Personal Data

Alexandre Caseiro

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citizenship: portuguese

Date and place of birth: May 24th, 1979 in Liège, Belgium

General quality indicators of scientific research

Patent: 1 (under evaluation by the German Patents Office)

Articles published in peer-reviewed journals: 37 (5 as first author, 26 in Q1 journals)

> Currently working on 2 publications, submission planned for the 1st half of 2019 (first author, Q1)

Citations (Google scholar): 3033

h-index (Google scholar): 23

i10-index (Google scholar): 28

Co-author of

> book chapters: 1

> Scientific-technical reports: 10

Works submitted at Conferences (posters and talks): 49 (as presenting or first author: 27)

> Published in Proceedings: 37 (as presenting or first author: 13)

Works submitted at Schools, Workshops and Seminars: 2

Invited speaker in Schools, Workshops and Seminars: 3

> Published in proceedings: 1

MSc thesis evaluation board: 4

PhD thesis evaluation board: 1

BSc courses taught: 9

BSc final works supervised: 2

Academic education and training

July 6 – 11, 2014	COST action ES1004 "European framework for online integrated air quality and meteorology modelling (EuMetChem)", Young Scientist summer School, Aveiro, Portugal, 3 ECTS
April 22, 2014	Good Practices Contributing to an Effective National GHG Inventory System, World Resources Institute, Webinar ID: 395-239-071
October 21 – 25, 2013	Course on Biofuels and Sustainability, Department of Environment and Planning, University of Aveiro, Portugal
July 25 – August 21, 2013	Applied Remote Sensing Training – Air Quality (online, 5 sessions), NASA – Goddard Space Flight Center
September 10 – 12, 2012	Summer Institute on Global Environmental Issues – FLAD, Lisbon, Portugal
November 9 – 10, 2011	Block Course on Remote Sensing of Air Contaminants, Center of Environment and Sustainability Research (CENSE) – Faculty of Science and Technology, Universidade Nova de Lisboa, Portugal
August 16 – 19, 2009	Wilhelm and Else Heraeus Seminar – Determination of Atmospheric Aerosol Properties Using Satellite Measurements, Physikzentrum Bad Honnef, Germany.
June 23 – 28, 2008	Summer School on Organic Aerosols, Gothenburg Chalmers University, Sweden.
February 2004 – November 2008	PhD on atmospheric aerosol (*Composition of the european atmospheric aerosol*) at the University of Aveiro (practical work at the Technical University of Vienna).
September 2006	PEER/METIER training course on Remote Sensing of the Atmosphere, European Commission Joint Research Center, Institute for Environment and sustainability, Ispra, Italy.
September 1997 – September 2003	Graduate studies on environmental engineering, University of Aveiro (5-years study).
	Final thesis: Responsible for SO_2, NO_x, O_3, CO as well as some $PM_{10}/PM_{2.5}$ measurements and data handling for the SAPPHIRE and CARBOSOL european projects. (October 2002 – September 2003)
	Erasmus exchange student, Tampere University of Technology, Finland. (August 2001 – February 2002)

Professional experience and capabilities

October 2017 – present	Post-Doc researcher at the Max Planck Institute for Chemistry, Mainz, Germany.
	Main project: FireSense (http://www.mpic.de/forschung/atmosphaerenchemie/gruppe-kaiser/firesense.html) – Development of an improved fire information system by integrating sensor derived data from drones, planes and satellites with improved algorithms.
March 2015 – September 2017	Post-Doc researcher at the Max Planck Institute for Chemistry, Mainz, Germany.
	Main project: GFS3 (http://www.mpic.de/forschung/atmosphaerenchemie/gruppe-kaiser/gasflares.html) – Development of a methodology to detect gas flares and compute their emissions using remote sensed data (BIRD, FireBIRD,

	AATSR and SLSTR, among others).
September 2011 – September 2012	Guest associate professor at the Tomar Technology College (Polytechnic Institute of Tomar) (ESTT-IPT).
	Teaching *Environmental Management Systems, Atmospheric Pollution* and *Gaseous Effluents Treatment Systems* to the Environmental and Biological Engineering Course.
February 2011 – September 2014	Technician at UVW, Environmental Systems Modelling Centre.
	Conducting atmospheric dispersion studies using a diversity of local to regional dispersion models. Development of task automation scripts in R, perl and bash. Development of tools to evaluate air quality based on remote sensing data. SIG operation. Analysis of climate model outputs (IPCC) with R.
January 2009 – February 2011	Post-Doc grant from the Portuguese foundation for science and technology.
	Development of a methodology to determine organic S and N compounds in the atmospheric aerosol.
	Participation (atmospheric sample analysis, field work) in the projects CV-Dust, PAHLIS, BIOEMI, EUCAARI, SINPHONIE.
September 2008 – September 2009	Associate professor at the Technology and Management College of Oliveira do Hospital (Polytechnic Institute of Coimbra) (ESTGOH-IPC).
	Teaching *Hydraulics*, *Sustainable Construction*, *Waste Management* and *Environment and Nature Protection* to the Civil Engineering course; as well as *Organizations Management* to the Informatics course.
January 2008 – December 2008	PhD grant from the Portuguese foundation for science and technology.
May – December 2007	Scientific Research grant, University of Aveiro.
	Responsible for Ion Chromatography measurements on atmospheric aerosols. Participation (atmospheric sample analysis, field work) in the projects PAHLIS, BIOEMI, EUCAARI.
March 2006 – March 2007	University assistant at the Technical University of Vienna, Institute of Chemical Technologies and Analytics, working groups of Atmospheric Analytics and Environmental Analytical Chemistry.
	Responsible for the Ion Chromatography exercise of the Analytical Chemistry course.
	Responsible for the analysis of saccharidic compounds in the atmospheric aerosol for the „AQUELLA" and „CARBOSOL" projects (HPAE-PAD for carbohydrates, enzymatic determination for cellulose).
	Collaboration in the „AEROWOOD" project (Paul Scherrer Institut, Villigen, Switzerland).
May 2005-February 2006	Project assistant at the Technical University of Vienna, Institute of Chemical Technologies and Analytics, working groups of Atmospheric Analytics and Environmental Analytical Chemistry.
	Responsible for the analysis of saccharidic compounds in the atmospheric aerosol for the „AQUELLA" and „CARBOSOL" projects (HPAE-PAD for carbohydrates, enzymatic determination for cellulose).
May 2004-April 2005	Marie Curie Scholarship (from the EU Commission) at the Technical University of Vienna, Institute of Chemical Technologies and Analytics, working groups of Atmospheric Analytics and Environmental Analytical Chemistry.

Responsible for the analysis of saccharidic compounds in the atmospheric aerosol for the „AQUELLA" and „CARBOSOL" projects (HPAE-PAD for carbohydrates, enzymatic determination for cellulose).

October 2003 – January 2004	Starting Scientific Research grant (Bolsa de Iniciação à Investigação Científica), University of Aveiro.

Responsible for SO_2, NO_x, O_3, CO as well as some PM_{10}/$PM_{2.5}$ measurements and data handling for the „SAPPHIRE" European project.

Skills and competences

Technical	Experience with atmospheric dispersion models, indoor air quality models, meteorological prognostic and environmental risk: TAPM, AERMOD, CALPUFF, AUSTAL2000, CALROADS, SLAB, EDMS, CONTAM and ALOHA.

Experience with atmospheric pollutants analysers, aerosol sampling systems and their data acquisition systems.

Experience with ion chromatography systems, particularly with High pH Anion Exchange Chromatography – Pulsed Amperometric Detection. Good knowledge of chromatography software: Chromeleon (Dionex) and PeakFit (Systat).

Experience with delignification and saccharification enzymatic methods and XAD/DAX resins.

GIS: some ArcGIS and QuantumGIS, but mainly R and GDAL/OGR.

Experience with multivariate data analysis (Principal Components Analysis/Multilinear Regression and Postive Matrix Factorization) and with the model Chemical Mass Balance.

Basic knowledge of SPSS, good knowledge of the R statistical software.

Experience of remote sensing data processing and manipulation (Levels 1, 2 and 3) and GCM outputs manipulation under diverse formats (grib, NetCDF, HDF, …), mainly with R and python.

Languages	French and Portuguese (first languages), English (very good oral and writing skills); German and Spanish (good oral and writing skills); Dutch (regular); Finnish (basic).
IT	Good knowledge of *moodle* tools.

Good knowledge of Windows® tools (MS Word, Excel, Access, ...); advanced knowledge of Linux systems (bash, zsh, etc.); good knowledge of LaTeX.

Programming and scripting:

R: statistical testing, GIS (*raster, sp, rgeos, rgdal, ...*), data analysis, visualization and modelling, literate programming (*knitr*);

bash / zsh: task automation, simple data manipulation (with *grep, (g)awk, sed*, ...), GIS (with *GDAL/OGR*);

python: manipulation, analysis and visualization of large datasets (scientific programming with *scipy/numpy, matplotlib*, parallel processing and object-oriented programming, among others), image processing (*imageio*), XML processing (*lxml*).

perl: data manipulation;

pascal and *FORTRAN*: basic knowledge.

Academic year 2002/2003	Environmental Engineering fifth year student's representative, University of Aveiro.
December 2000 – April 2004	Portuguese Red Cross volunteer in Marinhas, Esposende (Portugal).
April 2000	Participation in the ESGIRA MARIA project: Integrated Management System for the Aveiro Lagoon as environmental monitor.

Industrial and intellectual property

Title of registered industrial property	SLSTR Nightfire: Hot Spot Charakterisierung mittels Beobachtungen de SLSTR Instruments auf dem Copernicus Sentinel-3 Satelliten
Inventors/authors/obtainers	Alexandre Caseiro; Johannes W. Kaiser
Country of inscription	Germany

Scientific Production

Book chapter (1, co-author)	*Forest fires research: beyond burnt area statistics.* Célia Alves, Ana Vicente, Teresa Nunes, Cátia Gonçalves, Patrícia Fernandes, Cristina Monteiro, Alexandre Caseiro, Fátima Mirante, Margarita Evtyugina, Casimiro Pio. *Forest Fire Emissions.* Amorim J.H., Keizer J.J., Miranda A.I., Monaghan K. (Editors). pp. 27 - 32. 2011. ISBN 978-972-789-345-4
Publications in peer-reviewed journals (37)	*Persistent hot spot detection and characterisation using SLSTR.* Alexandre Caseiro, Gernot Rücker, Joachim Tiemann, David Leimbach, Eckehard Lorenz, Olaf Frauenberger, Johannes W. Kaiser. Remote Sensing, 10 (7), 1118, 2018
	Road tunnel, roadside and urban background measurements of aliphatic compounds in size-segregated particulate matter. Alves A.C., Oliveira C., Martins N., Mirante F., Caseiro A., Pio C., Matos M., Silva H.F., Oliveira C., Camões F. Atmospheric Research. 168, 139-148, 2016
	Impact of wood burning on indoor PM2.5 in a primary school in rural Portugal. Canha N., Almeida S.M., Freitas M.D., Wolterbeek H.T., Cardoso J., Pio C., Caseiro A. Atmospheric Environment. 94, 663-670, 2014
	Size fractionated aerosol composition at roadside and background environments in the Madrid. Mirante F., Salvador P., Pio C., Alves C., Artiñano B., Caseiro A., Revueta M.A. Atmospheric Research. 138, 278-292, 2014
	Impact of Maritime Air Mass Trajectories on the Western European Coast Urban Aerosol. Almeida S.M., Silva A.I., Freitas M.C., Dung H.M., Caseiro A., Pio C.A. Journal of Toxicology and Environmental Health-Part a-Current Issues. 76, 4-5, 252-262, 2013
	Size-segregated chemical composition of aerosol emissions in an urban road tunnel in Portugal. Pio C., Mirante F., Oliveira C., Matos M., Caseiro A., Oliveira C., Querol X., Alves C., Martins N., Cerqueira M., Camões F., Silva H., Plana F. Atmospheric Environment. 71, 15-25, 2013
	Variations in wood burning organic marker concentrations in the atmospheres of four European cities. Alexandre Caseiro and César Oliveira Journal of Environmental Monitoring. 14, 2261-2269, 2012

Burn Wood Influence on Outdoor Air Quality in a Small Village – Foros de Arrão, Portugal. Canha N., Freitas M.C., Almeida-Silva M., Almeida S.M., Dung H.M., Dionisio I., Cardoso J., Pio C.A., Caseiro A., Verburg T.G., Wolterbeek H.Th. Journal of Radioanalytical and Nuclear Chemistry. 291, 83-88, 2012

Indoor and outdoor characterisation of organic and inorganic compounds in city centre and suburban elementary schools of Aveiro, Portugal. Pegas P.N., Nunes T., Alves C.A., Silva J.R., Vieira S.L.A., Caseiro A., Pio C. Atmospheric Environment. 55, 80-89, 2012

Summer 2009 wildfires in Portugal: Emission of trace gases and aerosol composition. Célia Alves, Ana Vicente, Teresa Nunes, Cátia Gonçalves, Ana Patrícia Fernandes, Fátima Mirante, Luís Tarelho, Ana M. Sánchez de la Campa, Xavier Querol, Alexandre Caseiro, Cristina Monteiro, Margarita Evtyugina, Casimiro Pio Atmospheric Environment, 45, 641-649, 2011

Experimental evidence for a significant contribution of cellulose to indoor aerosol mass concentration. Mário Cerqueira, Daniel Marques, Alexandre Caseiro, Casimiro Pio Atmospheric Environment, 44, 867-871, 2010

Smoke emissions from biomass burning in a Mediterranean shrubland. Alves C.A., Gonçalves C., Pio C.A., Mirante F., Caseiro A., Tarelho L., Freitas M.C., Viegas D.X. Atmospheric Environment. 44, 3024-3033, 2010.

Road Traffic Impact on urban Atmospheric Aerosol loading at Oporto, Portugal. Oliveira C., Pio C. A. , Caseiro A. , Santos P., Nunes T., Mao H., Luahana L., Sokhi R. Atmospheric Environment. 44(26), 3147-3158, 2010.

Characterisation of PM10 emissions from wood stove combustion of common woods grown in Portugal. Gonçalves C., Alves C., Evtyugina M., Mirante F., Pio C., Caseiro A., Schmidl C., Bauer H., Carvalho F. Atmospheric Environment. 44, 4474-4480, 2010.

Major sources of PM2.5 organic aerosols in Europe: Predominance of biomass burning and secondary organic aerosols (SOA). Gelencsér A., May B., Simpson D., Sanchez-Ochoa A., Kasper-Giebl A., Puxbaum H., Caseiro A., Pio C., Legrand M. Geochimica et Cosmochimica Acta, 73(13):A425-A425, 2009

Quantifying emissions of primary biological aerosol particle mass in Europe. W. Winiwarter, H. Bauer, A. Caseiro and H. Puxbaum Atmospheric Environment, 43(7):1403-1409, 2009

Application of the integrating sphere method to separate the contributions of brown and black carbon in atmospheric aerosols Anna Wonaschütz, Regina hitzenberger, Heidi Bauer, Parissa Pouresmaeil, Barbara Klatzer, Alexandre Caseiro and Hans Puxbaum. Environmental Science and Technology, 43(4):1141-1146, 2009

Wood Burning impact on PM10 in three Austrian regions. Alexandre Caseiro, Heidi Bauer, Christoph Schmidl, Casimiro A. Pio, Hans Puxbaum Atmospheric Environment, 43:2186-2195, 2009

Evaluating children exposure to air pollutants for an epidemiological study. Almeida S.M., Freitas M.C., Repolho C., Dionísio I., Dung H.M., Pio C.A., Alves C., Caseiro A., Pacheco A.M.G. Journal of Radioanalytical Nuclear Chemistry, 280: 405-409, 2009

Characterizing air particulate matter composition and sources in Lisbon, Portugal. Almeida S.M., Freitas M.C., Repolho C., Dionísio I., Dung H.M., Caseiro A., Alves C., Pio C.A., Pacheco A.M.G. Journal of Radioanalytical and Nuclear Chemistry, 281, 215-218, 2009

Characterisation of the seasonal exposure to air pollutants for a respiratory

epidemiological study. Freitas, M.; Almeida, S.; Pacheco, A.; Dionisio, I.; Repolho, C.; Caseiro, A.; Dung, H.; Pio, C. & Alves, C. Journal of Radioanalytical and Nuclear Chemistry, 281, 219-223, 2009

Association between monthly-reported rhinitis by children from basic schools and monthly-averaged air pollutants, at Lisbon (Portugal). M. C. Freitas, I. Dionísio, D. G. Beasley, S. M. Almeida, H. M. Dung, C. Repolho, A. M. G. Pacheco, A. Caseiro, C. A. Pio and C. Alves Journal of Radioanalytical and Nuclear Chemistry,282 (1), 15-20, July 2009

A comparison of new and classic methods to estimate the contribution of wood smoke at different sites in Switzerland A.S.H. Prevot, J.Sandradewi, M.R. Alfarra, S. Szidat, V.A. Lanz, N. Perron, A. Caseiro, A. Kasper-Giebl, H. Puxbaum, U. Baltensperger Chemical Engineering Transactions, Vol 16, 367-369, 2008

Chemical characterisation of fine particle emissions from woodstove combustion of common woods growing in mid-European Alpine regions. Christoph Schmidl, Iain L. Marr, Alexandre Caseiro, Heidi Bauer, Anne Kasper-Giebl and Hans Puxbaum Atmospheric Environment, Volume 42(1):126-141, 2008

Temporal patterns of n-alkanes at traffic exposedand suburban sites in Vienna. Petra Kotianová, Hans Puxbaum, Heidi Bauer, Alexandre Caseiro, Iain L. Marr and Gabriel Čík Atmospheric Environment, Volume 42(13):2993-3005, 2008

Source attribution of submicron organic aerosols during wintertime inversions by advanced factor analysis of aerosol mass spectra. Lanz VA, Alfarra MR, Baltensperger U, *et al.* Environmental Science and Technicology Volume: 42(1):214-220, 2008

Comparison of several wood smoke markers and source apportionment methods for wood burning particulate mass. Sandradewi J., Prévôt A.S.H., Alfarra M.R., Szidat S., Wehrli M.N., Ruff M., Weimer S., Lanz V.A., Weingartner E., Perron N., Caseiro A., Kasper-Giebl A., Puxbaum H., Wacker L., Baltensperger U. Atmospheric Chemistry and Physics Discussions. 8(2):8091-8118, 2008

Chemical composition of atmospheric aerosols during the 2003 summer intense forest fire period. Pio C.A., Legrand M., Alves C.A., Oliveira T., Afonso J., Caseiro A., Puxbaum H., Sanchez-Ochoa A., Gelencser A. Atmospheric Environment, Volume 42(32):7530-7543, 2008

Quantifying Source Contribution to Ambient Particulate Matter in Austria with Chemical Mass Balance Receptor Modeling. Caseiro A., Bauer H., Marr I., Pio C., Puxbaum H., Simeonov V. Air Pollution Modeling and its Application XIX – NATO Science for Peace and Security Series C: Environmental Security, 711-712, 2008

Air quality and organic compounds in aerosols from a coastal rural area in the Western Iberian Peninsula over a year long period: Characterisation, loads and seasonal trends. Tiago Oliveira, Casimiro Pio, Célia Alves, Armando Silvestre, Margarita Evtyugina, Joana Afonso, Alexandre Caseiro and Michel Legrand. Atmospheric Environment 41(17):*3631-3643*, 2007.

Modeling Carbonaceous Aerosol over Europe. Analysis of the CARBOSOL and EMEP EC/OC campaigns. David Simpson, Karl Yttri, Zbigniew Klimont, Kaarle Kupiainen, Alexandre Caseiro, Andras Gelencser, Casimiro Pio, Hans Puxbaum and Michel Legrand Journal of Geophysical Research, 112, D23S14, 2007

Source apportionment of PM2.5 organic aerosol over Europe: primary/ secondary, natural/ anthropogenic, fossil/biogenic origin. András Gelencsér, Barbara May, David Simpson, Asunción Sánchez-Ochoa, Anne Kasper-

Giebl, Hans Puxbaum, Alexandre Caseiro, Casimiro Pio, Michel Legrand Journal of Geophysical Research, 112, D23S04, 2007.

Levoglucosan levels at background sites in Europe for assesing the impact of biomass combustion on the european aerosol background. Hans Puxbaum, Alexandre Caseiro, Asunción Sánchez-Ochoa , Anne Kasper-Giebl, Magda Claeys-Maenhaut, András Gelencsér, Michel Legrand, Susanne Preunkert, Casimiro Pio Journal of Geophysical Research, 112, D23S05, 2007.

Climatology of aerosol composition (organic versus inorganic) at nonurban sites on a west-east transect across Europe. C. A. Pio, M. Legrand, T. Oliveira, J. Afonso, C. Santos, A. Caseiro, P. Fialho, F. Barata, H. Puxbaum, A. Sanchez-Ochoa, A. Kasper-Giebl, A. Gelencsér, S. Preunkert, and M. Schock Journal of Geophysical Research, 112, D23S05, 2007.

Determination of saccharides in atmospheric aerosol using anion-exchange high-performance liquid chromatography and pulsed amperometric detection. Alexandre Caseiro, Iain L. Marr, Magda Claeys, Anne Kasper-Giebl, Hans Puxbaum, Casimiro A. Pio Journal of Chromatography A, 1171, 37-45, 2007.

Composition and source apportionment of atmospheric aerosols in Portugal during the 2003 summer intense forest fire period. Pio, Casimiro; Alves, Célia; Oliveira, Tiago; Afonso, Joana; Caseiro, Alexandre; Kasper-Giebl, Anne; Preunkert, S.; Legrand, Michel; Gelencsér, András WIT Transactions on Ecology and the Environment, 101, 45-57, 2007.

Determination of organic wood smoke markers in aerosol samples. PetraKotianova, AlexandreCaseiro, BarbaraRollinger, HansPuxbaum CHEMICKE LISTY. 100 - 8, pp. 6L. 2006

Scientific-technical reports, a selection (10)	Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Marcus Sageder; Hans Puxbaum. *"AQUELLA" Niederösterreich Bestimmung von Immissionsbeiträgen in Feinstaubproben.* 23/04/2009.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Hans Puxbaum. *"AQUELLA" Knittelfeld Bestimmung von Immissionsbeiträgen in Feinstaubproben in Knittelfeld.* 02/03/2009.

Nicole Jankowski; Marcus Sageder; Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Carlos Ramirez-Santa Cruz; Andreas Dattler; Lorena Andrade-Sanchez; Hans Puxbaum. *"AQUELLA" Linz - Oberösterreich Aerosolquellenanalyse für Linz - Oberösterreich.* 19/01/2009.

Alexandre Caseiro; Andrius Garbaras; Esther Coz; Mark Hammonds. Off-line analysis of organic aerosols. 09/2008. Available on-line at: https://aerosolschool.web.psi.ch/gothenburg_2008/Group_reviews/OfflineInstrumentsOrganicAerosols.pdf

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Marcus Sageder; Hans Puxbaum. *"AQUELLA" Kärnten/Klagenfurt Aerosolquellenanalysen für Kärnten PM10-Filteranalysen nach dem „AQUELLA-Verfahren"* . 28/12/2007.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre

Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Marcus Sageder; Hans Puxbaum. *"AQUELLA" Salzburg Aerosolquellenanalyse für Salzburg*. 05/12/2007.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Hans Puxbaum. *"AQUELLA" Hartberg Bestimmung von   Immissionsbeiträgen in Feinstaubproben.* 17/08/2007.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Hans Puxbaum. *"AQUELLA" Köflach Bestimmung von Immissionsbeiträgen in Feinstaubproben.* 17/08/2007.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Hans Puxbaum. *"AQUELLA" Steiermark Bestimmung von Immissionsbeiträgen in Feinstaubproben.* 17/08/2007.

Heidi Bauer; Iain L. Marr; Anne Kasper-Giebl; Andreas Limbeck; Alexandre Caseiro; Marcus Handler; Nicole Jankowski; Barbara Klatzer; Petra Kotianova; Parissa Pouresmaeil; Christoph Schmidl; Marcus Sageder; Hans Puxbaum. *"AQUELLA" Wien Bestimmung von Immissionsbeiträgen in Feinstaubproben.* 31/12/2006

| Communications, a selection (17) | *The Southern European fire season 2017 as seen by the Copernicus Atmosphere Monitoring Service* Johannes W. Kaiser, Imke Hüser, Mark Parrington, Johannes Flemming, Alexandre Caseiro, 8th International Conference on Forest Fire Research 2018, Coimbra, Portugal. |

Estimation of the gas flaring emissions using Sentinel-3A's SLSTR Alexandre Caseiro, Johannes W. Kaiser, Berit Gehrke, Gernot Rücker, Joachim Tiemann, David Leimbach, DLR Symposium Neue Perspektiven der Erdbeobachtung 2018, Köln, Germany

Monitoring of gas flaring using Sentinel-3 SLSTR   Alexandre Caseiro, Johannes W. Kaiser, Gernot Rücker, Joachim Tiemann, David Leimbach, ESA Sentinel-3A Fourth Validation Team Meeting 2018, Darmstadt, Germany

Gas flaring detection, characterisation and emissions assessment from Sentinel-3 SLSTR   Alexandre Caseiro, Johannes W. Kaiser, Gernot Ruecker, Joachim Tiemann, David Leimbach, Eckehard Lorenz, 18 [th] GEIA (Global Emissions Initiative) conference, 2017, Hamburg, Germany.

Gas flare detection with Sentinel-3, including night-time acquisition in S1-S4. Alexandre Caseiro, Gernot   Rücker, Johannes W. Kaiser, Eckehart Lorenz, Olaf Frauenberger, ESA Sentinel-3A Validation Team Meeting 2017, Frascati, Italy.

Chasing gas flares with SLSTR   . Alexandre Caseiro, Gernot   Rücker, Eckehart Lorenz, Johannes W. Kaiser, ESA Sentinel-3A Expert Users Meeting 2016, Frascati, Italy.

Identification of gas flares using FireBIRD data in combination with Sentinel-3. Alexandre Caseiro, Johannes W. Kaiser, Angelika Heil, Gernot Rücker, DLR First Scientific FireBIRD Workshop 2015 Oberpfaffenhofen, Germany.

O Ambiente em Museus – A Modelação da Qualidade do Ar exterior. Alexandre Caseiro, Processos de Musealização. Um seminário de Investigação Internacional. – Qualidade do Ar interior e Previsão do Risco

de Dano para as Coleções e para a Saúde Ocupacional 2014. Porto, Portugal. ISBN: 978-989-8648-47-1

A detecção remota e a georreferenciação como ferramentas fundamentais no processo de modelação de sistemas ambientais. Alexandre Caseiro, IV Encontro de Sistemas de Informação Geográfica 2013. Castelo Branco, Portugal

Selecção do Modelo de dispersão "fit for purpose". Alexandre Caseiro, APEA – Seminário de Formação Avançada "Modelação da Qualidade do Ar". 2013. Lisboa, Portugal.

Métodos de Validação dos Modelos de Dispersão. Alexandre Caseiro, APEA – Seminário de Formação Avançada "Modelação da Qualidade do Ar". 2013. Lisboa, Portugal.

Wood burning contribution to PM10 in three Austrian cities Alexandre Caseiro, Summer School on Organic Aerosol 2008. Gothenburg, Sweden.

Contribuição da queima de madeira no aerossol Europeu. Alexandre Caseiro, Casimiro Pio, Hans Puxbaum, Anne Kasper-Giebl, Heidi Bauer, Christoph Schmidl, 9ª Conferência Nacional do Ambiente, 2007, Aveiro, Portugal. ISBN: 978-972-789-230-3

Contribution of Anhydrosugars and cellulose in PM_{10} in Vienna. A. Caseiro, C. Pio, A. Kasper-Giebl, H. Bauer and H. Puxbaum, European Aerosol Conference 2005, Ghent, Belgium. ISBN: 9080915939

Carbohydrate analysis in atmospheric aerosol. A. Caseiro, 8th International school of ion chromatography, 2005, Rogla, Slovenia.

Tratamento de efluentes gasosos com carvão activado. Caseiro, A. F. F., Andrade, R.M.M., Alexandre, J.L., Jornadas do Mar 2002 – Pedro Nunes: Novos Saberes na Rota do Futuro, Escola Naval, Alfeite, Portugal. ISBN: 972980981x

Quinhentos anos de benefício? Paiva, T. H. E., Caseiro, A. F. F., Jornadas do Mar 2000 – Dos mares de Cabral ao Oceano da Língua Portuguesa, Escola Naval, Alfeite, Portugal. ISBN: 972-98098-1-X

Posters, a selection (17)	FireSense – Entwicklung satelliten-basierter Web- und Handy-Apps für Vegetationsfeuer J.W. Kaiser, G. Rücker, A. Caseiro, B. Gehrke, W. Wiedemann, S. Pless, M.J. Wooster, J.G. Goldammer, DLR Symposium Neue Perspektiven der Erdbeobachtung 2018, Köln, Germany

Estimation of the gas flaring emissions using Sentinel-3A's SLSTR Alexandre Caseiro, Johannes W. Kaiser, Gernot Rücker, Joachim Tiemann, David Leimbach, Eckehard Lorenz, EUMETSAT Meteorological Satellite Conference 2017, Rome, Italy.

Gas flare characterisation with Sentinel-3 Alexandre Caseiro, Johannes W. Kaiser, Angelika Heil, Gernot Rücker, Joachim Tiemann, and David Leimbach, EGU General Assembly 2017, Vienna, Austria

Identification of gas flares and quantification of their emissions using Sentinel3 SLSTR. Alexandre Caseiro, Johannes W. Kaiser, Angelika Heil, Gernot Rücker, ESA – Living Planet Symposium 2016 Prague, Czech Republic

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Diverse

Hobbies	avid reader;

trail and orientation running:

- participation in various races in Portugal, namely the *Serra da Freita Ultra Trail* (2012 and 2014).

Rugby:

- player between 1999 and 2014: RU Aveiro (Portugal), Tampere RC (Finland), Vienna Celtic RFC (Austria);
- participation in the founding of the Tampere Rugby Club (Finland, 2001/2002);
- participation in the founding of the Rugby Union Aveiro Association and member of its board for the youth teams (2012-2014), youth coach (2011-2013).

mountainbiking and road cycling, mountaineering, skiing

Driving license	Type B, since 2003
Personal portfolio and other resources	https://www.linkedin.com/in/alexandre-caseiro-90b1a635/
	https://github.com/AlexCaseiro1979
	https://anaconda.org/AlexCaseiro1979/
	https://www.researchgate.net/profile/Alexandre_Caseiro
	https://scholar.google.com/citations?user=lJSgFU4AAAAJ&hl=en