Viggo Hansteen

List of Publications by Year in descending order

44 papers	5,148 citations	186265 28 h-index	265206 42 g-index
44 all docs	44 docs citations	44 times ranked	1827 citing authors

#	Article	IF	Citations
1	The Interface Region Imaging Spectrograph (IRIS). Solar Physics, 2014, 289, 2733-2779.	2.5	948
2	Chromospheric Alfvèinic Waves Strong Enough to Power the Solar Wind. Science, 2007, 318, 1574-1577.	12.6	697
3	AlfvÃ©nic waves with sufficient energy to power the quiet solar corona and fast solar wind. Nature, 2011, 475, 477-480.	27.8	471
4	The stellar atmosphere simulation codeBifrost. Astronomy and Astrophysics, 2011, 531, A154.	5.1	354
5	The Origins of Hot Plasma in the Solar Corona. Science, 2011, 331, 55-58.	12.6	316
6	Dynamic Fibrils Are Driven by Magnetoacoustic Shocks. Astrophysical Journal, 2006, 647, L73-L76.	4.5	237
7	Highâ€Resolution Observations and Modeling of Dynamic Fibrils. Astrophysical Journal, 2007, 655, 624-641.	4.5	185
8	UBIQUITOUS TORSIONAL MOTIONS IN TYPE II SPICULES. Astrophysical Journal Letters, 2012, 752, L12.	8.3	151
9	On the generation of solar spicules and AlfvÃ©nic waves. Science, 2017, 356, 1269-1272.	12.6	149
10	Slow Solar Wind: Observations and Modeling. Space Science Reviews, 2016, 201, 55-108.	8.1	147
11	Dynamics of solar coronal loops. Astronomy and Astrophysics, 2004, 424, 289-300.	5.1	123
12	ON REDSHIFTS AND BLUESHIFTS IN THE TRANSITION REGION AND CORONA. Astrophysical Journal, 2010, 718, 1070-1078.	4.5	119
13	Radiative transfer with scattering for domain-decomposed 3D MHD simulations of cool stellar atmospheres. Astronomy and Astrophysics, 2010, 517, A49.	5.1	118
14	TWO-DIMENSIONAL RADIATIVE MAGNETOHYDRODYNAMIC SIMULATIONS OF THE IMPORTANCE OF PARTIAL IONIZATION IN THE CHROMOSPHERE. Astrophysical Journal, 2012, 753, 161.	4.5	99
15	OBSERVING CORONAL NANOFLARES IN ACTIVE REGION MOSS. Astrophysical Journal Letters, 2013, 770, L1.	8.3	99
16	THE FORMATION OFIRISDIAGNOSTICS. IV. THE Mg ii TRIPLET LINES AS A NEW DIAGNOSTIC FOR LOWER CHROMOSPHERIC HEATING. Astrophysical Journal, 2015, 806, 14.	4.5	84
17	Bombs and Flares at the Surface and Lower Atmosphere of the Sun. Astrophysical Journal, 2017, 839, 22.	4.5	80
18	ON THE ORIGIN OF THE TYPE II SPICULES: DYNAMIC THREE-DIMENSIONAL MHD SIMULATIONS. Astrophysical Journal, 2011, 736, 9.	4.5	66

#	Article	IF	Citations
19	Modeling of EIS Spectrum Drift from Instrumental Temperatures. Solar Physics, 2010, 266, 209-223.	2.5	62
20	Two-dimensional Radiative Magnetohydrodynamic Simulations of Partial Ionization in the Chromosphere. II. Dynamics and Energetics of the Low Solar Atmosphere. Astrophysical Journal, 2017, 847, 36.	4.5	59
21	Intermittent Reconnection and Plasmoids in UV Bursts in the Low Solar Atmosphere. Astrophysical Journal Letters, 2017, 851, L6.	8.3	58
22	A New View of the Solar Interface Region from the Interface Region Imaging Spectrograph (IRIS). Solar Physics, 2021, 296, 1.	2.5	51
23	NON-EQUILIBRIUM IONIZATION EFFECTS ON THE DENSITY LINE RATIO DIAGNOSTICS OF O IV. Astrophysical Journal, 2013, 767, 43.	4.5	49
24	The Multi-slit Approach to Coronal Spectroscopy with the Multi-slit Solar Explorer (MUSE). Astrophysical Journal, 2020, 888, 3.	4.5	45
25	HIGH SPATIAL RESOLUTION Fe xii OBSERVATIONS OF SOLAR ACTIVE REGIONS. Astrophysical Journal, 2016, 827, 99.	4.5	37
26	SYNTHESIZED SPECTRA OF OPTICALLY THIN EMISSION LINES PRODUCED BY THE BIFROST STELLAR ATMOSPHERE CODE, INCLUDING NONEQUILIBRIUM IONIZATION EFFECTS: A STUDY OF THE INTENSITY, NONTHERMAL LINE WIDTHS, AND DOPPLER SHIFTS. Astrophysical Journal, 2015, 802, 5.	4.5	36
27	ON THE MISALIGNMENT BETWEEN CHROMOSPHERIC FEATURES AND THE MAGNETIC FIELD ON THE SUN. Astrophysical Journal Letters, 2016, 831, L1.	8.3	32
28	The role of partial ionization effects in the chromosphere. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140268.	3.4	31
29	A DETAILED COMPARISON BETWEEN THE OBSERVED AND SYNTHESIZED PROPERTIES OF A SIMULATED TYPE II SPICULE. Astrophysical Journal, 2013, 771, 66.	4.5	28
30	Small-scale Magnetic Flux Emergence in the Quiet Sun. Astrophysical Journal Letters, 2018, 859, L26.	8.3	25
31	Probing the Physics of the Solar Atmosphere with the Multi-slit Solar Explorer (MUSE). I. Coronal Heating. Astrophysical Journal, 2022, 926, 52.	4.5	25
32	Probing the Physics of the Solar Atmosphere with the Multi-slit Solar Explorer (MUSE). II. Flares and Eruptions. Astrophysical Journal, 2022, 926, 53.	4.5	24
33	Multi-component Decomposition of Astronomical Spectra by Compressed Sensing. Astrophysical Journal, 2019, 882, 13.	4.5	22
34	Sources of Solar Wind at Solar Minimum: Constraints from Composition Data. Space Science Reviews, 2012, 172, 41-55.	8.1	20
35	CHROMOSPHERIC AND CORONAL WAVE GENERATION IN A MAGNETIC FLUX SHEATH. Astrophysical Journal, 2016, 827, 7.	4.5	20
36	ALMA and IRIS Observations of the Solar Chromosphere. I. An On-disk Type II Spicule. Astrophysical Journal, 2021, 906, 82.	4.5	16

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37	Self-consistent 3D radiative magnetohydrodynamic simulations of coronal rain formation and evolution. Astronomy and Astrophysics, 2020, 639, A20.	5.1	16
38	ALMA and IRIS Observations of the Solar Chromosphere. II. Structure and Dynamics of Chromospheric Plages. Astrophysical Journal, 2021, 906, 83.	4.5	14
39	Modeling Repeatedly Flaring<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>I</mml:mi></mml:math>Sunspots. Physical Review Letters, 2016, 116, 101101.	7.8	11
40	IRIS Observations of the Low-atmosphere Counterparts of Active Region Outflows. Astrophysical Journal, 2020, 903, 68.	4.5	9
41	High-resolution observations of the solar photosphere, chromosphere, and transition region. Astronomy and Astrophysics, 2020, 641, A146.	5.1	8
42	Detailed Description of the Collision Frequency in the Solar Atmosphere. Astrophysical Journal, 2022, 933, 205.	4.5	7
43	Thermal forces and the coronal helium abundance. AIP Conference Proceedings, 2003, , .	0.4	0
44	Observations at $0{hbox{.!!^{primeprime}}}1$ Resolution of the Dynamic Evolution of Magnetic Elements. Proceedings of the International Astronomical Union, 2004, 2004, 207-210.	0.0	0