Michel Legrand

List of Publications by Year in Descending Order

42 papers	2,469 citations	26 h-index	44 g-index
44 ext. papers	2,669 ext. citations	5.7 avg, IF	4.59 L-index

#	Paper	IF	Citations
42	Regional Characteristics of Atmospheric Sulfate Formation in East Antarctica Imprinted on 17O-Excess Signature. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033583	4.4	3
41	Causes of Enhanced Bromine Levels in Alpine Ice Cores During the 20th Century: Implications for Bromine in the Free European Troposphere. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD034246	4.4	0
40	Ammonium in Antarctic Aerosol: Marine Biological Activity Versus Long-Range Transport of Biomass Burning. *Geophysical Research Letters*, **2021**, 48, e2021GL092826	4.9	
39	Anthropogenic Impacts on Tropospheric Reactive Chlorine Since the Preindustrial. *Geophysical Research Letters*, **2021**, 48, e2021GL093808	4.9	2
38	Alpine Ice-Core Evidence of a Large Increase in Vanadium and Molybdenum Pollution in Western Europe During the 20th Century. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033211	4.4	3
37	Cadmium Pollution From Zinc-Smelters up to Fourfold Higher Than Expected in Western Europe in the 1980s as Revealed by Alpine Ice. *Geophysical Research Letters*, **2020**, 47, e2020GL087537	4.9	2
36	Homogeneous sulfur isotope signature in East Antarctica and implication for sulfur source shifts through the last glacial-interglacial cycle. *Scientific Reports*, **2019**, 9, 12378	4.9	5
35	Lead and Antimony in Basal Ice From Col du Dome (French Alps) Dated With Radiocarbon: A Record of Pollution During Antiquity. *Geophysical Research Letters*, **2019**, 46, 4953-4961	4.9	20
34	The Elbrus (Caucasus, Russia) ice core record – Part 1: reconstruction of past anthropogenic sulfur emissions in south-eastern Europe. *Atmospheric Chemistry and Physics*, **2019**, 19, 14119-14132	6.8	6
33	A New Sample Preparation System for Micro-14C Dating of Glacier Ice with a First Application to a High Alpine Ice Core from Colle Gnifetti (Switzerland). *Radiocarbon*, **2018**, 60, 517-533	4.6	12
32	Alpine ice evidence of a three-fold increase in atmospheric iodine deposition since 1950 in Europe due to increasing oceanic emissions. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12136-12141	11.5	34
31	Year-round records of bulk and size-segregated aerosol composition in central Antarctica (Concordia site) – Part 1: Fractionation of sea-salt particles. *Atmospheric Chemistry and Physics*, **2017**, 17, 14039-14054	6.8	29
30	Year-round record of bulk and size-segregated aerosol composition in central Antarctica (Concordia site) – Part 2: Biogenic sulfur (sulfate and methanesulfonate) aerosol. *Atmospheric Chemistry and Physics*, **2017**, 17, 14055-14073	6.8	29
29	Seasonal variations of triple oxygen isotopic compositions of atmospheric sulfate, nitrate, and ozone at Dumont dŒUrville, coastal Antarctica. *Atmospheric Chemistry and Physics*, **2017**, 17, 3713-3727	6.8	26
28	Inter-annual variability of surface ozone at coastal (Dumont dŒUrville, 2004–2014) and inland (Concordia, 2007–2014) sites in East Antarctica. *Atmospheric Chemistry and Physics*, **2016**, 16, 8053-8069	6.8	23
27	Oxygen isotope mass balance of atmospheric nitrate at Dome C, East Antarctica, during the OPALE campaign. *Atmospheric Chemistry and Physics*, **2016**, 16, 2659-2673	6.8	16
26	Boreal fire records in Northern Hemisphere ice cores: a review. *Climate of the Past*, **2016**, 12, 2033-2059	3.9	58

25	Year-round records of sea salt, gaseous, and particulate inorganic bromine in the atmospheric boundary layer at coastal (Dumont dŒUrville) and central (Concordia) East Antarctic sites. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 997-1023	4.4	47
24	First investigations of IO, BrO, and NO2 summer atmospheric levels at a coastal East Antarctic site using mode-locked cavity enhanced absorption spectroscopy. *Geophysical Research Letters*, **2013**, 40, 791-796	4.9	28
23	Major 20th century changes of the content and chemical speciation of organic carbon archived in Alpine ice cores: Implications for the long-term change of organic aerosol over Europe. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 3879-3890	4.4	27
22	Towards a quasi-complete reconstruction of past atmospheric aerosol load and composition (organic and inorganic) over Europe since 1920 inferred from Alpine ice cores. *Climate of the Past*, **2013**, 9, 1403-1416	3.9	37
21	Water-soluble organic carbon in snow and ice deposited at Alpine, Greenland, and Antarctic sites: a critical review of available data and their atmospheric relevance. *Climate of the Past*, **2013**, 9, 2195-2211	3.9	59
20	Seasonality of sulfur species (dimethyl sulfide, sulfate, and methanesulfonate) in Antarctica: Inland versus coastal regions. *Journal of Geophysical Research*, **2008**, 113,		67
19	Interannual variability of dimethylsulfide in air and seawater and its atmospheric oxidation by-products (methanesulfonate and sulfate) at Dumont dŒUrville, coastal Antarctica (1999–2003). *Journal of Geophysical Research*, **2007**, 112,		38
18	Climatology of aerosol composition (organic versus inorganic) at nonurban sites on a west-east transect across Europe. *Journal of Geophysical Research*, **2007**, 112,		182
17	Modeling historical long-term trends of sulfate, ammonium, and elemental carbon over Europe: A comparison with ice core records in the Alps. *Journal of Geophysical Research*, **2007**, 112,		52
16	Major 20th century changes of carbonaceous aerosol components (EC, WinOC, DOC, HULIS, carboxylic acids, and cellulose) derived from Alpine ice cores. *Journal of Geophysical Research*, **2007**, 112,		72
15	A seasonally resolved alpine ice core record of nitrate: Comparison with anthropogenic inventories and estimation of preindustrial emissions of NO in Europe. *Journal of Geophysical Research*, **2003**, 108,		44
14	Improvement and characterization of an automatic aerosol sampler for remote (glacier) sites. *Atmospheric Environment*, **2002**, 36, 1221-1232	5.3	18
13	Seasonally resolved Alpine and Greenland ice core records of anthropogenic HCl emissions over the 20th century. *Journal of Geophysical Research*, **2002**, 107, ACH 4-1		25
12	Year-round records of bulk and size-segregated aerosol composition and HCl and HNO3 levels in the Dumont dŒUrville (coastal Antarctica) atmosphere: Implications for sea-salt aerosol fractionation in the winter and summer. *Journal of Geophysical Research*, **2002**, 107, ACH 20-1		80
11	Sulfate trends in a Col du Dôme (French Alps) ice core: A record of anthropogenic sulfate levels in the European midtroposphere over the twentieth century. *Journal of Geophysical Research*, **2001**, 106, 31991-32004		60
10	Causes of enhanced fluoride levels in Alpine ice cores over the last 75 years: Implications for the atmospheric fluoride budget. *Journal of Geophysical Research*, **2001**, 106, 12619-12632		17
9	. *Tellus, Series B: Chemical and Physical Meteorology*, **2000**, 52, 993-1012	3.3	26
8	Col du Dôme (Mt Blanc Massif, French Alps) suitability for ice-core studies in relation with past atmospheric chemistry over Europe. *Tellus, Series B: Chemical and Physical Meteorology*, **2000**, 52, 993-1012	3.3	24

7	Loss of volatile acid species from upper firn layers at Vostok, Antarctica. *Journal of Geophysical Research*, **1999**, 104, 3423-3431		98
6	Antarctic aerosol and snowfall chemistry: implications for deep Antarctic ice-core chemistry. *Annals of Glaciology*, **1999**, 29, 66-72	2.5	39
5	Sea-salt aerosol in coastal Antarctic regions. *Journal of Geophysical Research*, **1998**, 103, 10961-10974		231
4	Ammonium in coastal Antarctic aerosol and snow: Role of polar ocean and penguin emissions. *Journal of Geophysical Research*, **1998**, 103, 11043-11056		109
3	Sulfur-containing species (sulfate and methanesulfonate) in coastal Antarctic aerosol and precipitation. *Journal of Geophysical Research*, **1998**, 103, 10975-10990		177
2	Glaciochemistry of polar ice cores: A review. *Reviews of Geophysics*, **1997**, 35, 219-243	23.1	503
1	Large perturbations of ammonium and organic acids content in the summit-Greenland Ice Core. Fingerprint from forest fires?. *Geophysical Research Letters*, **1992**, 19, 473-475	4.9	141