

Parte A. DATOS PERSONALES

Fecha del CVA 27/04/2021

Nombre y apellidos	Utrillas Esteban, M ^a Pilar		
DNI/NIE/pasaporte	22693009J	Edad	56
Núm. identificación del/de la investigador/a	WoS Researcher ID (*)	B-5099-2015	
	SCOPUS Author ID(*)	7003626419	
	Open Researcher and Contributor ID (ORCID) **	0000-0002-1952-4117	

(*) Al menos uno de los dos es obligatorio

(**) Obligatorio

A.1. Situación profesional actual

Organismo	Universidad de Valencia		
Dpto./Centro	Departamento de Física de la Tierra y Termodinámica		
Dirección	c/Dr. Moliner 50 , 46100Burjassot		
Teléfono	963543123	correo electrónico	Maria.p.utrillas@uv.es
Categoría profesional	Catedrática Universidad	Fecha inicio	18-05-2011
Palabras clave	Aerosoles, nubes, radiación solar		

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

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciada en Física	Universidad de Valencia Estudio General	1988
Doctora en Ciencias Físicas	Universidad de Valencia Estudio General	1995

A.3. Indicadores generales de calidad de la producción científica (véanse instrucciones)

Número de sexenios de investigación: 5. El último correspondiente a los años 2013-2018 y concedido en junio de 2019.

Número de tesis doctorales dirigidas en los últimos 10 años: 3 leídas y 4 en preparación

Citas totales: 1320

Promedio citas/año durante los últimos 5 años: 94 citas/año

Publicaciones totales en Q1: 80

Índice h: 23

Parte B. RESUMEN LIBRE DEL CURRÍCULUM (máximo 3500 caracteres, incluyendo espacios en blanco)

Since obtaining my degree in Physics I have developed my scientific activity in the field of atmospheric physics on the Solar Radiation group (GRSV), Group of Excellence of the Valencian Community through the Prometeo Project 2010 and 2014. This research has had a basic-oriented character and has been developed in two universities mainly (Valencia, and Jaume I of Castellón), with short research stays in other universities such as the University of Valladolid. At the beginning my research focused on the applications of solar radiation in the visible band and its study in different inclinations for energy applications. Later, as a result of the acquisition of more sophisticated instrumentation, work began on the different bands of the solar spectrum to study the different atmospheric components and their influence on climate and climate change. At present, the main lines of research of the group are basically two, very interrelated among them. The first is the study of atmospheric particles, in particular the obtaining of the radiative properties of atmospheric aerosols and their influence on the radiative balance Earth- Atmosphere. The second can be summarized in the study of the effects of UVB radiation on humans, prediction of the UVI (UltraViolet Index) and modeling of UV solar radiation on planes of different inclination and orientation, as well as the influence of clouds on solar radiation and the study of their radiative parameters. I have participated in numerous field campaigns like those carried out by the ESA (European Space Agency) in the Barrax area (Albacete), DAISEX I and II, Digital Airbone Imaging Spectrometer EXPERiment, SPARC, SPectra bARrax Campaign) and SEN2FLEX, SENTinel- 2 and Fluorescence Experiment, among others. I have participated in the coordination of the thematic networks DAMOCLES "Determination of Aerosols for Measures Obtained in Column (Lidar), Extinction and Soil" I and II during the years 2004 to 2010, in which more than thirty Spanish institutions have participated.

The Solar Radiation group participates in the international aerosol measuring network AErosol RObotic NETwork (AERONET) through the Iberian Network RIMA. He also coordinates the European Skynet Radiometers network (ESR) in collaboration with the Institute of Atmospheric Sciences and Climate of the Italian National Research Council (CNR). The GRSV is Associated Partner to the ACTRIS2 network (Aerosols, Clouds, and Trace gases Research InfraStructure Network), a European research infrastructure (RI) financed under the H2020 program in the context of Climate Change. The network has been accepted in the ESFRI roadmap (The European Strategy Forum on Research Infrastructure) in 2016. The scientific objective of these networks is the characterization of atmospheric aerosols and their interaction with clouds and solar radiation. I have participated in more than 20 projects and research contracts (since 2003 I am project IP), with which the GRSV has been able to acquire a large infrastructure (LiDAR, Radiometers, cloud cameras, etc.), which allow it to study the main atmospheric parameters. I am co-author of some 117 publications in journals indexed in the JCR and more than 150 contributions to congresses.

Parte C. MÉRITOS MÁS RELEVANTES *(ordenados por tipología)*

C.1. Publicaciones

1. A.J.Fernández, M. Sicard, M. J.Costa, J. L. Guerrero-Rascado, J. L.Gómez-Amo, F. Molero, R. Barragán, S. Basart, D. Bortoli, A. E. Bedoya-Velásquez, M. P.Utrillas, P. Salvador, M. J.Granados-Muñoz, et al. (2019) -Extreme, wintertime Saharan dust intrusion in the Iberian Peninsula: Lidar monitoring and evaluation of dust forecast models during the February 2017 event, Atmospheric research, volumen: 228, Página: 223-241,DOI:10.1016/j.atmosres.2019.06.007
2. M. P. Utrillas, M. J. Marín, A. R. Esteve, G. Salazar, H. Suarez, S. Gandía, J. A. Martínez-Lozano (2018). Relationship between erythemal UV and broadband solar irradiation at high altitude in Northwestern Argentina. Energy, 162: 136-147.
3. Marcos, C. R.; Gomez-Amo, J. L.; Peris, C., Pedros, R.; Utrillas, M.P., Martínez-Lozano, J.A. (2018). Analysis of four years of ceilometer-derived aerosol backscatter profiles in a coastal site of the western Mediterranean. Atmospheric Research, Volumen: 213, Páginas: 331-345
4. Gomez-Amo, JL; Estelles, V; Marcos, C; Segura, S; Esteve, AR; Pedros, R Utrillas, MP, Martinez-Lozano, JA (2017) Impact of dust and smoke mixing on column-integrated aerosol properties from observations during a severe wildfire episode over Valencia (Spain). Science of the total environment, 599, 2121-2134.
5. Segura, S.; Estelles, V.; Utrillas, M. P.; et ál.. (2017). Long term analysis of the columnar and surface aerosol relationship at an urban European coastal site Atmospheric, Environment Volumen: 167 Páginas: 309-322.
6. Peris-Ferrus, C; Gomez-Amo, JL; Marcos, C; Freile-Aranda, MD; Utrillas, MP; Martinez-Lozano, JA. (2017) Heating rate profiles and radiative forcing due to a dust storm in the Western Mediterranean using satellite observations. atmospheric Environment Volumen: 1607 Páginas: 142-153.
7. Marcos, Carlos R; Pedros, Roberto ;Luis Gomez-Amo, Jose; Pilar Utrillas, Maria; Martinez-Lozano, Jose A.(2016) Analysis of Desert Dust Outbreaks Over Southern Europe Using CALIOP Data and Ground-Based Measurements. IEEE transactions on geoscience and remote sensing. Volume: 54. Issue: 2 Pages: 744-756
8. Segura, S.; Estelles, V.; Esteve, A. R.; Marcos, C. R. ; Utrillas, M. P.; Martinez-Lozano, J.(2016). Multiyear in-situ measurements of atmospheric aerosol absorption properties at an urban coastal site in western Mediterranean. Atmospheric Environment.Volume: 129.Pages: 18-26.
9. R Pedros, JL. Gómez-Amo, CR. Marcos, MP. Utrillas, S. Gandia, F. Tena, J.A, Martínez-Lozano (2014) AEROGUI: A Graphical User Interface for the Optical Properties of Aerosols. Bulletin of the American Meteorological Society, 95, Issue: 12,1863-1871
10. S. Segura, V. Estelles, G. Titos, H. Lyamani, M.P. Utrillas, P. Zotter ASH Prevot, G. Mocnik, G. L. Alados-Arboledas, J.A. Martinez-Lozano (2014) Determination and analysis of in situ spectral aerosol optical properties by a multi-instrumental approach Atmospheric Measurement Techniques, 7, 8, 2373-2387

C.2. Proyectos

1. Reference: RTI2018-096548-B-I00. Project name: efecto de la interaccion aerosoles-nubes con medidas de suelo y teledeteccion. Execution entity: Ministerio de Ciencia e Innovación IP: M^a Pilar Utrillas Esteban/J.L. Gomez Amo. Funding entity/s: Ministerio de Ciencia e Innovación Cód. según financiadora: RTI2018-096548-B-I00. Start date: 2019/2021 Total amount: 133.000
2. Reference: ESA/EarthCARE CalVal Project (ID 39211). Project name Evaluation of vertical profiles and column integrated aerosol properties from EarthCARE in Spain using EARLINET/ACTRIS facilities and airborne data from field-campaigns. European Space Agency (ESA). Execution entity: Universitat de Granada, 2018. IP: Daniel Perez-Ramirez (UGR). IP (UVEG): J.L. Gómez Amo.
3. Reference: CGL2016-81814-REDT Project name: AEROSOL, NUBES Y GASES TRAZA ESPAÑA. Execution entity: Universitat de Granada. IP: Lucas Alados Arboleda. IP-UVEG: M^a Pilar Utrillas Esteban. Funding entity/s: Ministerio de Economía y Competitividad. Start date: 2017/2018. Total amount: 20.000
4. Reference: CGL2015_64785R Project name: Obtención de las Propiedades microfísicas de las nubes y Estudio del Realce en el rango UVB. Execution entity: Universitat de Valencia. IP: Pilar Utrillas Esteban/J.L. Gomez Amo. Funding entity/s: Ministerio de Economía y Competitividad. Start date: 2016/2018. Total amount: 190.000
5. Reference: H2020 Grant Agreement N° 654109. Aerosols, Clouds, and Trace Gases. Research Infrastructure (ACTRIS-2). ENT. FINANC.: Unión Europea, Programa H2020. Start date: 2015-2019. IP: Gelsomina Pappalardo (Italia). UVEG: Associated Partner Reference:
6. Reference: CGL2011-24290 Project name: Relacion de la radiacion solar uvb con las propiedades opticas de las nubes Execution entity: Ministerio de Ciencia e Innovación IP: M^a Pilar Utrillas Esteban Funding entity/s: Ministerio de Ciencia e Innovación Cód. según financiadora: CGL2011-24290 Start date: 2012/2015 Total amount: 133.000
7. Reference: PROMETEO_II/058 Título: Estudio y comparación de las propiedades de los aerosoles a nivel de suelo, a partir de las medidas en la Columna Atmosférica y mediante satélite. Aplicación a la Comunidad Valenciana IP: Jose Antonio Martinez Lozano (Universidad de Valencia) Entidad financiadora y convocatoria: Conselleria d'Empresa, Universitat i Ciència (2014) Start date: 2014 - 2017 Total amount: 191.982 € Tipo de participación: Investigador
8. Reference: PROMETEO2010/064 Project name: Evaluación del Forzamiento Radiativo directo de los Aerosoles en la Comunidad Valenciana Execution entity: Universitat de València IP: Jose A. Martinez Lozano Funding entity/s: Conselleria d'Empresa, Universitat i Ciència ; Start date: 2010-2014 Total amount: 263.130 €
9. Reference: CGL-2007-60648 Project name: Modelos de prediccción del indice UV sobre planos inclinados Execution entity: Universitat de València IP: M^a Pilar Utrillas Esteban Funding entity/s: Ministerio de Ciencia y Tecnología, Dirección General de Investigación Start date: 2008-2011 Total amount: 162.140
10. Reference: SN07A149 Project name: Estudio de la radiación uv eritemática incidente sobre poblaciones situadas a gran altitud en el noroeste argentino. Posibles estrategias de alerta a la población" Execution entity: Universidad Nacional de Salta (Argentina)/Universitat de Valencia IP: M^a Pilar Utrillas Esteban Funding entity/s: Universitat de Valencia. Relaciones Internacionales y cooperacion Start date: 2012-2013 Total amount: 26.868

C.3. Contratos, méritos tecnológicos o de transferencia

Technical evaluation of the capabilities of the SPN1 instrument to derive optical depth measurements in comparison to a sunphotometer CIMEL CE318

DELTA-T DEVICES, UK

IP: Victor Estelles Leal/ M^a Pilar Utrillas Esteban

Start date: 2015. Financiación: 2.500€

Collecting hours of cumulus cloud images together with corresponding irradiance data and delivering it to GE Global Research Europe. GE Global Research ZN der General

Electric Deutschalnd Holding GmbH
Execution entity: Universitat de València
IP: M^a Pilar Utrillas Esteban
Funding entity/s: GE Global Research ZN der General Electric Deutschalnd Holding GmbH. GE Global Research ZN der
Start date:2010 Total amount: 3.000

C.4. Works presented at congresses

I have presented invited lectures, oral communications and posters in different conferences of national and international nature, some of which appear referenced in the "web of Science" as "International Radiation Symposium on Radiation Processes in the Atmosphere and Ocean (IRS, Free Univ Berlin , 2012), 5th International Conference of Education, Research and Innovation (ICERI 2012), 3rd Biannual International Conference on Advanced Atmospheric Aerosol (AAAS10, Florence, ITALY, 2010), ICERI2014, ISAS2020, etc.

C.5 Activity as 'referee' and evaluator

I have participated as a reviewer for the international magazines Solar Energy, Renewable Energy, Atmospheric Research, Journal of Geophysical Research, International Journal of climatology, Photochemistry and Photobiology, among others.

I have also acted as an evaluator for the National Agency for Evaluation and Prospective (ANEP) and as coordinator of the area of Earth Sciences in the Mobility Subprogram (ANECA)