## Sven Wedemeyer-Böhm

List of Publications by Year in descending order

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62 papers 2,453 citations

218677 26 h-index 206112 48 g-index

62 all docs

62 docs citations

times ranked

62

1256 citing authors

#	Article	IF	CITATIONS
1	Simulations of stellar convection with CO5BOLD. Journal of Computational Physics, 2012, 231, 919-959.	3.8	276
2	Magnetic tornadoes as energy channels into the solar corona. Nature, 2012, 486, 505-508.	27.8	270
3	Numerical simulation of the three-dimensional structure andÂdynamicsÂofÂthe non-magnetic solar chromosphere. Astronomy and Astrophysics, 2004, 414, 1121-1137.	5.1	200
4	Small-scale swirl events in the quiet Sun chromosphere. Astronomy and Astrophysics, 2009, 507, L9-L12.	5.1	116
5	Solar Science with the Atacama Large Millimeter/Submillimeter Array—A New View of Our Sun. Space Science Reviews, 2016, 200, 1-73.	8.1	113
6	Coupling from the Photosphere to the Chromosphere andÂtheÂCorona. Space Science Reviews, 2009, 144, 317-350.	8.1	84
7	Observing the Sun with the Atacama Large Millimeter/submillimeter Array (ALMA): Fast-Scan Single-Dish Mapping. Solar Physics, 2017, 292, 1.	2.5	76
8	The Horizontal Internetwork Magnetic Field: Numerical Simulations in Comparison to Observations with <i>Hinode</i> . Astrophysical Journal, 2008, 680, L85-L88.	4.5	69
9	Point spread functions for the Solar optical telescope onboard Hinode. Astronomy and Astrophysics, 2008, 487, 399-412.	5.1	69
10	ARE GIANT TORNADOES THE LEGS OF SOLAR PROMINENCES?. Astrophysical Journal, 2013, 774, 123.	4.5	67
11	On the continuum intensity distribution of the solar photosphere. Astronomy and Astrophysics, 2009, 503, 225-239.	5.1	67
12	Observing the Sun with the Atacama Large Millimeter/submillimeter Array (ALMA): High-Resolution Interferometric Imaging. Solar Physics, 2017, 292, 1.	2.5	57
13	ON THE EVOLUTION OF MAGNETIC WHITE DWARFS. Astrophysical Journal, 2015, 812, 19.	4.5	52
14	UNRESOLVED FINE-SCALE STRUCTURE IN SOLAR CORONAL LOOP-TOPS. Astrophysical Journal, 2014, 797, 36.	4.5	48
15	DOT tomography of the solar atmosphere. Astronomy and Astrophysics, 2005, 431, 687-692.	5.1	46
16	On the plasma flow inside magnetic tornadoes on the Sun. Publication of the Astronomical Society of Japan, 2014, 66, .	2.5	39
17	Statistical equilibrium and photospheric abundance of silicon in the Sun and in Vega. Astronomy and Astrophysics, 2001, 373, 998-1008.	5.1	39
18	Non-equilibrium calcium ionisation in the solar atmosphere. Astronomy and Astrophysics, 2011, 528, A1.	5.1	38

#	Article	IF	CITATIONS
19	Inter-network regions of the Sun at millimetre wavelengths. Astronomy and Astrophysics, 2007, 471, 977-991.	5.1	36
20	OBSERVING THE FORMATION OF FLARE-DRIVEN CORONAL RAIN. Astrophysical Journal, 2016, 833, 184.	4.5	35
21	Carbon monoxide in the solar atmosphere. Astronomy and Astrophysics, 2005, 438, 1043-1057.	5.1	33
22	The Sun at millimeter wavelengths. Astronomy and Astrophysics, 2020, 635, A71.	5.1	32
23	Time-dependent hydrogen ionisation in 3D simulations of the solar chromosphere. Astronomy and Astrophysics, 2006, 460, 301-307.	5.1	32
24	IS THE SUN LIGHTER THAN THE EARTH? ISOTOPIC CO IN THE PHOTOSPHERE, VIEWED THROUGH THE LENS OF THREE-DIMENSIONAL SPECTRUM SYNTHESIS. Astrophysical Journal, 2013, 765, 46.	4.5	31
25	The multi-thermal chromosphere. Astronomy and Astrophysics, 2020, 634, A56.	5.1	29
26	THE DETECTION OF UPWARDLY PROPAGATING WAVES CHANNELING ENERGY FROM THE CHROMOSPHERE TO THE LOW CORONA. Astrophysical Journal, 2014, 791, 61.	4.5	28
27	Vortex flows in the solar chromosphere. Astronomy and Astrophysics, 2017, 601, A135.	5.1	28
28	First high-resolution look at the quiet Sun with ALMA at 3mm. Astronomy and Astrophysics, 2018, 619, L6.	5.1	27
29	First analysis of solar structures in 1.21 mm full-disc ALMA image of the Sun. Astronomy and Astrophysics, 2018, 613, A17.	5.1	26
30	The solar chromosphere at millimetre and ultraviolet wavelengths. Astronomy and Astrophysics, 2019, 622, A150.	5.1	26
31	Hinode observations reveal boundary layers of magnetic elements in the solar photosphere. Astronomy and Astrophysics, 2007, 476, L33-L36.	5.1	26
32	Observation of a short-lived pattern in the solar chromosphere. Astronomy and Astrophysics, 2006, 459, L9-L12.	5.1	25
33	Magnetic tornadoes and chromospheric swirls – Definition and classification. Journal of Physics: Conference Series, 2013, 440, 012005.	0.4	24
34	On the fine structure of the quiet solar CaÂIIÂK atmosphere. Astronomy and Astrophysics, 2007, 462, 303-310.	5.1	23
35	Multiwavelength High-resolution Observations of Chromospheric Swirls in the Quiet Sun. Astrophysical Journal, 2019, 881, 83.	4.5	20
36	First Spectral Analysis of a Solar Plasma Eruption Using ALMA. Astrophysical Journal, 2019, 875, 163.	4.5	20

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37	CHROMOSPHERIC AND CORONAL WAVE GENERATION IN A MAGNETIC FLUX SHEATH. Astrophysical Journal, 2016, 827, 7.	4.5	20
38	The Sun at millimeter wavelengths. Astronomy and Astrophysics, 2020, 644, A152.	5.1	17
39	Carbon monoxide in the solar atmosphere. Astronomy and Astrophysics, 2007, 462, L31-L35.	5.1	16
40	First local helioseismic experiments with CO5BOLD. Astronomische Nachrichten, 2007, 328, 323-328.	1.2	16
41	ALMA and IRIS Observations of the Solar Chromosphere. I. An On-disk Type II Spicule. Astrophysical Journal, 2021, 906, 82.	4.5	16
42	An overall view of temperature oscillations in the solar chromosphere with ALMA. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200174.	3.4	15
43	Threeâ€dimensional magnetohydrodynamic simulations of Mâ€dwarf chromospheres. Astronomische Nachrichten, 2013, 334, 137-140.	1.2	14
44	ALMA and IRIS Observations of the Solar Chromosphere. II. Structure and Dynamics of Chromospheric Plages. Astrophysical Journal, 2021, 906, 83.	4.5	14
45	The Sun at millimeter wavelengths. Astronomy and Astrophysics, 2021, 656, A68.	5.1	12
46	3-D hydrodynamic simulations of the solar chromosphere. Astronomische Nachrichten, 2003, 324, 410-411.	1.2	10
47	MORPHOLOGY AND DYNAMICS OF THE LOW SOLAR CHROMOSPHERE. Astrophysical Journal, 2009, 706, 148-157.	4.5	10
48	Characterization of shock wave signatures at millimetre wavelengths from Bifrost simulations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200185.	3.4	10
49	The Solar ALMA Science Archive (SALSA). Astronomy and Astrophysics, 2022, 659, A31.	5.1	10
50	High-frequency oscillations in small chromospheric bright features observed with Atacama Large Millimetre/Submillimetre Array. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200184.	3.4	9
51	Three-dimensional hydrodynamical CO5BOLD model atmospheres of red giant stars. Astronomy and Astrophysics, 2017, 606, A26.	5.1	8
52	SSALMON $\hat{a}\in$ The Solar Simulations for the Atacama Large Millimeter Observatory Network. Advances in Space Research, 2015, 56, 2679-2692.	2.6	5
53	EMISSA (Exploring Millimeter Indicators of Solar-Stellar Activity). Astronomy and Astrophysics, 2021, 655, A113.	5.1	5
54	Power distribution of oscillations in the atmosphere of a plage region. Joint observations with ALMA, IRIS, and SDO. Astronomy and Astrophysics, 0, , .	5.1	4

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55	First detection of AlF line emission towards M-type AGB stars. Astronomy and Astrophysics, 2022, 663, A54.	5.1	4
56	A Genetic Algorithm to Model Solar Radio Active Regions From 3D Magnetic Field Extrapolations. Frontiers in Astronomy and Space Sciences, 0, 9, .	2.8	4
57	Small-scale structure and dynamics of the lower solar atmosphere. Proceedings of the International Astronomical Union, 2007, 3, 66-73.	0.0	3
58	Coupling from the Photosphere to the Chromosphere andÂtheÂCorona. Space Sciences Series of ISSI, 2008, , 317-350.	0.0	2
59	Dynamic models of the sun from the convection zone to the chromosphere. Proceedings of the International Astronomical Union, 2006, 2, 52-57.	0.0	1
60	Synthetic activity indicators for M-type dwarf stars. Proceedings of the International Astronomical Union, 2015, 11, 303-308.	0.0	1
61	Are there variations in Earth's global mean temperature related to the solar activity?. Proceedings of the International Astronomical Union, 2009, 5, 320-325.	0.0	O
62	Observing the Sun with the Atacama Large Millimeter/submillimeter Array – from continuum to magnetic fields. Proceedings of the International Astronomical Union, 2019, 15, 24-37.	0.0	0