

# Fabien Gibert

## List of Publications by Year in descending order

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27  
papers

722  
citations

567281

15  
h-index

526287

27  
g-index

28  
all docs

28  
docs citations

28  
times ranked

678  
citing authors

#	ARTICLE	IF	CITATIONS
1	Side-line tunable laser transmitter for differential absorption lidar measurements of CO <sub>2</sub> : design and application to atmospheric measurements. <i>Applied Optics</i> , 2008, 47, 944.	2.1	107
2	Two-micrometer heterodyne differential absorption lidar measurements of the atmospheric CO <sub>2</sub> mixing ratio in the boundary layer. <i>Applied Optics</i> , 2006, 45, 4448.	2.1	97
3	MERLIN: A French-German Space Lidar Mission Dedicated to Atmospheric Methane. <i>Remote Sensing</i> , 2017, 9, 1052.	4.0	88
4	2- $\frac{1}{4}$ m high-power multiple-frequency single-mode Q-switched Ho:YLF laser for DIAL application. <i>Applied Physics B: Lasers and Optics</i> , 2014, 116, 967-976.	2.2	66
5	Vertical 2- $\frac{1}{4}$ m Heterodyne Differential Absorption Lidar Measurements of Mean CO <sub>2</sub> Mixing Ratio in the Troposphere. <i>Journal of Atmospheric and Oceanic Technology</i> , 2008, 25, 1477-1497.	1.3	50
6	Complementary study of differential absorption lidar optimization in direct and heterodyne detections. <i>Applied Optics</i> , 2006, 45, 4898.	2.1	36
7	Retrieval of average CO <sub>2</sub> fluxes by combining in situ CO <sub>2</sub> measurements and backscatter lidar information. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	33
8	A complete study of CO <sub>2</sub> line parameters around 4845cm <sup>-1</sup> for Lidar applications. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2008, 109, 426-434.	2.3	31
9	Laser diode absorption spectroscopy for accurate CO <sub>2</sub> line parameters at 2 $\frac{1}{4}$ m: consequences for space-based DIAL measurements and potential biases. <i>Applied Optics</i> , 2009, 48, 5475.	2.1	27
10	2- $\frac{1}{4}$ m double-pulse single-frequency Tm: fiber laser pumped Ho:YLF laser for a space-borne CO <sub>2</sub> lidar. <i>Applied Optics</i> , 2018, 57, 10370.	1.8	25
11	Error Budget of the MEthane Remote Lidar mission and Its Impact on the Uncertainties of the Global Methane Budget. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 11,766.	3.3	23
12	Evaluation of a HgCdTe e-APD based detector for 2- $\frac{1}{4}$ m CO <sub>2</sub> DIAL application. <i>Applied Optics</i> , 2017, 56, 7577.	1.8	22
13	Tunable diode laser measurement of pressure-induced shift coefficients of CO <sub>2</sub> around 2.05 $\frac{1}{4}$ m for Lidar application. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2011, 112, 1411-1419.	2.3	21
14	Internal gravity waves convectively forced in the atmospheric residual layer during the morning transition. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011, 137, 1610-1624.	2.7	18
15	On the Correlation between Convective Plume Updrafts and Downdrafts, Lidar Reflectivity and Depolarization Ratio. <i>Boundary-Layer Meteorology</i> , 2007, 125, 553-573.	2.3	17
16	Can CO <sub>2</sub> Turbulent Flux Be Measured by Lidar? A Preliminary Study. <i>Journal of Atmospheric and Oceanic Technology</i> , 2011, 28, 365-377.	1.3	16
17	Inter-comparison of 2- $\frac{1}{4}$ m Heterodyne Differential Absorption Lidar, Laser Diode Spectrometer, LICOR NDIR analyzer and flask measurements of near-ground atmospheric CO <sub>2</sub> mixing ratio. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 71, 1914-1921.	3.9	9
18	Averaging bias correction for the future space-borne methane IPDA lidar mission MERLIN. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 5865-5884.	3.1	9

#	ARTICLE	IF	CITATIONS
19	A Case Study of CO <sub>2</sub> , CO and Particles Content Evolution in the Suburban Atmospheric Boundary Layer Using a 2- $\hat{1}$ / <sub>4</sub> m Doppler DIAL, a 1- $\hat{1}$ / <sub>4</sub> m Backscatter Lidar and an Array of In-situ Sensors. Boundary-Layer Meteorology, 2008, 128, 381-401.	2.3	6
20	An <i>a Posteriori</i> Method Based on Photo-Acoustic Cell Information to Correct for Lidar Transmitter Spectral Shift: Application to Atmospheric CO <sub>2</sub> Differential Absorption Lidar Measurements. Applied Spectroscopy, 2007, 61, 1068-1075.	2.2	4
21	Performances of a HGCDTE APD based direct detection lidar at 2 $\hat{1}$ / <sub>4</sub> m. Application to dial measurements. EPJ Web of Conferences, 2018, 176, 01001.	0.3	4
22	Optical Energy Variability Induced by Speckle: The Cases of MERLIN and CHARM-F IPDA Lidar. Atmosphere, 2019, 10, 540.	2.3	4
23	2- $\hat{1}$ / <sub>4</sub> m Coherent DIAL for CO <sub>2</sub> , H <sub>2</sub> O and Wind Field Profiling in the Lower Atmosphere: Instrumentation and Results. EPJ Web of Conferences, 2016, 119, 03005.	0.3	2
24	Numerical Simulations of a 2.05 $\hat{1}$ / <sub>4</sub> m Q-switched Ho:YLF Laser for CO <sub>2</sub> IPDA Space Remote Sensing. EPJ Web of Conferences, 2016, 119, 05003.	0.3	1
25	Development and Validation of an End-to-End Simulator and Gas Concentration Retrieval Processor Applied to the MERLIN Lidar Mission. Remote Sensing, 2021, 13, 2679.	4.0	1
26	2- $\hat{1}$ / <sub>4</sub> m pulsed Holmium laser for a future CO <sub>2</sub> / H <sub>2</sub> O space lidar mission. , 2019, , .		1
27	Impact of Meteorological Uncertainties in the Methane Retrieval Ground Segment of the MERLIN Lidar Mission. Atmosphere, 2022, 13, 431.	2.3	1