463-471.	3.1	46
68	Cryogenic trapping of reduced sulfur compounds using a nafion drier and cotton wadding as an oxidant scavenger. Atmospheric Environment Part A General Topics, 1992, 26, 2445-2449.	1.3	46
69	Field investigations of nitrogen dioxide (NO₂) exchange between plants and the atmosphere. Atmospheric Chemistry and Physics, 2013, 13, 773-790.	4.9	46
70	Leaf level emissions of volatile organic compounds (VOC) from some Amazonian and Mediterranean plants. Biogeosciences, 2013, 10, 5855-5873.	3.3	46
71	Effects of the hydroedaphic gradient on tree species composition and aboveground wood biomass of oligotrophic forest ecosystems in the central Amazon basin. Folia Geobotanica, 2015, 50, 185-205.	0.9	46
72	Consumption of Carbonyl Sulphide byChlamydomonas reinhardtiiwith Different Activities of Carbonic Anhydrase (CA) Induced by Different CO2Growing Regimes. Botanica Acta, 1995, 108, 445-448.	1.6	44

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73	The dynamic chamber method: trace gas exchange fluxes (NO,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 752 Td (NO<sub& plants and the atmosphere in the laboratory and in the field. Atmospheric Measurement Techniques, 2012, 5, 955-989.	3.1	43
74	Factors controlling the emissions of volatile organic acids from leaves of Quercus ilex L. (Holm oak). Atmospheric Environment, 1999, 33, 1347-1355.	4.1	42
75	A new mechanistic framework to predict OCS fluxes from soils. Biogeosciences, 2016, 13, 2221-2240.	3.3	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.	2.1	40
77	Amazonian biogenic volatile organic compounds under global change. Global Change Biology, 2020, 26, 4722-4751.	9.5	38
78	COS and H2S 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.	3.3	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.	4.9	37
81	Ecosystem-scale compensation points of formic and acetic acid in the central Amazon. Biogeosciences, 2011, 8, 3709-3720.	3.3	36
82	Identification of Saponins as Structural Building Units in Isolated Prolamellar Bodies from Etioplasts of Avena sativa L.. Zeitschrift FÃ¼r 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.	4.1	35
84	Volatile organic compounds (VOCs) in photochemically aged air from the eastern and western Mediterranean. Atmospheric Chemistry and Physics, 2017, 17, 9547-9566.	4.9	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.	3.1	33
86	Enzymatic consumption of carbonyl sulfide (COS) by marine algae. Biogeochemistry, 2000, 48, 185-197.	3.5	33
87	Exchange of reduced volatile sulfur compounds between leaf litter and the atmosphere. Atmospheric Environment, 2002, 36, 4679-4686.	4.1	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.	3.1	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.	4.9	32
90	Cryogenic trapping of atmospheric organic acids under laboratory and field conditions. Atmospheric Environment, 1997, 31, 1275-1284.	4.1	31

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91	Title is missing!. Biogeochemistry, 2000, 48, 199-216.	3.5	29
92	Impact of the Manaus urban plume on trace gas mixing ratios near the surface in the Amazon Basin: Implications for the NOâ€NO₂â€O₃ 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 â€" Atmosphere Interactions: A Review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 74, 24.	1.6	27
95	Field measurements on the exchange of carbonyl sulfide between lichens and the atmosphere. Atmospheric Environment, 2000, 34, 4867-4878.	4.1	26
96	High Perform ance Liquid Chrom atographie Analysis o f Steroidal Saponins from Avena sativa L. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1981, 36, 1072-1074.	1.4	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.	3.1	25
99	Steroidal saponins in etiolated, greening and green leaves and in isolated etioplasts and chloroplasts ofAvena sativa. Protoplasma, 1982, 112, 127-132.	2.1	24
100	Ground and space spectral measurements for assessing the semi-arid ecosystem phenology related to CO2 fluxes of biological soil crusts. Remote Sensing of Environment, 2006, 101, 1-12.	11.0	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 O₃ and PAN deposition to plant leaves coated with organic/inorganic solution. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,239.	3.3	24
103	5-Oxo-prolinase in Nicotiana tabacum: catalytic properties and subcellular localization. Physiologia Plantarum, 1981, 52, 211-224.	5.2	23
104	Characterization of a membrane bound Î²-glucosidase responsible for the activation of oat leaf saponins. Phytochemistry, 1985, 24, 1941-1943.	2.9	22
105	Observations of atmospheric monoaromatic hydrocarbons at urban, semi-urban and forest environments in the Amazon region. Atmospheric Environment, 2016, 128, 175-184.	4.1	22
106	The uptake of gaseous sulphur dioxide by non-gelatinous lichens. New Phytologist, 1997, 135, 595-602.	7.3	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 FÃ¼r 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.	4.9	20

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109	Lagrangian dispersion of 222Rn, H2O and CO2 within Amazonian rain forest. Agricultural and Forest Meteorology, 2005, 132, 286-304.	4.8	20
110	Biological activities of furostanol saponins from Nicotiana tabacum. Phytochemistry, 1990, 29, 2485-2490.	2.9	18
111	The Amazonian boundary layer and mesoscale circulations. Geophysical Monograph Series, 2009, , 163-181.	0.1	18
112	Twin-cuvette measurement technique for investigation of dry deposition of O₃ and PAN to plant leaves under controlled humidity conditions. Atmospheric Measurement Techniques, 2016, 9, 599-617.	3.1	18
113	Influence of drainage status on soil and water chemistry, litter decomposition and soil respiration in central Amazonian forests on sandy soils. Revista Ambiente & Ãgua, 2011, 6, 6-29.	0.3	18
114	Sterols and sterylglycosides of oats (Avena sativa). Distribution in the leaf tissue and medium-induced glycosylation of sterols during protoplast isolation. Physiologia Plantarum, 1987, 70, 610-616.	5.2	17
115	Volatile organic compounds in the biosphereâ€“atmosphere system: a preface. Plant Biology, 2008, 10, 2-7.	3.8	17
116	Exchange of carbonyl sulfide (OCS) between soils and atmosphere under various CO₂ concentrations. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1343-1358.	3.0	17
117	Soil CO2 exchange in seven pristine Amazonian rain forest sites in relation to soil temperature. Agricultural and Forest Meteorology, 2014, 192-193, 96-107.	4.8	16
118	Design and field application of an automated cartridge sampler for VOC concentration and flux measurements. Journal of Environmental Monitoring, 2005, 7, 568.	2.1	15
119	Observations of the uptake of carbonyl sulfide (COS) by trees under elevated atmospheric carbon dioxide concentrations. Biogeosciences, 2012, 9, 2935-2945.	3.3	15
120	Development of chloro-etioplasts containing prolamellar bodies and steroidal saponins in suspension cultures ofNicotiana tabacum. Protoplasma, 1980, 104, 295-306.	2.1	14
121	Automated in situ analysis of volatile sulfur gases using a Sulfur Gas Analyser (SUGAR) based on cryogenic trapping and gas-chromatographic separation. International Journal of Environmental Analytical Chemistry, 2008, 88, 303-315.	3.3	14
122	Total OH Reactivity Changes Over the Amazon Rainforest During an El NiÃ±o Event. Frontiers in Forests and Global Change, 2018, 1, .	2.3	14
123	Aerosol measurement methods to quantify spore emissions from fungi and cryptogamic covers in the Amazon. Atmospheric Measurement Techniques, 2020, 13, 153-164.	3.1	14
124	Biochemical and Cytological Observations on Chloroplast Development V. Reaggregations of Prolamellar Body Tubules without Protein Participation. Zeitschrift FÃ¼r Pflanzenphysiologie, 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. Plant, Cell and Environment, 2005, 28, 287-301.	5.7	13
126	Preface "Earth observation for land-atmosphere interaction science". Biogeosciences, 2013, 10, 261-266.	3.3	13

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127	Isoprenoid emissions of trees in a tropical rainforest in Xishuangbanna, SW China. Atmospheric Environment, 2007, 41, 3748-3757.	4.1	12
128	Bioaerosols in the Amazon rain forest: temporal variations and vertical profiles of Eukarya, Bacteria, and Archaea. Biogeosciences, 2021, 18, 4873-4887.	3.3	12
129	Induction of steroidal hydroxylase activity by plant defence compounds in the filamentous fungus Cochliobolus lunatus. Chemosphere, 1999, 38, 853-863.	8.2	11
130	Biochemical and Cytological Observations on Chloroplast Development. Zeitschrift FÃ¼r Pflanzenphysiologie, 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. Physics and Chemistry of the Earth, 1999, 24, 725-728.	0.3	10
133	Exchange of Sulfur Gases between the Biosphere and the Atmosphere. , 1997, , 167-198.		10
134	Soil CO2 efflux in central Amazonia: environmental and methodological effects. Acta Amazonica, 2012, 42, 173-184.	0.7	10
135	Microclimatic conditions and water content fluctuations experienced by epiphytic bryophytes in an Amazonian rain forest. Biogeosciences, 2020, 17, 5399-5416.	3.3	10
136	Some Observations on the Saponin Accumulation in Oat Seedlings and on the Transformation of the Avenacosides to the Antibiotic 26-Desgluco-avenacosides. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1982, 37, 1095-1099.	1.4	9
137	[59] Separation of molecular species of plant glycolipids and phospholipids by high-performance liquid chromatography. Methods in Enzymology, 1987, 148, 650-661.	1.0	9
138	Coupled carbon-water exchange of the Amazon rain forest, II. Comparison of predicted and observed seasonal exchange of energy, CO₂, isoprene and ozone at a remote site in RondÃ´nia. Biogeosciences, 2005, 2, 255-275.	3.3	9
139	Coupled carbon-water exchange of the Amazon rain forest, I. Model description, parameterization and sensitivity analysis. Biogeosciences, 2005, 2, 231-253.	3.3	9
140	Microbial community responses determine how soilâ€“atmosphere exchange of carbonyl sulfide, carbon monoxide, and nitric oxide responds to soil moisture. Soil, 2019, 5, 121-135.	4.9	8
141	Saponin distribution in the etiolated leaf tissue and subcellular localization of steroidal saponins in etiolated protoplasts of oat (Avena sativa L.). Protoplasma, 1983, 118, 121-123.	2.1	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. Protoplasma, 1988, 146, 1-9.	2.1	6
144	C4-like photosynthesis and the effects of leaf senescence on C4-like physiology in Sesuvium sesuvioides (Aizoaceae). Journal of Experimental Botany, 2019, 70, 1553-1565.	4.8	6

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145	Prolamellar-body structure, composition of molecular species and amount of galactolipids in etiolated, greening and reetiolated primary leaves of oat, wheat and rye. Planta, 1986, 168, 453-460.	3.2	5
146	The relation of H 2 S release to SO 2 , fumigation of lichens. New Phytologist, 1997, 136, 703-711.	7.3	4
147	Biosphere â€" 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 Biogeosciences, 8, 2427â€"2435, 2011. Biogeosciences, 2011, 8, 2867-2867.	3.3	2
150	Assessing a New Clue to How Much Carbon Plants Take Up. Eos, 2017, , .	0.1	2
151	Ammonia Exchange between Terrestrial Plants and the Atmosphere Controlled by Plant Physiology: Compensation Point and CO2 Exchange. , 1997, , 445-449.		1
152	QUALITY CONTROL IN BIOGEOSCIENCES AND OTHER INTERACTIVE JOURNALS OF THE EUROPEAN GEOSCIENCES UNION. Limnology and Oceanography Bulletin, 2004, 13, 36-37.	0.4	0
153	Some Observations on the Artificial Adsorption of Monodesmosidic Steroidal Saponins to Prolamellar Bodies. , 1984, , 623-626.		0