Francois-Marie A Breon

List of Publications by Year
in descending order

86 papers	7,526 citations	71102 41 h-index	56724 83 g-index
117 all docs	117 docs citations	117 times ranked	8818 citing authors

#	Article	IF	Citations
1	Impact of Lockdowns and Winter Temperatures on Natural Gas Consumption in Europe. Earth's Future, 2022, 10, .	6.3	10
2	Assessing the Effectiveness of an Urban CO₂ Monitoring Network over the Paris Region through the COVID-19 Lockdown Natural Experiment. Environmental Science & Technology, 2022, 56, 2153-2162.	10.0	20
3	A local- to national-scale inverse modeling system to assess the potential of spaceborne CO₂ measurements for the monitoring of anthropogenic emissions. Atmospheric Measurement Techniques, 2021, 14, 403-433.	3.1	3
4	XCO₂ estimates from the OCO-2 measurements using a neural network approach. Atmospheric Measurement Techniques, 2021, 14, 117-132.	3.1	11
5	Sensitivity to the sources of uncertainties in the modeling of atmospheric CO₂ concentration within and in the vicinity of Paris. Atmospheric Chemistry and Physics, 2021, 21, 10707-10726.	4.9	14
6	Suivi atmosphÃ©rique des Ã©missions de CO2 de la rÃ©gion parisienne. La MÃ©tÃ©orologie, 2021, , 030.	0.5	3
7	Near-real-time monitoring of global CO2 emissions reveals the effects of the COVID-19 pandemic. Nature Communications, 2020, 11, 5172.	12.8	420
8	Carbon Monitor, a near-real-time daily dataset of global CO2 emission from fossil fuel and cement production. Scientific Data, 2020, 7, 392.	5.3	115
9	The potential of a constellation of low earth orbit satellite imagers to monitor worldwide fossil fuel CO2 emissions from large cities and point sources. Carbon Balance and Management, 2020, 15, 18.	3.2	9
10	Local Anomalies in the Columnâ€Averaged Dry Air Mole Fractions of Carbon Dioxide Across the Globe During the First Months of the Coronavirus Recession. Geophysical Research Letters, 2020, 47, e2020GL090244.	4.0	31
11	Simulating Multi-Directional Narrowband Reflectance of the Earthâ€™s Surface Using ADAM (A Surface) Tj ETQq1 1 0.784314 rgBT /Ov	4.0	8
12	The use of the 1.27â€‰Âµm O₂ absorption band for greenhouse gas monitoring from space and application to MicroCarb. Atmospheric Measurement Techniques, 2020, 13, 3329-3374.	3.1	33
13	PMIF v1.0: assessing the potential of satellite observations to constrain CO₂ emissions from large cities and point sources over the globe using synthetic data. Geoscientific Model Development, 2020, 13, 5813-5831.	3.6	16
14	Revisiting Pseudo Invariant Calibration Sites (PICS) Over Sand Deserts for Vicarious Calibration of Optical Imagers at 20 km and 100 km Scales. Remote Sensing, 2019, 11, 1166.	4.0	28
15	An improved algorithm of cloud droplet size distribution from POLDER polarized measurements. Remote Sensing of Environment, 2019, 228, 61-74.	11.0	19
16	Analysis of temporal and spatial variability of atmospheric CO₂ concentration within Paris from the GreenLITEâ„¢ laser imaging experiment. Atmospheric Chemistry and Physics, 2019, 19, 13809-13825.	4.9	17
17	Development of a snow kernel to better model the anisotropic reflectance of pure snow in a kernel-driven BRDF model framework. Remote Sensing of Environment, 2019, 221, 198-209.	11.0	57
18	A global map of emission clumps for future monitoring of fossil fuel CO₂ emissions from space. Earth System Science Data, 2019, 11, 687-703.	9.9	19

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19	Diurnal, synoptic and seasonal variability of atmospheric CO₂ in the Paris megacity area. Atmospheric Chemistry and Physics, 2018, 18, 3335-3362.	4.9	40
20	Error Budget of the MEthane Remote LIdar missioN and Its Impact on the Uncertainties of the Global Methane Budget. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,766.	3.3	23
21	The potential of satellite spectro-imagery for monitoring CO₂ emissions from large cities. Atmospheric Measurement Techniques, 2018, 11, 681-708.	3.1	45
22	The influence of spatial resolution on the angular variation patterns of optical reflectance as retrieved from MODIS and POLDER measurements. Remote Sensing of Environment, 2018, 215, 371-385.	11.0	28
23	Evaluation of the WRF-UCM mesoscale model and ECMWF global operational forecasts over the Paris region in the prospect of tracer atmospheric transport modeling. Elementa, 2018, 6, .	3.2	13
24	A BRDFâ€“BPDF database for the analysis of Earth target reflectances. Earth System Science Data, 2017, 9, 31-45.	9.9	58
25	Evaluation of the aerosol vertical distribution in global aerosol models through comparison against CALIOP measurements: AeroCom phase II results. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7254-7283.	3.3	80
26	A method for improving hotspot directional signatures in BRDF models used for MODIS. Remote Sensing of Environment, 2016, 186, 135-151.	11.0	85
27	A sub km resolution global database of surface reflectance and emissivity based on 10-years of MODIS data. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 122, 222-235.	11.1	3
28	The first 1-year-long estimate of the Paris region fossil fuel CO₂ emissions based on atmospheric inversion. Atmospheric Chemistry and Physics, 2016, 16, 14703-14726.	4.9	87
29	An attempt at estimating Paris area CO₂ emissions from atmospheric concentration measurements. Atmospheric Chemistry and Physics, 2015, 15, 1707-1724.	4.9	169
30	Using satellite data to improve the leaf phenology of a global terrestrial biosphere model. Biogeosciences, 2015, 12, 7185-7208.	3.3	85
31	Impact of cloud horizontal inhomogeneity and directional sampling on the retrieval of cloud droplet size by the POLDER instrument. Atmospheric Measurement Techniques, 2015, 8, 4931-4945.	3.1	19
32	Assessing climate change impacts on European wind energy from ENSEMBLES high-resolution climate projections. Climatic Change, 2015, 128, 99-112.	3.6	171
33	Declining uncertainty in transient climate response as CO2 forcing dominates future climateÂchange. Nature Geoscience, 2015, 8, 181-185.	12.9	38
34	Measuring the Directional Variations of Land Surface Reflectance From MODIS. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 4638-4649.	6.3	12
35	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	3.3	189
36	Observation of tropospheric ÎD by IASI over western Siberia: comparison with a general circulation model. Atmospheric Measurement Techniques, 2014, 7, 1581-1595.	3.1	12

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37	Forest summer albedo is sensitive to species and thinning: how should we account for this in Earth system models?. Biogeosciences, 2014, 11, 2411-2427.	3.3	29
38	A posteriori calculation of Î´¹⁸O and ÎD in atmospheric water vapour from ground-based near-infrared FTIR retrievals of H₂¹⁶O, H₂¹⁸O, and HD¹⁶O. Atmospheric Measurement Techniques, 2014, 7, 2567-2580.	3.1	19
39	Regional climate model simulations indicate limited climatic impacts by operational and planned European wind farms. Nature Communications, 2014, 5, 3196.	12.8	90
40	Regional inversion of CO₂ ecosystem fluxes from atmospheric measurements: reliability of the uncertainty estimates. Atmospheric Chemistry and Physics, 2013, 13, 9039-9056.	4.9	60
41	Response to Comment on â€œSurface Urban Heat Island Across 419 Global Big Citiesâ€• Environmental Science & Technology, 2012, 46, 6889-6890.	10.0	15
42	Surface Urban Heat Island Across 419 Global Big Cities. Environmental Science & Technology, 2012, 46, 696-703.	10.0	864
43	Application of the CALIOP layer product to evaluate the vertical distribution of aerosols estimated by global models: AeroCom phase I results. Journal of Geophysical Research, 2012, 117, .	3.3	170
44	Correction of MODIS surface reflectance time series for BRDF effects. Remote Sensing of Environment, 2012, 125, 1-9.	11.0	96
45	Sampling strategy and climatic implications of tree-ring stable isotopes on the southeast Tibetan Plateau. Earth and Planetary Science Letters, 2011, 301, 307-316.	4.4	54
46	An evaluation of satellite aerosol products against sunphotometer measurements. Remote Sensing of Environment, 2011, 115, 3102-3111.	11.0	130
47	The specific surface area and chemical composition of diamond dust near Barrow, Alaska. Journal of Geophysical Research, 2011, 116, .	3.3	27
48	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. Current Opinion in Environmental Sustainability, 2010, 2, 225-230.	6.3	73
49	Analysis of aerosolâ€cloud interaction from multiâ€sensor satellite observations. Geophysical Research Letters, 2010, 37, .	4.0	92
50	A static Fourier transform spectrometer for atmospheric sounding: concept and experimental implementation. Optics Express, 2010, 18, 8311.	3.4	36
51	Spaceborne remote sensing of greenhouse gas concentrations. Comptes Rendus - Geoscience, 2010, 342, 412-424.	1.2	38
52	The Earth as an extrasolar planet: the vegetation spectral signature today and during the last Quaternary climatic extrema. International Journal of Astrobiology, 2009, 8, 81-94.	1.6	48
53	Polarized reflectances of natural surfaces: Spaceborne measurements and analytical modeling. Remote Sensing of Environment, 2009, 113, 2642-2650.	11.0	141
54	On the accuracy of the CO₂ surface fluxes to be estimated from the GOSAT observations. Geophysical Research Letters, 2009, 36, .	4.0	80

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55	Aerosol vertical distribution in dust outflow over the Atlantic: Comparisons between GEOSâ€Chem and Cloudâ€Aerosol Lidar and Infrared Pathfinder Satellite Observation (CALIPSO). Journal of Geophysical Research, 2008, 113, .	3.3	76
56	Contribution of the Orbiting Carbon Observatory to the estimation of CO2sources and sinks: Theoretical study in a variational data assimilation framework. Journal of Geophysical Research, 2007, 112, .	3.3	301
57	A satelliteâ€•and modelâ€based assessment of the 2003 Russian fires: Impact on the Arctic region. Journal of Geophysical Research, 2007, 112, .	3.3	77
58	Injection height of biomass burning aerosols as seen from a spaceborne lidar. Geophysical Research Letters, 2007, 34, .	4.0	166
59	Simultaneous retrieval of aerosol and surface properties from a combination of AERONET and satellite data. Remote Sensing of Environment, 2007, 107, 90-108.	11.0	97
60	Normalization of the directional effects in NOAAâ€“AVHRR reflectance measurements for an improved monitoring of vegetation cycles. Remote Sensing of Environment, 2006, 102, 402-413.	11.0	49
61	CLIMATE: How Do Aerosols Affect Cloudiness and Climate?. Science, 2006, 313, 623-624.	12.6	33
62	Variability of biome reflectance directional signatures as seen by POLDER. Remote Sensing of Environment, 2005, 98, 80-95.	11.0	149
63	Horizontally Oriented Plates in Clouds. Journals of the Atmospheric Sciences, 2004, 61, 2888-2898.	1.7	82
64	CO2column averaged mixing ratio from inversion of ground-based solar spectra. Journal of Geophysical Research, 2004, 109, .	3.3	22
65	Spaceborne estimate of atmospheric CO_2 column by use of the differential absorption method: error analysis. Applied Optics, 2003, 42, 3595.	2.1	86
66	Aerosol Effect on Cloud Droplet Size Monitored from Satellite. Science, 2002, 295, 834-838.	12.6	380
67	Analysis of hot spot directional signatures measured from space. Journal of Geophysical Research, 2002, 107, AAC 1-1.	3.3	86
68	Variability of tropical upper tropospheric humidity 1979-1998. Journal of Geophysical Research, 2001, 106, 32271-32281.	3.3	41
69	Evaluation of aerosol indirect radiative forcing in MIRAGE. Journal of Geophysical Research, 2001, 106, 5317-5334.	3.3	97
70	<title>Assessment of the marine biota DMS-cloud climate hypothesis using remotely sensed data and an ocean general circulation model (OGCM)</title>. , 2000, 4172, 102.		1
71	Calibration of the Meteosat water vapor channel using collocated NOAA/HIRS 12 measurements. Journal of Geophysical Research, 2000, 105, 11925-11933.	3.3	23
72	Global distribution of cloud droplet effective radius from POLDER polarization measurements. Geophysical Research Letters, 2000, 27, 4065-4068.	4.0	35

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73	Evidence of Atmospheric Contamination on the Measurement of the Spectral Response of theGMS-5Water Vapor Channel. Journal of Atmospheric and Oceanic Technology, 1999, 16, 1851-1853.	1.3	8
74	Cloud Detection from the Spaceborne POLDER Instrument and Validation against Surface Synoptic Observations. Journal of Applied Meteorology and Climatology, 1999, 38, 777-785.	1.7	80
75	Comment on Rayleigh-scattering calculations for the terrestrial atmosphere. Applied Optics, 1998, 37, 428.	2.1	6
76	Cloud droplet effective radius from spaceborne polarization measurements. Geophysical Research Letters, 1998, 25, 1879-1882.	4.0	127
77	Remote sensing of high-latitude wetlands using polarized wide-angle imagery. , 1997, , .		0
78	Retrieval of land surface parameters from airborne POLDER bidirectional reflectance distribution function during HAPEX-Sahel. Journal of Geophysical Research, 1997, 102, 11201-11218.	3.3	49
79	Land Surface Pressure Estimate from Measurements in the Oxygen A Absorption Band. Journal of Applied Meteorology and Climatology, 1996, 35, 69-77.	1.7	36
80	Angular signatures of surface reflectances from airborne POLDER data. Remote Sensing of Environment, 1996, 57, 97-107.	11.0	51
81	Estimating PAR absorbed by vegetation from bidirectional reflectance measurements. Remote Sensing of Environment, 1995, 51, 375-384.	11.0	973
82	Polarized reflectance of bare soils and vegetation: measurements and models. IEEE Transactions on Geoscience and Remote Sensing, 1995, 33, 487-499.	6.3	38
83	Global Shortwave Energy Budget at the Earth's Surface from ERBE Observations. Journal of Climate, 1994, 7, 309-324.	3.2	16
84	Reflectance of Broken Cloud Fields: Simulation and Parameterization. Journals of the Atmospheric Sciences, 1992, 49, 1221-1232.	1.7	40
85	Downwelling Longwave Irradiance at the Ocean Surface: An Assessment of In Situ Measurements and Parameterizations. Journal of Applied Meteorology and Climatology, 1991, 30, 17-31.	1.7	19
86	Re: First answer to the reviewer comment. , 0, , .		0