Francisco JosÃ© Olmo-Reyes

List of Publications by Year
in descending order

134 papers	5,021 citations	87888 38 h-index	128289 60 g-index
139 all docs	139 docs citations	139 times ranked	3900 citing authors

#	Article	IF	Citations
1	Short-wave radiative forcing at the surface for cloudy systems at a midlatitude site. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 21069.	1.6	23
2	Assessment of African desert dust episodes over the southwest Spain at sea level using in situ aerosol optical and microphysical properties. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 27482.	1.6	10
3	Study of mineral dust entrainment in the planetary boundary layer by lidar depolarisation technique. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 26180.	1.6	34
4	Intrusions of dust and iberulites in Granada basin (Southern Iberian Peninsula). Genesis and formation of atmospheric iberulites. Atmospheric Research, 2021, 248, 105260.	4.1	5
5	Activation properties of aerosol particles as cloud condensation nuclei at urban and high-altitude remote sites in southern Europe. Science of the Total Environment, 2021, 762, 143100.	8.0	14
6	Overview of the SLOPE I and II campaigns: aerosol properties retrieved with lidar and sunâ€“sky photometer measurements. Atmospheric Chemistry and Physics, 2021, 21, 9269-9287.	4.9	12
7	Evaluation of LIRIC Algorithm Performance Using Independent Sun-Sky Photometer Data at Two Altitude Levels. Remote Sensing, 2020, 12, 842.	4.0	1
8	Testing a Paul trap through determining the evaporation rate of levitated single semi-volatile organic droplets. Optics Express, 2020, 28, 34812.	3.4	4
9	New particle formation at urban and high-altitude remote sites in the south-eastern Iberian Peninsula. Atmospheric Chemistry and Physics, 2020, 20, 14253-14271.	4.9	22
10	Correction of a lunar-irradiance model for aerosol optical depth retrieval and comparison with a star photometer. Atmospheric Measurement Techniques, 2020, 13, 6293-6310.	3.1	12
11	Impact of primary NO2 emissions at different urban sites exceeding the European NO2 standard limit. Science of the Total Environment, 2019, 646, 1117-1125.	8.0	43
12	Evaluation of retrieved aerosol extinction profiles using as reference the aerosol optical depth differences between various heights. Atmospheric Research, 2019, 230, 104625.	4.1	16
13	Retrieval of optical and microphysical properties of transported Saharan dust over Athens and Granada based on multi-wavelength Raman lidar measurements: Study of the mixing processes. Atmospheric Environment, 2019, 214, 116824.	4.1	28
14	Long-term aerosol optical hygroscopicity study at the ACTRIS SIRTA observatory: synergy between ceilometer and in situ measurements. Atmospheric Chemistry and Physics, 2019, 19, 7883-7896.	4.9	3
15	Seasonal analysis of the atmosphere during five years by using microwave radiometry over a mid-latitude site. Atmospheric Research, 2019, 218, 78-89.	4.1	16
16	Extinction-related AngstrÃ¶m exponent characterization of submicrometric volume fraction in atmospheric aerosol particles. Atmospheric Research, 2019, 228, 270-280.	4.1	1
17	Contribution to column-integrated aerosol typing based on Sun-photometry using different criteria. Atmospheric Research, 2019, 224, 1-17.	4.1	10
18	Analyzing the turbulent planetary boundary layer by remote sensing systems: the Doppler wind lidar, aerosol elastic lidar and microwave radiometer. Atmospheric Chemistry and Physics, 2019, 19, 1263-1280.	4.9	21

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19	Different strategies to retrieve aerosol properties at night-time with the GRASP algorithm. Atmospheric Chemistry and Physics, 2019, 19, 14149-14171.	4.9	29
20	Retrieval of aerosol profiles combining sunphotometer and ceilometer measurements in GRASP code. Atmospheric Research, 2018, 204, 161-177.	4.1	50
21	Angular scattering of the Sahara dust aerosol. Atmospheric Chemistry and Physics, 2018, 18, 17735-17744.	4.9	22
22	Integrated Aerosol Extinction Profiles from Ceilometer and Sunphotometer Combination against Sunphotometer Measurements at Various Heights. , 2018, , .		2
23	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, 2018, 18, 7001-7017.	4.9	32
24	Sources and physicochemical characteristics of submicron aerosols during three intensive campaigns in Granada (Spain). Atmospheric Research, 2018, 213, 398-410.	4.1	12
25	Solar and thermal radiative effects during the 2011 extreme desert dust episode over Portugal. Atmospheric Environment, 2017, 148, 16-29.	4.1	23
26	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, 2017, 196, 238-252.	11.0	36
27	Monumental heritage exposure to urban black carbon pollution. Atmospheric Environment, 2017, 170, 22-32.	4.1	29
28	Cloud cover detection combining high dynamic range sky images and ceilometer measurements. Atmospheric Research, 2017, 196, 224-236.	4.1	22
29	Spatial and temporal variability of carbonaceous aerosols: Assessing the impact of biomass burning in the urban environment. Science of the Total Environment, 2017, 578, 613-625.	8.0	117
30	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, 2017, 17, 6839-6851.	4.9	35
31	Comparative assessment of GRASP algorithm for a dust event over Granada (Spain) during ChArMEx-ADRIMEDÂ2013 campaign. Atmospheric Measurement Techniques, 2017, 10, 4439-4457.	3.1	46
32	A comparative study of aerosol microphysical properties retrieved from ground-based remote sensing and aircraft in situ measurements during a Saharan dust event. Atmospheric Measurement Techniques, 2016, 9, 1113-1133.	3.1	36
33	Effect of hygroscopic growth on the aerosol light-scattering coefficient: A review of measurements, techniques and error sources. Atmospheric Environment, 2016, 141, 494-507.	4.1	107
34	Sensitivity of <scp>UV</scp> Erythemal Radiation to Total Ozone Changes under Different Sky Conditions: Results for Granada, Spain. Photochemistry and Photobiology, 2016, 92, 215-219.	2.5	9
35	Colorimetric analysis of outdoor illumination across varieties of atmospheric conditions. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 1049.	1.5	12
36	Profiling of aerosol microphysical properties at several EARLINET/AERONET sites during the JulyÂ2012 ChArMEx/EMEP campaign. Atmospheric Chemistry and Physics, 2016, 16, 7043-7066.	4.9	26

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37	Statistical study of day and night hourly patterns of columnar aerosol properties using sun and star photometry. Proceedings of SPIE, 2016, , .	0.8	6
38	Surface-Parallel Sensor Orientation for Assessing Energy Balance Components on Mountain Slopes. Boundary-Layer Meteorology, 2016, 158, 489-499.	2.3	18
39	Relationship between fraction of backscattered light and asymmetry parameter. Journal of Aerosol Science, 2016, 91, 43-53.	3.8	18
40	Assessment of lidar depolarization uncertainty by means of a polarimetric lidar simulator. Atmospheric Measurement Techniques, 2016, 9, 4935-4953.	3.1	38
41	Aerosol properties over the western Mediterranean basin: temporal and spatial variability. Atmospheric Chemistry and Physics, 2015, 15, 2473-2486.	4.9	26
42	Role of spheroidal particles in closure studies for aerosol microphysicalâ€“optical properties. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2700-2707.	2.7	10
43	A long-term study of new particle formation in a coastal environment: Meteorology, gas phase and solar radiation implications. Science of the Total Environment, 2015, 511, 723-737.	8.0	18
44	Evaluation of the impact of transportation changes on air quality. Atmospheric Environment, 2015, 114, 19-31.	4.1	65
45	Aerosol scattering and absorption AngstrÃ¶m exponents as indicators of dust and dust-free days over Granada (Spain). Atmospheric Research, 2015, 154, 1-13.	4.1	79
46	A method to determine the ozone radiative forcing in the ultraviolet range from experimental data. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1860-1873.	3.3	5
47	Variability of Mediterranean aerosols properties at three regional background sites in the western Mediterranean Basin. , 2014, , .		1
48	Evaluation of enhancement events of total solar irradiance during cloudy conditions at Granada (Southeastern Spain). Atmospheric Research, 2014, 135-136, 1-7.	4.1	34
49	Efficiency of clouds on shortwave radiation using experimental data. Applied Energy, 2014, 113, 1216-1219.	10.1	14
50	Longwave aerosol radiative effects during an extreme desert dust event in southeastern Spain. Atmospheric Research, 2014, 149, 18-23.	4.1	19
51	Aerosol transport over the western Mediterranean basin: Evidence of the contribution of fine particles to desert dust plumes over AlborÃ¡n Island. Journal of Geophysical Research D: Atmospheres, 2014, 119, 14,028.	3.3	36
52	Aerosol size distribution from inversion of solar radiances and measured at ground-level during SPALI10 campaign. Atmospheric Research, 2013, 127, 130-140.	4.1	12
53	Retrieval and variability analysis of optically thin cloud optical depths from a Cimel sun-photometer. Atmospheric Research, 2013, 127, 210-220.	4.1	7
54	Eruption of the EyjafjallajÃ¶kull Volcano in spring 2010: Multiwavelength Raman lidar measurements of sulphate particles in the lower troposphere. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1804-1813.	3.3	38

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55	Retrieval of aerosol microphysical properties by means of sun and star photometry at Granada, Spain. International Journal of Remote Sensing, 2013, 34, 3607-3624.	2.9	3
56	Direct-sun total ozone data from a spectroradiometer: methodology and comparison with satellite observations. Atmospheric Measurement Techniques, 2013, 6, 637-647.	3.1	1
57	Cloud screening and quality control algorithm for star photometer data: assessment with lidar measurements and with all-sky images. Atmospheric Measurement Techniques, 2012, 5, 1585-1599.	3.1	20
58	Calibration of an all-sky camera for obtaining sky radiance at three wavelengths. Atmospheric Measurement Techniques, 2012, 5, 2013-2024.	3.1	51
59	Corrigendum to "Cloud screening and quality control algorithm for star photometer data: assessment with lidar measurements and with all-sky images" published in Atmos. Meas. Tech., 5, 1585â€“1599, 2012. Atmospheric Measurement Techniques, 2012, 5, 2307-2308.	3.1	0
60	Aerosol radiative forcing during African desert dust events (2005â€“2010) over Southeastern Spain. Atmospheric Chemistry and Physics, 2012, 12, 10331-10351.	4.9	87
61	Experimental and modeled UV erythemal irradiance under overcast conditions: the role of cloud optical depth. Atmospheric Chemistry and Physics, 2012, 12, 11723-11732.	4.9	24
62	Columnar aerosol properties from sun-and-star photometry: statistical comparisons and day-to-night dynamic. Atmospheric Chemistry and Physics, 2012, 12, 9719-9738.	4.9	32
63	Aerosol properties over two urban sites in South Spain during an extended stagnation episode in winter season. Atmospheric Environment, 2012, 62, 424-432.	4.1	47
64	Investigation of fine and coarse aerosol contributions to the total aerosol light scattering: Shape effects and concentration profiling by Raman lidar measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2593-2600.	2.3	5
65	Extreme ultraviolet index due to broken clouds at a midlatitude site, Granada (southeastern Spain). Atmospheric Research, 2012, 118, 10-14.	4.1	10
66	Global and diffuse shortwave irradiance during a strong desert dust episode at Granada (Spain). Atmospheric Research, 2012, 118, 232-239.	4.1	44
67	Analysis of the columnar radiative properties retrieved during African desert dust events over Granada (2005â€“2010) using principal plane sky radiances and spheroids retrieval procedure. Atmospheric Research, 2012, 104-105, 292-301.	4.1	33
68	Classification of aerosol radiative properties during African desert dust intrusions over southeastern Spain by sector origins and cluster analysis. Journal of Geophysical Research, 2012, 117, .	3.3	74
69	Influence of desert dust intrusions on groundâ€based and satelliteâ€derived ultraviolet irradiance in southeastern Spain. Journal of Geophysical Research, 2012, 117, .	3.3	9
70	Retrievals of precipitable water vapor using star photometry: Assessment with Raman lidar and link to sun photometry. Journal of Geophysical Research, 2012, 117, .	3.3	31
71	Aerosol properties of the EyjafjallajÃ¶kull ash derived from sun photometer and satellite observations over the Iberian Peninsula. Atmospheric Environment, 2012, 48, 22-32.	4.1	26
72	Air Masses and Weather Types: A Useful Tool for Characterizing Precipitation Chemistry and Wet Deposition. Aerosol and Air Quality Research, 2012, 12, 856-878.	2.1	24

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73	Optical and microphysical properties of fresh biomass burning aerosol retrieved by Raman lidar, and star-and sun-photometry. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	117
74	Aerosol closure study by lidar, Sun photometry, and airborne optical counters during DAMOCLES field campaign at El Arenosillo sounding station, Spain. Journal of Geophysical Research, 2011, 116, .	3.3	8
75	Evaluation of the aerosol forcing efficiency in the UV erythemal range at Granada, Spain. Journal of Geophysical Research, 2011, 116, .	3.3	30
76	Improvements in star photometry for aerosol characterizations. Journal of Aerosol Science, 2011, 42, 737-745.	3.8	31
77	Applications of optical spectroscopy and stable isotope analyses to organic aerosol source discrimination in an urban area. Atmospheric Environment, 2011, 45, 1960-1969.	4.1	66
78	Short-term variability of experimental ultraviolet and total solar irradiance in Southeastern Spain. Atmospheric Environment, 2011, 45, 4815-4821.	4.1	27
79	Black carbon aerosols over an urban area in south-eastern Spain: Changes detected after the 2008 economic crisis. Atmospheric Environment, 2011, 45, 6423-6432.	4.1	62
80	Influence of the calibration on experimental UV index at a midlatitude site, Granada (Spain). Atmospheric Measurement Techniques, 2011, 4, 499-507.	3.1	13
81	Physical and optical properties of aerosols over an urban location in Spain: seasonal and diurnal variability. Atmospheric Chemistry and Physics, 2010, 10, 239-254.	4.9	157
82	Relationships between spectroscopic properties of highâ€altitude organic aerosols and Sun photometry from groundâ€based remote sensing. Journal of Geophysical Research, 2010, 115, .	3.3	27
83	Chemical composition of wet precipitation at the background EMEP station in VÃznar (Granada, Spain) (2002â€“2006). Atmospheric Research, 2010, 96, 408-420.	4.1	72
84	Extreme Saharan dust event over the southern Iberian Peninsula in september 2007: active and passive remote sensing from surface and satellite. Atmospheric Chemistry and Physics, 2009, 9, 8453-8469.	4.9	146
85	Technical Note: Determination of aerosol optical properties by a calibrated sky imager. Atmospheric Chemistry and Physics, 2009, 9, 6417-6427.	4.9	40
86	Correction factors for a total scatter/backscatter nephelometer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1496-1503.	2.3	15
87	Aerosol optical properties assessed by an inversion method using the solar principal plane for non-spherical particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1504-1516.	2.3	43
88	Development and calibration of a star photometer to measure the aerosol optical depth: Smoke observations at a high mountain site. Atmospheric Environment, 2008, 42, 2733-2738.	4.1	46
89	Using a Sky Imager for aerosol characterization. Atmospheric Environment, 2008, 42, 2739-2745.	4.1	49
90	Aerosol columnar properties retrieved from CIMEL radiometers during VELETA 2002. Atmospheric Environment, 2008, 42, 2654-2667.	4.1	57

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91	Light scattering and absorption properties of aerosol particles in the urban environment of Granada, Spain. Atmospheric Environment, 2008, 42, 2630-2642.	4.1	107
92	Altitude effect in UV radiation during the Evaluation of the Effects of Elevation and Aerosols on the Ultraviolet Radiation 2002 (VELETAâ€2002) field campaign. Journal of Geophysical Research, 2008, 113, .	3.3	26
93	Retrieval of the optical depth using an all-sky CCD camera. Applied Optics, 2008, 47, H182.	2.1	36
94	Using a trichromatic CCD camera for spectral skylight estimation. Applied Optics, 2008, 47, H31.	2.1	28
95	Development of a sky imager for cloud cover assessment. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 29.	1.5	152
96	Application of Sun/star photometry to derive the aerosol optical depth. International Journal of Remote Sensing, 2008, 29, 5113-5132.	2.9	31
97	Detection of May 2006 Saharan dust outbreak over Granada, Spain, by combination of active and passive remote sensing. , 2007, , .		2
98	Characterization of the atmospheric aerosol by combination of lidar and sun-photometry. , 2007, , .		7
99	Powder X-ray Thermodiffraction Study of Mirabilite and Epsomite Dehydration. Effects of Direct IR-Irradiation on Samples. Analytical Chemistry, 2007, 79, 4455-4462.	6.5	14
100	Aerosol radiative forcing efficiency in the UV region over southeastern Mediterranean: VELETA2002 campaign. Journal of Geophysical Research, 2007, 112, .	3.3	19
101	Intercomparison of spectroradiometers and Sun photometers for the determination of the aerosol optical depth during the VELETA-2002 field campaign. Journal of Geophysical Research, 2006, 111, .	3.3	47
102	Preliminary results of a non-spherical aerosol method for the retrieval of the atmospheric aerosol optical properties. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 305-314.	2.3	43
103	Atmospheric aerosols during the 2003 heat wave in southeastern Spain II: Microphysical columnar properties and radiative forcing. Atmospheric Environment, 2006, 40, 6465-6476.	4.1	96
104	Atmospheric aerosols during the 2003 heat wave in southeastern Spain I: Spectral optical depth. Atmospheric Environment, 2006, 40, 6453-6464.	4.1	124
105	Comparison of aerosol size distributions measured at ground level and calculated from inversion of solar radiances. , 2005, 5979, 204.		3
106	Saharan dust outbreak over southeastern Spain as detected by sun photometer. Atmospheric Environment, 2005, 39, 7276-7276.	4.1	99
107	Long-term changes in aerosol radiative properties at Armilla (Spain). Atmospheric Environment, 2004, 38, 5935-5943.	4.1	23
108	The influence of cloudiness on UV global irradiance (295â€“385 nm). Agricultural and Forest Meteorology, 2003, 120, 101-111.	4.8	85

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109	Relationship between net radiation and solar radiation for semi-arid shrub-land. Agricultural and Forest Meteorology, 2003, 116, 221-227.	4.8	82
110	The influence of clouds on surface UV erythemal irradiance. Atmospheric Research, 2003, 66, 273-290.	4.1	80
111	Optical characteristics of the aerosol in Spain and Austria and its effect on radiative forcing. Journal of Geophysical Research, 2002, 107, AAC 9-1.	3.3	79
112	Improved estimation of diffuse photosynthetically active radiation using two spectral models. Agricultural and Forest Meteorology, 2002, 111, 1-12.	4.8	36
113	Performance reduction of solar irradiance parametric models due to limitations in required aerosol data: case of the CPCR2 model. Theoretical and Applied Climatology, 2001, 69, 253-263.	2.8	12
114	On the use of a cloud modification factor for solar UV (290-385 nm) spectral range. Theoretical and Applied Climatology, 2001, 68, 41-50.	2.8	26
115	Dependence of one-minute global irradiance probability density distributions on hourly irradiation. Energy, 2001, 26, 659-668.	8.8	23
116	Empirical modeling of hourly direct irradiance by means of hourly global irradiance. Energy, 2000, 25, 675-688.	8.8	84
117	Estimating solar ultraviolet irradiance (290-385 nm) by means of the spectral parametric models: SPCTRAL2 and SMARTS2. Annales Geophysicae, 2000, 18, 1382-1389.	1.6	3
118	Comparison of Cloudless Sky Parameterizations of Solar Irradianceat Various Spanish Midlatitude Locations. Theoretical and Applied Climatology, 2000, 66, 81-93.	2.8	51
119	Estimation of photosynthetically active radiation under cloudy conditions. Agricultural and Forest Meteorology, 2000, 102, 39-50.	4.8	66
120	Parametric models to estimate photosynthetically active radiation in Spain. Agricultural and Forest Meteorology, 2000, 101, 187-201.	4.8	60
121	ONE MINUTE kb AND kd PROBABILITY DENSITY DISTRIBUTIONS CONDITIONED TO THE OPTICAL AIR MASS. Solar Energy, 1999, 65, 297-304.	6.1	20
122	Prediction of global irradiance on inclined surfaces from horizontal global irradiance. Energy, 1999, 24, 689-704.	8.8	90
123	A comparison of ground level solar radiative effects of recent volcanic eruptions. Atmospheric Environment, 1999, 33, 4589-4596.	4.1	20
124	One-minute global irradiance probability density distributions conditioned to the optical air mass. Solar Energy, 1998, 62, 387-393.	6.1	72
125	Determination of aerosol optical thickness from measurements of spectral sky radiance. Journal of Aerosol Science, 1998, 29, 1199-1211.	3.8	14
126	Evolution of solar radiative effects of Mount Pinatubo at ground level. Tellus, Series B: Chemical and Physical Meteorology, 1997, 49, 190-198.	1.6	8

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127	Fire Detection and Growth Monitoring Using a Multitemporal Technique on AVHRR Mid-Infrared and Thermal Channels. Remote Sensing of Environment, 1997, 60, 111-120.	11.0	58
128	A comparative study of algorithms for estimating land surface temperature from AVHRR Data. Remote Sensing of Environment, 1997, 62, 215-222.	11.0	77
129	The estimation of thermal atmospheric radiation under cloudy conditions. International Journal of Climatology, 1995, 15, 107-116.	3.5	35
130	Solar radiation resource assessment by means of silicon cells. Solar Energy, 1995, 54, 183-191.	6.1	25
131	Pinatubo eruption effects on solar radiation at Almeria (36.83oN, 2.41oW). Tellus, Series B: Chemical and Physical Meteorology, 1995, 47, 602-606.	1.6	10
132	On shadowband correction methods for diffuse irradiance measurements. Solar Energy, 1995, 54, 105-114.	6.1	120
133	Verification of two models to predict global radiation on a horizontal surface. Solar & Wind Technology, 1990, 7, 707-711.	0.2	0
134	Flicker techniques in the determination of visual latency. Journal of Optics, 1987, 18, 237-243.	0.3	1