

David Orozco Suarez

List of Publications by Year in descending order

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85
papers

2,573
citations

186265
28
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48
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86
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86
docs citations

86
times ranked

1149
citing authors

#	ARTICLE	IF	CITATIONS
1	The Imaging Magnetograph eXperiment (IMaX) for the Sunrise Balloon-Borne Solar Observatory. Solar Physics, 2011, 268, 57-102.	2.5	229
2	Quiet-Sun Internetwork Magnetic Fields from the Inversion of <i>Hinode</i> Measurements. Astrophysical Journal, 2007, 670, L61-L64.	4.5	175
3	The Magnetic Landscape of the Sun's Polar Region. Astrophysical Journal, 2008, 688, 1374-1381.	4.5	170
4	The Polarimetric and Helioseismic Imager on Solar Orbiter. Astronomy and Astrophysics, 2020, 642, A11.	5.1	121
5	Quiet Sun magnetic fields: an observational view. Living Reviews in Solar Physics, 2019, 16, 1.	22.0	93
6	Formation of Solar Magnetic Flux Tubes with Kilogauss Field Strength Induced by Convective Instability. Astrophysical Journal, 2008, 677, L145-L147.	4.5	89
7	THE SOLAR INTERNETWORK. I. CONTRIBUTION TO THE NETWORK MAGNETIC FLUX. Astrophysical Journal, 2014, 797, 49.	4.5	80
8	The Second Flight of the Sunrise Balloon-borne Solar Observatory: Overview of Instrument Updates, the Flight, the Data, and First Results. Astrophysical Journal, Supplement Series, 2017, 229, 2.	7.7	80
9	POLAR FIELD REVERSAL OBSERVATIONS WITH <i>HINODE</i> . Astrophysical Journal, 2012, 753, 157.	4.5	72
10	The Solar Orbiter Science Activity Plan. Astronomy and Astrophysics, 2020, 642, A3.	5.1	67
11	Strategy for the Inversion of <i>Hinode</i> Spectropolarimetric Measurements in the Quiet Sun. Publication of the Astronomical Society of Japan, 2007, 59, S837-S844.	2.5	66
12	Solar Coronal Loops Associated with Small-scale Mixed Polarity Surface Magnetic Fields. Astrophysical Journal, Supplement Series, 2017, 229, 4.	7.7	64
13	The usefulness of analytic response functions. Astronomy and Astrophysics, 2007, 462, 1137-1145.	5.1	53
14	Models and data analysis tools for the Solar Orbiter mission. Astronomy and Astrophysics, 2020, 642, A2.	5.1	53
15	The magnetic field configuration of a solar prominence inferred from spectropolarimetric observations in the He I 10830 Å... triplet. Astronomy and Astrophysics, 2014, 566, A46.	5.1	50
16	Magnetic field emergence in quiet Sun granules. Astronomy and Astrophysics, 2008, 481, L33-L36.	5.1	45
17	ANALYSIS OF QUIET-SUN INTERNETWORK MAGNETIC FIELDS BASED ON LINEAR POLARIZATION SIGNALS. Astrophysical Journal, 2012, 751, 2.	4.5	45
18	THE CONNECTION BETWEEN INTERNETWORK MAGNETIC ELEMENTS AND SUPERGRANULAR FLOWS. Astrophysical Journal Letters, 2012, 758, L38.	8.3	44

#	ARTICLE	IF	CITATIONS
19	EVIDENCE FOR ROTATIONAL MOTIONS IN THE FEET OF A QUIESCENT SOLAR PROMINENCE. <i>Astrophysical Journal Letters</i> , 2012, 761, L25.	8.3	43
20	THE SOLAR INTERNETWORK. II. FLUX APPEARANCE AND DISAPPEARANCE RATES. <i>Astrophysical Journal</i> , 2016, 820, 35.	4.5	41
21	Three-dimensional structure of a sunspot light bridge. <i>Astronomy and Astrophysics</i> , 2016, 596, A59.	5.1	41
22	Transverse Oscillations in Slender Ca ii H Fibrils Observed with Sunrise/SuFI. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 9.	7.7	39
23	Quiet-Sun Magnetic Fields from Space-borne Observations: Simulating Hinode's Case. <i>Astrophysical Journal</i> , 2007, 662, L31-L34.	4.5	38
24	Slender Ca ii H Fibrils Mapping Magnetic Fields in the Low Solar Chromosphere. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 11.	7.7	34
25	PERVASIVE LINEAR POLARIZATION SIGNALS IN THE QUIET SUN. <i>Astrophysical Journal</i> , 2012, 757, 19.	4.5	33
26	DIFFUSION OF SOLAR MAGNETIC ELEMENTS UP TO SUPERGRANULAR SPATIAL AND TEMPORAL SCALES. <i>Astrophysical Journal Letters</i> , 2013, 770, L36.	8.3	31
27	Deep probing of the photospheric sunspot penumbra: no evidence of field-free gaps. <i>Astronomy and Astrophysics</i> , 2016, 596, A2.	5.1	29
28	Spatial deconvolution of spectropolarimetric data: an application to quiet Sun magnetic elements. <i>Astronomy and Astrophysics</i> , 2015, 579, A3.	5.1	28
29	Probing deep photospheric layers of the quiet Sun with high magnetic sensitivity. <i>Astronomy and Astrophysics</i> , 2016, 596, A6.	5.1	28
30	A Tale of Two Emergences: Sunrise II Observations of Emergence Sites in a Solar Active Region. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 3.	7.7	28
31	Coordination within the remote sensing payload on the Solar Orbiter mission. <i>Astronomy and Astrophysics</i> , 2020, 642, A6.	5.1	27
32	Applicability of Milne-Eddington inversions to high spatial resolution observations of the quiet Sun. <i>Astronomy and Astrophysics</i> , 2010, 518, A2.	5.1	26
33	Oscillations on Width and Intensity of Slender Ca ii H Fibrils from Sunrise/SuFI. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 7.	7.7	25
34	Pair separation of magnetic elements in the quiet Sun. <i>Astronomy and Astrophysics</i> , 2014, 569, A121.	5.1	24
35	HEIGHT VARIATION OF THE VECTOR MAGNETIC FIELD IN SOLAR SPICULES. <i>Astrophysical Journal Letters</i> , 2015, 803, L18.	8.3	24
36	A New MHD-assisted Stokes Inversion Technique. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 16.	7.7	23

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37	POWER SPECTRA OF VELOCITIES AND MAGNETIC FIELDS ON THE SOLAR SURFACE AND THEIR DEPENDENCE ON THE UNSIGNED MAGNETIC FLUX DENSITY. <i>Astrophysical Journal</i> , 2012, 758, 139.	4.5	21
38	Magneto-static Modeling from Sunrise/IMaX: Application to an Active Region Observed with Sunrise II. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 18.	7.7	21
39	Upper chromospheric magnetic field of a sunspot penumbra: observations of fine structure. <i>Astronomy and Astrophysics</i> , 2016, 596, A8.	5.1	20
40	ON SPECTROPOLARIMETRIC MEASUREMENTS WITH VISIBLE LINES. <i>Astrophysical Journal</i> , 2010, 711, 312-321.	4.5	19
41	DeSIRe: Departure coefficient aided Stokes Inversion based on Response functions. <i>Astronomy and Astrophysics</i> , 2022, 660, A37.	5.1	19
42	MODEL SELECTION FOR SPECTROPOLARIMETRIC INVERSIONS. <i>Astrophysical Journal</i> , 2012, 748, 83.	4.5	18
43	THE DISTRIBUTION OF QUIET-SUN MAGNETIC FIELDS AT DIFFERENT HELIOCENTRIC ANGLES. <i>Astrophysical Journal</i> , 2012, 746, 182.	4.5	17
44	Photospheric Response to an Ellerman Bomb-like Event—An Analogy of Sunrise/IMaX Observations and MHD Simulations. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 5.	7.7	16
45	Solar polarimetry through the $\text{K}\alpha$ lines at 770 nm. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 1453-1461.	4.4	16
46	Machine learning initialization to accelerate Stokes profile inversions. <i>Astronomy and Astrophysics</i> , 2021, 651, A31.	5.1	16
47	Morphological Properties of Slender Ca H Fibrils Observed by Sunrise II. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 6.	7.7	15
48	The magnetic drivers of campfires seen by the Polarimetric and Helioseismic Imager (PHI) on Solar Orbiter. <i>Astronomy and Astrophysics</i> , 2022, 660, A143.	5.1	14
49	Chromospheric polarimetry through multiline observations of the 850-nm spectral region II. A magnetic flux tube scenario. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 727-737.	4.4	13
50	Milne-Eddington inversion of the Fe I line pair at 630 nm. <i>Astronomy and Astrophysics</i> , 2010, 518, A3.	5.1	12
51	Fitting peculiar spectral profiles in He I 10830 Å... absorption features. <i>Astronomische Nachrichten</i> , 2016, 337, 1057-1063.	1.2	12
52	Kinematics of Magnetic Bright Features in the Solar Photosphere. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 8.	7.7	12
53	High speed magnetized flows in the quiet Sun. <i>Astronomy and Astrophysics</i> , 2014, 569, A73.	5.1	12
54	TIME EVOLUTION OF PLASMA PARAMETERS DURING THE RISE OF A SOLAR PROMINENCE INSTABILITY. <i>Astrophysical Journal Letters</i> , 2014, 785, L10.	8.3	11

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55	On Fabry-Pérot Etalon-based Instruments. I. The Isotropic Case. <i>Astrophysical Journal, Supplement Series</i> , 2019, 241, 9.	7.7	11
56	Photospheric downward plasma motions in the quiet Sun. <i>Astronomy and Astrophysics</i> , 2014, 566, A139.	5.1	10
57	Spectropolarimetric observations of an arch filament system with the GREGOR solar telescope. <i>Astronomische Nachrichten</i> , 2016, 337, 1050-1056.	1.2	9
58	Study of the polarization produced by the Zeeman effect in the solar Mg II λ lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 5675-5686.	4.4	8
59	Diagnostic capabilities of spectropolarimetric observations for understanding solar phenomena. <i>Astronomy and Astrophysics</i> , 2021, 652, A161.	5.1	8
60	Moving Magnetic Features Around a Pore. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 13.	7.7	7
61	Sunrise Chromospheric Infrared SpectroPolarimeter (SCIP) for sunrise III: system design and capability. , 2020, , .		7
62	Spectropolarimetric Evidence for a Siphon Flow along an Emerging Magnetic Flux Tube. <i>Astrophysical Journal, Supplement Series</i> , 2017, 229, 15.	7.7	6
63	The Solar Internetwork. III. Unipolar versus Bipolar Flux Appearance. <i>Astrophysical Journal</i> , 2022, 925, 188.	4.5	6
64	SOPHISM: An End-to-end Software Instrument Simulator. <i>Astrophysical Journal, Supplement Series</i> , 2018, 237, 35.	7.7	5
65	Solar polarimetry in the $K I D_{2}$ line : A novel possibility for a stratospheric balloon. <i>Astronomy and Astrophysics</i> , 2018, 610, A79.	5.1	5
66	On Fabry-Pérot Etalon-based Instruments. II. The Anisotropic (Birefringent) Case. <i>Astrophysical Journal, Supplement Series</i> , 2019, 242, 21.	7.7	5
67	Detection of emission in the Si IV λ 1082.7 nm line core in sunspot umbrae. <i>Astronomy and Astrophysics</i> , 2017, 607, A102.	5.1	5
68	Power spectrum of turbulent convection in the solar photosphere. <i>Astronomy and Astrophysics</i> , 2020, 644, A44.	5.1	5
69	Temporal evolution of short-lived penumbral microjets. <i>Astronomy and Astrophysics</i> , 2020, 642, A128.	5.1	5
70	Retrieval of solar magnetic fields from high-spatial resolution filtergraph data: the Imaging Magnetograph eXperiment (IMaX). <i>Astronomy and Astrophysics</i> , 2010, 522, A101.	5.1	4
71	On Fabry-Pérot Etalon-based Instruments. III. Instrument Applications. <i>Astrophysical Journal, Supplement Series</i> , 2020, 246, 17.	7.7	4
72	Probing Upflowing Regions in the Quiet Sun and Coronal Holes. <i>Solar Physics</i> , 2021, 296, 175.	2.5	4

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73	On Fabry-Pérot Etalon-based Instruments. IV. Analytical Formulation of Telecentric Etalons. <i>Astrophysical Journal, Supplement Series</i> , 2021, 254, 18.	7.7	3
74	The Maximum Entropy Limit of Small-scale Magnetic Field Fluctuations in the Quiet Sun. <i>Astrophysical Journal, Supplement Series</i> , 2017, 233, 5.	7.7	3
75	Size matters. <i>Astronomische Nachrichten</i> , 2010, 331, 558-562.	1.2	2
76	A modified Milne-Eddington approximation for a qualitative interpretation of chromospheric spectral lines. <i>Astronomy and Astrophysics</i> , 2022, 659, A156.	5.1	2
77	Flow and magnetic field properties in the trailing sunspots of active region NOAA 12396. <i>Astronomische Nachrichten</i> , 2016, 337, 1090-1098.	1.2	1
78	Polarimetric Observations of the Sun. <i>Astrophysics and Space Science Library</i> , 2019, , 147-172.	2.7	1
79	Autonomous on-board data processing and instrument calibration software for the SO/PHI. , 2018, , .		1
80	Image compression on reconfigurable FPGA for the SO/PHI space instrument. , 2018, , .		1
81	Enhanced Channel Calibration for the Image Sensor of the TuMag Instrument. <i>Sensors</i> , 2022, 22, 2078.	3.8	1
82	CASPER: A mission to study the time-dependent evolution of the magnetic solar chromosphere and transition regions. <i>Experimental Astronomy</i> , 0, , 1.	3.7	1
83	A first look into the magnetic field configuration of prominence threads using spectropolarimetric data. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 112-116.	0.0	0
84	Flows along arch filaments observed in the GRIS â€“very fast spectroscopic modeâ€™. <i>Proceedings of the International Astronomical Union</i> , 2016, 12, 28-33.	0.0	0
85	The quick RTE inversion on FPGA for DKIST. , 2018, , .		0