

Jorrit Leenaarts

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

3,756
citations

159585

30
h-index

155660

55
g-index

56
all docs

56
docs citations

56
times ranked

1904
citing authors

#	ARTICLE	IF	CITATIONS
1	The Interface Region Imaging Spectrograph (IRIS). <i>Solar Physics</i> , 2014, 289, 2733-2779.	2.5	948
2	Star cluster disruption by giant molecular clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 371, 793-804.	4.4	211
3	THE FORMATION OF THE $H\hat{\pm}$ LINE IN THE SOLAR CHROMOSPHERE. <i>Astrophysical Journal</i> , 2012, 749, 136.	4.5	201
4	THE FORMATION OF <i>IRIS</i> DIAGNOSTICS. II. THE FORMATION OF THE Mg II h&k LINES IN THE SOLAR ATMOSPHERE. <i>Astrophysical Journal</i> , 2013, 772, 90.	4.5	196
5	ON-DISK COUNTERPARTS OF TYPE II SPICULES IN THE Ca II 854.2 nm AND $H\hat{\pm}$ LINES. <i>Astrophysical Journal</i> , 2009, 705, 272-284.	4.5	160
6	A publicly available simulation of an enhanced network region of the Sun. <i>Astronomy and Astrophysics</i> , 2016, 585, A4.	5.1	152
7	THE FORMATION OF <i>IRIS</i> DIAGNOSTICS. I. A QUINTESSENTIAL MODEL ATOM OF Mg II AND GENERAL FORMATION PROPERTIES OF THE Mg II h&k LINES. <i>Astrophysical Journal</i> , 2013, 772, 89.	4.5	142
8	STiC: A multiatom non-LTE PRD inversion code for full-Stokes solar observations. <i>Astronomy and Astrophysics</i> , 2019, 623, A74.	5.1	100
9	THE FORMATION OF <i>IRIS</i> DIAGNOSTICS. III. NEAR-ULTRAVIOLET SPECTRA AND IMAGES. <i>Astrophysical Journal</i> , 2013, 778, 143.	4.5	97
10	Non-LTE oxygen line formation in 3D hydrodynamic model stellar atmospheres. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 3735-3751.	4.4	91
11	THREE-DIMENSIONAL NON-LTE RADIATIVE TRANSFER COMPUTATION OF THE CA 8542 INFRARED LINE FROM A RADIATION-MHD SIMULATION. <i>Astrophysical Journal</i> , 2009, 694, L128-L131.	4.5	88
12	Observational constraints on the origin of the elements. <i>Astronomy and Astrophysics</i> , 2019, 631, A80.	5.1	88
13	NON-LTE INVERSIONS OF THE Mg ii h & k AND UV TRIPLET LINES. <i>Astrophysical Journal Letters</i> , 2016, 830, L30.	8.3	71
14	DETAILED AND SIMPLIFIED NONEQUILIBRIUM HELIUM IONIZATION IN THE SOLAR ATMOSPHERE. <i>Astrophysical Journal</i> , 2014, 784, 30.	4.5	61
15	ON FIBRILS AND FIELD LINES: THE NATURE OF $H\hat{\pm}$ FIBRILS IN THE SOLAR CHROMOSPHERE. <i>Astrophysical Journal</i> , 2015, 802, 136.	4.5	61
16	WHAT DO IRIS OBSERVATIONS OF Mg II k TELL US ABOUT THE SOLAR PLAGE CHROMOSPHERE?. <i>Astrophysical Journal Letters</i> , 2015, 809, L30.	8.3	59
17	THE FORMATION OF <i>IRIS</i> DIAGNOSTICS. VI. THE DIAGNOSTIC POTENTIAL OF THE C ii LINES AT 133.5 nm IN THE SOLAR ATMOSPHERE. <i>Astrophysical Journal</i> , 2015, 811, 81.	4.5	51
18	Fan-shaped jets above the light bridge of a sunspot driven by reconnection. <i>Astronomy and Astrophysics</i> , 2016, 590, A57.	5.1	49

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19	THE QUIET SOLAR ATMOSPHERE OBSERVED AND SIMULATED IN Na I D ₁ . Astrophysical Journal, 2010, 709, 1362-1373.	4.5	47
20	Three-dimensional modeling of the Ca H and K lines in the solar atmosphere. Astronomy and Astrophysics, 2018, 611, A62.	5.1	46
21	THREE-DIMENSIONAL RADIATIVE TRANSFER SIMULATIONS OF THE SCATTERING POLARIZATION OF THE HYDROGEN LY α LINE IN A MAGNETOHYDRODYNAMIC MODEL OF THE CHROMOSPHEREâ€“CORONA TRANSITION REGION. Astrophysical Journal, 2015, 803, 65.	4.5	44
22	NON-EQUILIBRIUM HELIUM IONIZATION IN AN MHD SIMULATION OF THE SOLAR ATMOSPHERE. Astrophysical Journal, 2016, 817, 125.	4.5	43
23	Mapping solar magnetic fields from the photosphere to the base of the corona. Science Advances, 2021, 7, .	10.3	42
24	Partial redistribution in 3D non-LTE radiative transfer in solar-atmosphere models. Astronomy and Astrophysics, 2017, 597, A46.	5.1	39
25	Ionâ€“neutral Interactions and Nonequilibrium Ionization in the Solar Chromosphere. Astrophysical Journal, 2020, 889, 95.	4.5	39
26	Solar oxygen abundance. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2236-2253.	4.4	38
27	Chromospheric condensations and magnetic field in a C3.6-class flare studied via He I D ₃ spectro-polarimetry. Astronomy and Astrophysics, 2019, 621, A35.	5.1	37
28	Chromospheric heating during flux emergence in the solar atmosphere. Astronomy and Astrophysics, 2018, 612, A28.	5.1	34
29	Observational constraints on the origin of the elements. Astronomy and Astrophysics, 2020, 634, A55.	5.1	33
30	THE EFFECT OF ISOTOPIC SPLITTING ON THE BIASECTOR AND INVERSIONS OF THE SOLAR Ca II 854.2 nm LINE. Astrophysical Journal Letters, 2014, 784, L17.	8.3	32
31	A First Comparison of Millimeter Continuum and Mg ii Ultraviolet Line Emission from the Solar Chromosphere. Astrophysical Journal Letters, 2017, 845, L19.	8.3	32
32	Three-dimensional modeling of chromospheric spectral lines in a simulated active region. Astronomy and Astrophysics, 2019, 631, A33.	5.1	31
33	OBSERVED VARIABILITY OF THE SOLAR Mg II h SPECTRAL LINE. Astrophysical Journal, 2015, 811, 127.	4.5	30
34	The cause of spatial structure in solar He I 1083 nm multiplet images. Astronomy and Astrophysics, 2016, 594, A104.	5.1	29
35	The multi-thermal chromosphere. Astronomy and Astrophysics, 2020, 634, A56.	5.1	29
36	A DETAILED COMPARISON BETWEEN THE OBSERVED AND SYNTHESIZED PROPERTIES OF A SIMULATED TYPE II SPICULE. Astrophysical Journal, 2013, 771, 66.	4.5	28

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37	Observations of Ellerman bomb emission features in He I 10^3 Å and He I 10^8 Å... <i>Astronomy and Astrophysics</i> , 2017, 598, A33.	5.1	28
38	Temperature constraints from inversions of synthetic solar optical, UV, and radio spectra. <i>Astronomy and Astrophysics</i> , 2018, 620, A124.	5.1	28
39	Recent advancements in the EST project. <i>Advances in Space Research</i> , 2019, 63, 1389-1395.	2.6	27
40	THE HANLE EFFECT OF $\text{Ly}\beta$ IN A MAGNETOHYDRODYNAMIC MODEL OF THE SOLAR TRANSITION REGION. <i>Astrophysical Journal Letters</i> , 2012, 758, L43.	8.3	22
41	Radiation hydrodynamics in simulations of the solar atmosphere. <i>Living Reviews in Solar Physics</i> , 2020, 17, 1.	22.0	19
42	An observationally constrained model of strong magnetic reconnection in the solar chromosphere. <i>Astronomy and Astrophysics</i> , 2021, 647, A188.	5.1	18
43	Physical properties of bright Ca II K fibrils in the solar chromosphere. <i>Astronomy and Astrophysics</i> , 2020, 637, A1.	5.1	18
44	The chromosphere above a δ -sunspot in the presence of fan-shaped jets. <i>Astronomy and Astrophysics</i> , 2018, 609, A14.	5.1	16
45	Chromospheric Layer SpectroPolarimeter (CLASP2). <i>Proceedings of SPIE</i> , 2016, , .	0.8	15
46	ALMA observations of transient heating in a solar active region. <i>Astronomy and Astrophysics</i> , 2020, 643, A41.	5.1	12
47	Numerical non-LTE 3D radiative transfer using a multigrid method. <i>Astronomy and Astrophysics</i> , 2017, 599, A118.	5.1	11
48	Chromospheric observations and magnetic configuration of a supergranular structure. <i>Astronomy and Astrophysics</i> , 2019, 621, A1.	5.1	11
49	Heating of the solar chromosphere through current dissipation. <i>Astronomy and Astrophysics</i> , 2022, 661, A59.	5.1	11
50	The Formation of IRIS Diagnostics. IX. The Formation of the C I 135.58 NM Line in the Solar Atmosphere. <i>Astrophysical Journal</i> , 2017, 846, 40.	4.5	10
51	New Light on an Old Problem of the Cores of Solar Resonance Lines. <i>Astrophysical Journal</i> , 2020, 901, 32.	4.5	9
52	Comparison of Solar Fine Structure Observed Simultaneously in $\text{Ly}\beta$ and Mg II h. <i>Astrophysical Journal</i> , 2017, 847, 141.	4.5	8
53	The Dutch Open Telescope on La Palma. <i>Proceedings of the International Astronomical Union</i> , 2004, 2004, 597-604.	0.0	6
54	Tracing the evolution of radiation-MHD simulations of solar and stellar atmospheres in the Lagrangian frame. <i>Astronomy and Astrophysics</i> , 2018, 616, A136.	5.1	2

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55	Line formation of He I D ₃ and He I 10 830 Å... in a small-scale reconnection event. <i>Astronomy and Astrophysics</i> , 2021, 652, A146.	5.1	1