

Parte A. DATOS PERSONALES		Fecha del CVA	30/01/2019
Nombre y apellidos	Lucas Alados Arboledas		
Núm. identificación del investigador	Researcher ID	P-5630-2014	
	Código Orcid	0000-0003-3576-7167	

A.1. Situación profesional actual

Organismo	UNIVERSIDAD DE GRANADA		
Dpto./Centro	INSTITUTO INTERUNIVERSITARIO DE INVESTIGACIÓN DEL SISTEMA TIERRA EN ANDALUCÍA IISTA-CEAMA		
Dirección	Avda. Mediterráneo s/n 18071 GRANADA		
Teléfono	958249749	correo electrónico	alados@ugr.es
Categoría profesional	Catedrático de Universidad	Fecha inicio	2003
Espec. cód. UNESCO	250000- Ciencias de la Tierra y del Espacio 250616 Teledetección 250108 Óptica Atmosférica		
Palabras clave	Ciencias Atmosféricas, teledetección lidar, aerosol, nubes, radiación		

A.2. Formación académica (título, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Programa Oficial de Doctorado en Física	Universidad de Granada	1987
Doctor en Ciencias Físicas	Universidad de Granada	1987
Diplomado en Estadística e Investigación Operativa	Universidad de Granada	1984
Licenciado en Ciencias Físicas	Universidad de Granada	1983

A.3. Indicadores generales de calidad de la producción científica

Número de sexenios de Investigación: 5
 Fecha del último concedido: 01/01/2014
 Número de tesis doctorales dirigidas: 17
 Artículos JRC: 216
 Citas: 5023
 H-index: 41
 Crown 2014-2017: 1, 61

Parte B. RESUMEN LIBRE DEL CURRÍCULUM (máximo 3500 caracteres,)

Lucas Alados-Arboledas received his B.Sc. in Physics, M.Sc. in Physics and Ph.D. in Physics from the University of Granada, Spain, 1981, 1983 and 1987, respectively. Since 1987, LAA is part of the staff of the University of Granada, developing his activity at the Almería Polytechnic School. He got the Associate Professor position in 1989. After that he got the Full Professor position in Applied Physics in 1991. Since that date he develops his research and teaching activity at the Sciences Faculty of the University of Granada. Since 2003 he is Professor in Applied Physics developing his research activity in the Andalusian Research Institute for the Earth System. He has participated in 36 research projects and experimental campaigns, in 22 of which as principal investigator. He co-chaired the European Aerosol Conference (2012), being a member of the conference steering committee, conference organization committee, conference program committee and co-editor of the proceedings. LAA has been a supervisor of 17 PhD thesis and more than 20 MSc thesis. He is a member of the editorial board of Atmospheric Research Journal (Elsevier Publications, Impact Factor = 3.377) and has been an active reviewer in 25 scientific Journals including Journal of Geophysical Research, Geophysical Research Letter, Atmospheric Chemistry and Physics, Applied Optics, Atmospheric Environment, Tellus B and others.

LAA is mainly interested in atmospheric aerosol/cloud characterization using ground based remote sensing observations (passive and active remote sensing techniques) and in-situ techniques, specifically (i) Aerosol characterization, aerosol radiative impacts and climatic role, (ii) Ground-based active and passive remote sensing techniques for the retrieval of the atmospheric composition, (iii) Inversion methods for the retrieval of optical and microphysical aerosol properties, (iv) Link between in-situ and remote sensing retrievals of atmospheric aerosol properties and (v) Validation of aerosol-related space-borne products using ground based measurements.

LAA is Director of the Andalusian Research Institute for the Earth System and PI of the Atmospheric Physics Group (GFAT) of the IISTA-CEAMA research center. GFAT develops its activity in the frame of AERONET and EARLINET networks. His lidar related activities have been acknowledged by the European Aerosol Research Lidar Network (EARLINET), which has elected LAA as a council member for the period – 2012-2016 and re-elected for a new period 2016-2020. He has been co-chair of the EAA's working group "Atmospheric Aerosols" since 2009. Since 2017 he cooperates with the Agencia Estatal de Investigación in the management of the research projects program on atmosphere and climate change. He has recently been nominated Spanish representative in the Expert Group on Black Carbon and Methane of the Arctic Council.

Parte C. MÉRITOS MÁS RELEVANTES (ordenados por tipología)

C.1. Publicaciones recientes

1. Casquero-Vera, J.A.; et al. 2019. Impact of primary NO₂ emissions at different urban sites exceeding the European NO₂ standard limit Science of the Total Environment. 646, pp.1117-1125.
2. Pandolfi, M.; et al. 2018. A European aerosol phenomenology - 6: Scattering properties of atmospheric aerosol particles from 28 ACTRIS sites Atmospheric Chemistry and Physics. 18-11, pp.7877-7911.
3. Papagiannopoulos, N.; et al. 2018. An automatic observation-based aerosol typing method for EARLINET Atmospheric Chemistry and Physics. 18-21, pp.15879-15901.
4. Belegante, L.; et al. 2018. Experimental techniques for the calibration of lidar depolarization channels in EARLINET Atmospheric Measurement Techniques. 11-2, pp.1119-1141.
5. Bedoya-Velásquez, A.E.; et al. 2018. Hygroscopic growth study in the framework of EARLINET during the SLOPE i campaign: Synergy of remote sensing and in situ instrumentation Atmospheric Chemistry and Physics. 18-10, pp.7001-7017.
6. Román, R.; et al. 2018. Retrieval of aerosol profiles combining sunphotometer and ceilometer measurements in GRASP code Atmospheric Research. 204, pp.161-177.
7. del Águila, A.; et al. 2018. Sources and physicochemical characteristics of submicron aerosols during three intensive campaigns in Granada (Spain) Atmospheric Research. 213, pp.398-410.
8. de Arruda Moreira, G.; et al. 2018. Study of the planetary boundary layer by microwave radiometer, elastic lidar and Doppler lidar estimations in Southern Iberian Peninsula Atmospheric Research. 213, pp.185-195.
9. Alonso-Blanco, E.; et al. 2018. Temporal and spatial variability of atmospheric particle number size distributions across Spain Atmospheric Environment. 190, pp.146-160.
10. Bravo-Aranda, J.A.; et al. 2017. A new methodology for PBL height estimations based on lidar depolarization measurements: Analysis and comparison against MWR and WRF model-based results Atmospheric Chemistry and Physics. 17-11, pp.6839-6851.
11. Román, R.; et al. 2017. Cloud cover detection combining high dynamic range sky images and ceilometer measurements Atmospheric Research. 196, pp.224-236.
12. Benavent-Oltra, J.A.; et al. 2017. Comparative assessment of GRASP algorithm for a dust event over Granada (Spain) during ChArMEx-ADRIMED 2013 campaign Atmospheric Measurement Techniques. 10-11, pp.4439-4457.
13. Palacios-Peña, L.; et al. 2017. Evaluating the representation of aerosol optical properties using an online coupled model over the Iberian Peninsula Atmospheric Chemistry and Physics. 17-1, pp.277-296.

14. Ortiz-Amezcu, P.; et al. 2017. Microphysical characterization of long-range transported biomass burning particles from North America at three EARLINET stations Atmospheric Chemistry and Physics. 17-9, pp.5931-5946.
15. Patrón, D.; et al. 2017. Monumental heritage exposure to urban black carbon pollution Atmospheric Environment. 170, pp.22-32.
16. Román, R.; et al. 2017. Remote sensing of lunar aureole with a sky camera: Adding information in the nocturnal retrieval of aerosol properties with GRASP code Remote Sensing of Environment. 196, pp.238-252.

C.2. Proyectos

1. Project Title: CLOUD, AEROSOL RADIATION INTERACTION (CLARIN).
Funding Agency: Ministry of Economy, Industry and Competitiveness
From: 01/01/2017 to: 31/12/2020
Principal Investigator: Lucas Alados Arboledas. Funding: 2332.000,00 €
2. Project Title: AEROSOLS, CLOUDS, AND TRACE GASES RESEARCH INFRASTRUCTURE NETWORK. (ACTRIS2).
Funding Agency: Unión EuropeaH2020
From: 01/05/2105 to 30/04/2019
Principal Investigator: GelsominaPappalardo. PI Spanish Lidar JRU: Lucas Alados Arboledas (500.000 €) Funding: 10.000,00 k€ (UGR 250 k€)
3. Project Title: 3D Atmospheric aerosol regional monitoring by combination of multiwavelength lidar and ceilometer-radiometer network. (TRIAEROMONITOR) (CGL2013-45410-R)
Funding Agency: MINECO
Participants: Universidad de Granada.
From: 01/01/2014 to: 31/12/2016
Principal Investigator: Lucas Alados Arboledas Funding:239.580,00 €
4. Project Title: Caracterización del material particulado atmosférico con especial énfasis en sus efecto sobre la salud y el patrimonio histórico. (CAMESPA).
Funding Agency: JA-PAI
Participants: Universidad de Granada.
From: 01/01/2014 to: 31/12/2017
Principal Investigator: Francisco José Olmo Reyes Funding: 100,00 k€
5. Project Title: Estudo do Transporte de Material Particulado sobre Atlântico. Conselho Nacional de Desenvolvimento Científico e Tecnológico
Funding Agency: CNPq, Brasil.
Participants: Universidad de Sao Paulo, Universidad de Granada.
From 01/06/2014 to 30/05/2017
Principal Investigator: Eduardo Landulfo Funding:R\$ 396.522,32
6. Project Title: AEROSOLS, CLOUDS, AND TRACE GASES RESEARCH INFRASTRUCTURE NETWORK. (ACTRIS)
Funding Agency: Unión Europea
From: Abril 2011 to: Marzo 2014
Principal Investigator: Lucas Alados Arboledas Funding:98.364,90 €
7. Project Title: CARACTERIZACIÓN MULTIINSTRUMENTAL DEL AEROSOL ATMOSFÉRICO EN EL ENTORNO URBANO Y RURAL. IMPLICACIONES SOBRE LA SALUD Y EL CLIMA. (TARTESOS) (P10-RNM-6299)
Funding Agency: JA-PAI
Participants: Universidad de Granada. INTAFrom: Enero 2011 to: Diciembre 2014
Principal Investigator: Lucas Alados Arboledas Funding: 186.280 €

C.3. Contratos, méritos tecnológicos o de transferencia

C.3.1. Contratos con Instituciones

1. Título: To prevent and/or reduce icing of the installations of Sierra Nevada Ski resort"
Referencia del contrato: 3499
Investigador principal (nombre y apellidos): Lucas Alados Arboledas
Entidad financiadora: CETURSA S.A.
Duración (fecha inicio - fecha fin) 01/10/2014 -31/12/2015
Financiación recibida (en euros): 36.300,00 €

2. Título: Second stage of research and Development Project to prevent and/or reduce icing of the installations of Sierra Nevada Ski resort
Referencia del contrato: 3499A
Investigador principal (nombre y apellidos): Lucas Alados Arboledas
Entidad financiadora: CETURSA S.A.
Duración (fecha inicio - fecha fin,): 20/09/2016 -31/10/2017
Financiación recibida (en euros): 36.300,00 €
3. Título: Diagnóstico de la calidad del aire en Granada
Referencia del contrato: 4183-00
Investigador principal (nombre y apellidos): Lucas Alados Arboledas
Entidad financiadora: Ayuntamiento de Granada
Duración (fecha inicio - fecha fin): 22/10/2015 - 30/06/2016
Financiación recibida (en euros): 17.995,00 €
4. Título: Assessment of atmospheric optical properties during biomass burning events and long-range transport of desert dust (APEL)
Referencia del contrato: 3791
Investigador principal (nombre y apellidos): Juan Luís Guerrero Rascado, Lucas Alados Arboledas
Entidad financiadora: ESA
Duración (fecha inicio - fecha fin): 1/12/2016 – 30/04/2018
Financiación recibida (en euros): 28.815,00 €
5. Título: Estudio de distribuciones de tamaño de gotas de niebla en la autovía A-8
Referencia del contrato: 4081
Investigador principal (nombre y apellidos): Lucas Alados Arboledas
Entidad financiadora: GSJ, S.L
Duración (fecha inicio - fecha fin): 26/09/2018 -30/10/2018
Financiación recibida (en euros): 12.245,20 €

C.3.2. Miembro de Comités

- Miembro de Panel Evaluador de proyectos de la Academy of Finland. 2008
- Miembro del Panel Evaluador de Proyectos FP7 EU: ENV.2008.1.2.1.5 Quantification of changing surface UV radiation levels and its impact on human health. 2008
- Editor Asociado de Atmospheric Research, Fecha de inicio: 2010
- Miembro del Consejo Editorial de AEROSOL AND AIR QUALITY RESEARCH. Fecha de inicio: 01/01/2009 Fecha de Fin 31/12/2015
- Miembro del Council of EARLINET (European Aerosol Research Lidar Network) . Fecha Inicio: 2012
- Miembro del Board of Meeting Association for Aerosol Research. Fecha de inicio: 1999
- Miembro del Working Group Atmospheric Aerosol de la European Aerosol Association (EAA) Fecha de Inicio 2010.
- Colaborador de Agencia Estatal de Investigación, Coordinador Sub-área Atmosfera y Clima del Programa Ciencias y Tecnología Medio Ambiental.
- Representante Español en el Grupo de Trabajo de Black Carbon y Metano del Arctic Council desde 2018.

C.4. OTRAS ACTIVIDADES

- Organizador European Aerosol Conference 2012. Nº de asistentes: 800. Fecha de inicio-fin: 02/09/2012 - 09/09/2012
- Organizador Reunión Española de Ciencia y Tecnología del Aerosol 2010. Nº Asistentes: 100. Fecha de inicio-fin: 28/06/2010 - 30/10/2010
- Evaluador de proyectos en la Academy of Finland. Fecha de inicio-fin: 2008 – 2012
- Evaluador de proyectos de la Universidad de Hong Kong.Fecha de inicio-fin: 2008 – 2008.
- Evaluador de Proyectos Agencia Nacional de Evaluación y Prospectiva (ANEP), Programas Nacionales de Investigación.