

Michal Sobotka

List of Publications by Year in descending order

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71
papers

1,360
citations

331670

21
h-index

361022

35
g-index

72
all docs

72
docs citations

72
times ranked

591
citing authors

#	ARTICLE	IF	CITATIONS
1	Horizontal motions in sunspot penumbrae. <i>Astronomy and Astrophysics</i> , 2022, 662, A13.	5.1	4
2	Evolution and motions of magnetic fragments during the active region formation and decay: A statistical study. <i>Astronomy and Astrophysics</i> , 2021, 647, A146.	5.1	1
3	IRIS observations of chromospheric heating by acoustic waves in solar quiet and active regions. <i>Astronomy and Astrophysics</i> , 2021, 648, A28.	5.1	7
4	High-resolution spectroscopy of a surge in an emerging flux region. <i>Astronomy and Astrophysics</i> , 2020, 639, A19.	5.1	7
5	Observational study of chromospheric heating by acoustic waves. <i>Astronomy and Astrophysics</i> , 2020, 642, A52.	5.1	19
6	High-resolution imaging and near-infrared spectroscopy of penumbral decay. <i>Astronomy and Astrophysics</i> , 2018, 614, A2.	5.1	14
7	How Temperature And Magnetic Field Are Related In Sunspots?. , 2018, , .		0
8	The Temperature â€“ Magnetic Field Relation in Observed and Simulated Sunspots. <i>Solar Physics</i> , 2017, 292, 1.	2.5	5
9	Ca II 8542â€™s... brightenings induced by a solar microflare. <i>Astronomy and Astrophysics</i> , 2017, 608, A117.	5.1	4
10	Fitting peculiar spectral profiles in He I 10830 Å.. absorption features. <i>Astronomische Nachrichten</i> , 2016, 337, 1057-1063.	1.2	12
11	Horizontal flow fields in and around a small active region. <i>Astronomy and Astrophysics</i> , 2016, 596, A3.	5.1	13
12	Magnetic fields of opposite polarity in sunspot penumbrae. <i>Astronomy and Astrophysics</i> , 2016, 596, A4.	5.1	21
13	Active region fine structure observed at 0.08 arcsec resolution. <i>Astronomy and Astrophysics</i> , 2016, 596, A7.	5.1	23
14	Spectropolarimetric observations of an arch filament system with the GREGOR solar telescope. <i>Astronomische Nachrichten</i> , 2016, 337, 1050-1056.	1.2	9
15	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
16	Slipping reconnection in a solar flare observed in high resolution with the GREGOR solar telescope. <i>Astronomy and Astrophysics</i> , 2016, 596, A1.	5.1	10
17	Deep probing of the photospheric sunspot penumbra: no evidence of field-free gaps. <i>Astronomy and Astrophysics</i> , 2016, 596, A2.	5.1	29
18	Inference of magnetic fields in the very quiet Sun. <i>Astronomy and Astrophysics</i> , 2016, 596, A5.	5.1	24

#	ARTICLE	IF	CITATIONS
19	Probing deep photospheric layers of the quiet Sun with high magnetic sensitivity. <i>Astronomy and Astrophysics</i> , 2016, 596, A6.	5.1	28
20	CHROMOSPHERIC HEATING BY ACOUSTIC WAVES COMPARED TO RADIATIVE COOLING. <i>Astrophysical Journal</i> , 2016, 826, 49.	4.5	17
21	Upper chromospheric magnetic field of a sunspot penumbra: observations of fine structure. <i>Astronomy and Astrophysics</i> , 2016, 596, A8.	5.1	20
22	Three-dimensional structure of a sunspot light bridge. <i>Astronomy and Astrophysics</i> , 2016, 596, A59.	5.1	41
23	White-light continuum emission from a solar flare and plage. <i>Proceedings of the International Astronomical Union</i> , 2015, 11, 268-277.	0.0	0
24	Orphan penumbrae: Submerging horizontal fields. <i>Astronomy and Astrophysics</i> , 2014, 564, A91.	5.1	11
25	MOAT FLOW SYSTEM AROUND SUNSPOTS IN SHALLOW SUBSURFACE LAYERS. <i>Astrophysical Journal</i> , 2014, 790, 135.	4.5	10
26	Atmosphere above a large solar pore. <i>Journal of Physics: Conference Series</i> , 2013, 440, 012049.	0.4	0
27	Dynamics of the solar atmosphere above a pore with a light bridge. <i>Astronomy and Astrophysics</i> , 2013, 560, A84.	5.1	36
28	Optimisation of solar synoptic observations. <i>Proceedings of SPIE</i> , 2012, , .	0.8	0
29	The 1.5 meter solar telescope GREGOR. <i>Astronomische Nachrichten</i> , 2012, 333, 796-809.	1.2	131
30	A retrospective of the GREGOR solar telescope in scientific literature. <i>Astronomische Nachrichten</i> , 2012, 333, 810-815.	1.2	8
31	Magnetic and velocity fields of a solar pore. <i>Astronomy and Astrophysics</i> , 2012, 537, A85.	5.1	20
32	Auxiliary full-disc telescope for the European Solar Telescope. , 2010, , .		4
33	GREGOR solar telescope: Design and status. <i>Astronomische Nachrichten</i> , 2010, 331, 624-627.	1.2	13
34	Morphology and evolution of umbral dots and their substructures. <i>Astronomy and Astrophysics</i> , 2009, 504, 575-581.	5.1	32
35	EVOLUTION OF PHYSICAL CHARACTERISTICS OF UMBRAL DOTS AND PENUMBRAL GRAINS. <i>Astrophysical Journal</i> , 2009, 694, 1080-1084.	4.5	31
36	Large-scale horizontal flows in the solar photosphere IV. On the vertical structure of large-scale horizontal flows. <i>New Astronomy</i> , 2009, 14, 429-434.	1.8	7

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37	Large-scale horizontal flows in the solar photosphere. <i>Astronomy and Astrophysics</i> , 2009, 506, 875-884.	5.1	8
38	Large-scale horizontal flows in the solar photosphere. <i>Astronomy and Astrophysics</i> , 2008, 477, 285-292.	5.1	14
39	Observational Evidence for Rising Penumbra Flux Tubes?. <i>Solar Physics</i> , 2007, 241, 223-233.	2.5	3
40	Properties of sunspot moats derived from horizontal motions. <i>Astronomy and Astrophysics</i> , 2007, 472, 277-282.	5.1	20
41	Large-scale horizontal flows in the solar photosphere. <i>Astronomy and Astrophysics</i> , 2006, 458, 301-306.	5.1	21
42	The new 1.5m solar telescope GREGOR: first light and start of commissioning. , 2006, , .		2
43	The magnetic canopy above light bridges. <i>Astronomy and Astrophysics</i> , 2006, 453, 1079-1088.	5.1	73
44	Dynamics of Magnetic Bright Points in an Active Region. <i>Solar Physics</i> , 2006, 237, 13-23.	2.5	26
45	Phase diversity restoration of sunspot images. <i>Astronomy and Astrophysics</i> , 2005, 430, 1089-1097.	5.1	15
46	High-Pressure Enantioselective Allylation of Aldehydes Catalyzed by (Salen)Chromium(III) Complexes. <i>Synlett</i> , 2005, 2005, 227-230.	1.8	1
47	The structure of a penumbral connection between solar pores. <i>Astronomy and Astrophysics</i> , 2005, 442, 1079-1086.	5.1	3
48	Photometry of umbral dots. <i>Astronomy and Astrophysics</i> , 2005, 442, 323-329.	5.1	30
49	Observational evidence of Joule heating in some umbral dots. <i>Astronomy and Astrophysics</i> , 2004, 428, 215-218.	5.1	8
50	Progress report of the 1.5 m solar telescope GREGOR. , 2004, , .		4
51	Phase diversity restoration of sunspot images. <i>Astronomy and Astrophysics</i> , 2004, 423, 737-744.	5.1	18
52	A CCD-based guiding and control system for solar telescopes. <i>Astronomische Nachrichten</i> , 2003, 324, 305-307.	1.2	0
53	Solar activity II: Sunspots and pores. <i>Astronomische Nachrichten</i> , 2003, 324, 369-373.	1.2	24
54	Infrared photometry of a sunspot near the disk center. <i>Astronomische Nachrichten</i> , 2003, 324, 376-377.	1.2	0

#	ARTICLE	IF	CITATIONS
55	GREGOR: the new 1.5m solar telescope on Tenerife. , 2003, 4853, 360.		12
56	Centre-to-limb variation of solar granulation in the infrared. Astronomy and Astrophysics, 2003, 397, 1075-1081.	5.1	8
57	Properties of horizontal flows inside and outside a solar pore. Astronomy and Astrophysics, 2002, 395, 249-255.	5.1	14
58	Evolution and motions of small-scale photospheric structures near a large solar pore. Astronomy and Astrophysics, 2002, 387, 665-671.	5.1	7
59	Fine structure and dynamics in a light bridge inside a solar pore. Astronomy and Astrophysics, 2002, 383, 275-282.	5.1	36
60	Reconstruction of the HSFA telescopes. Astronomische Nachrichten, 2001, 322, 371-374.	1.2	2
61	Fine structure in sunspots. Astronomy and Astrophysics, 2001, 380, 714-718.	5.1	33
62	Infrared Photometry of Solar Photospheric Structures. I. Active Regions at the Center of the Disk. Astrophysical Journal, 2000, 544, 1155-1168.	4.5	17
63	Power-law spectra of 1.6 GHz narrowband dm-spikes. Solar Physics, 2000, 195, 165-174.	2.5	19
64	Infrared photometry of solar active regions. Journal of Astrophysics and Astronomy, 2000, 21, 289-292.	1.0	0
65	Temporal Evolution of Fine Structures in and around Solar Pores. Astrophysical Journal, 1999, 511, 436-450.	4.5	66
66	Time Series of Solar Granulation Images. I. Differences between Small and Large Granules in Quiet Regions. Astrophysical Journal, 1997, 480, 406-419.	4.5	71
67	Narrowband dm-spikes in the 2 GHz frequency range and MHD cascading waves in reconnection outflows. Solar Physics, 1996, 168, 375-383.	2.5	40
68	On the Dynamics of Bright Features in Sunspot Umbrae. Astrophysical Journal, 1995, 447, .	4.5	16
69	A high-resolution study of the structure of sunspot light bridges and abnormal granulation. Astrophysical Journal, 1994, 426, 404.	4.5	53
70	A High-Resolution Study of Inhomogeneities in Sunspot Umbrae. Astrophysical Journal, 1993, 415, 832.	4.5	77
71	Spectroscopic observations and models of umbral light bridges. Solar Physics, 1989, 124, 37-52.	2.5	7