Carolus J Schrijver

List of Publications by Year
in descending order

112	14,876	43973 48	91712 69
papers	citations	h-index	g-index

125	125	125	4265
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coronal Mass Ejections and Dimmings: A Comparative Study Using MHD Simulations and SDO Observations. Astrophysical Journal, 2022, 928, 154.	1.6	12
2	Extreme solar events. Living Reviews in Solar Physics, 2022, 19, 1.	7.8	60
3	Testing the Solar Activity Paradigm in the Context of Exoplanet Transits. Astrophysical Journal, 2020, 890, 121.	1.6	10
4	Sun-as-a-star Spectral Irradiance Observations of Transiting Active Regions. Astrophysical Journal, 2020, 902, 36.	1.6	22
5	Coronal dimming as a proxy for stellar coronal mass ejections. Proceedings of the International Astronomical Union, 2019, 15, 426-432.	0.0	8
6	MAGNETIC PROPERTIES OF SOLAR ACTIVE REGIONS THAT GOVERN LARGE SOLAR FLARES AND ERUPTIONS. Astrophysical Journal, 2017, 834, 56.	1.6	134
7	Publication Statistics on the Sun and the Heliosphere. Solar Physics, 2016, 291, 1267-1272.	1.0	4
8	A NUMERICAL STUDY OF LONG-RANGE MAGNETIC IMPACTS DURING CORONAL MASS EJECTIONS. Astrophysical Journal, 2016, 820, 16.	1.6	41
9	THE NONPOTENTIALITY OF CORONAE OF SOLAR ACTIVE REGIONS, THE DYNAMICS OF THE SURFACE MAGNETIC FIELD, AND THE POTENTIAL FOR LARGE FLARES. Astrophysical Journal, 2016, 820, 103.	1.6	29
10	The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?. Solar Physics, 2016, 291, 1761-1782.	1.0	69
11	THE INFLUENCE OF SPATIAL RESOLUTION ON NONLINEAR FORCE-FREE MODELING. Astrophysical Journal, 2015, 811, 107.	1.6	78
12	Understanding space weather to shield society: A global road map for 2015â€“2025 commissioned by COSPAR and ILWS. Advances in Space Research, 2015, 55, 2745-2807.	1.2	256
13	Blind Stereoscopy of the Coronal Magnetic Field. Solar Physics, 2015, 290, 2765-2789.	1.0	9
14	A Statistical Study of Distant Consequences of Large Solar Energetic Events. Solar Physics, 2015, 290, 2943-2950.	1.0	11
15	THERMAL DIAGNOSTICS WITH THE ATMOSPHERIC IMAGING ASSEMBLY ON BOARD THE SOLAR DYNAMICS OBSERVATORY: A VALIDATED METHOD FOR DIFFERENTIAL EMISSION MEASURE INVERSIONS. Astrophysical Journal, 2015, 807, 143.	1.6	201
16	Socioâ€Economic Hazards and Impacts of Space Weather: The Important Range Between Mild and Extreme. Space Weather, 2015, 13, 524-528.	1.3	37
17	BRIGHT HOT IMPACTS BY ERUPTED FRAGMENTS FALLING BACK ON THE SUN: UV REDSHIFTS IN STELLAR ACCRETION. Astrophysical Journal Letters, 2014, 797, L5.	3.0	22
18	USING CORONAL LOOPS TO RECONSTRUCT THE MAGNETIC FIELD OF AN ACTIVE REGION BEFORE AND AFTER A MAJOR FLARE. Astrophysical Journal, 2014, 783, 102.	1.6	57

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19	The Interface Region Imaging Spectrograph (IRIS). Solar Physics, 2014, 289, 2733-2779.	1.0	948
20	Photometric and Thermal Cross-calibration of Solar EUV Instruments. Solar Physics, 2014, 289, 2377-2397.	1.0	79
21	Assessing the impact of space weather on the electric power grid based on insurance claims for industrial electrical equipment. Space Weather, 2014, 12, 487-498.	1.3	64
22	Space Weather From Explosions on the Sun: How Bad Could It Be?. Eos, 2014, 95, 201-202.	0.1	12
23	LARGE-SCALE CORONAL PROPAGATING FRONTS IN SOLAR ERUPTIONS AS OBSERVED BY THE ATMOSPHERIC IMAGING ASSEMBLY ON BOARD THE SOLAR DYNAMICS OBSERVATORYâ€”AN ENSEMBLE STUDY. Astrophysical Journal, 2013, 776, 58.	1.6	101
24	Comets as solar probes. Physics Today, 2013, 66, 27-32.	0.3	22
25	Probing the Solar Magnetic Field with a Sun-Grazing Comet. Science, 2013, 340, 1196-1199.	6.0	55
26	PATHWAYS OF LARGE-SCALE MAGNETIC COUPLINGS BETWEEN SOLAR CORONAL EVENTS. Astrophysical Journal, 2013, 773, 93.	1.6	50
27	Bright Hot Impacts by Erupted Fragments Falling Back on the Sun: A Template for Stellar Accretion. Science, 2013, 341, 251-253.	6.0	47
28	A survey of customers of space weather information. Space Weather, 2013, 11, 529-541.	1.3	69
29	The standard flare model in three dimensions. Astronomy and Astrophysics, 2013, 549, A66.	2.1	158
30	Disturbances in the US electric grid associated with geomagnetic activity. Journal of Space Weather and Space Climate, 2013, 3, A19.	1.1	25
31	Destruction of Sun-Grazing Comet C/2011 N3 (SOHO) Within the Low Solar Corona. Science, 2012, 335, 324-328.	6.0	30
32	QUASI-PERIODIC FAST-MODE WAVE TRAINS WITHIN A GLOBAL EUV WAVE AND SEQUENTIAL TRANSVERSE OSCILLATIONS DETECTED BYSDO/AIA. Astrophysical Journal, 2012, 753, 52.	1.6	131
33	Estimating the frequency of extremely energetic solar events, based on solar, stellar, lunar, and terrestrial records. Journal of Geophysical Research, 2012, 117, .	3.3	141
34	GUIDING NONLINEAR FORCE-FREE MODELING USING CORONAL OBSERVATIONS: FIRST RESULTS USING A QUASI-GRAD-RUBIN SCHEME. Astrophysical Journal, 2012, 756, 153.	1.6	54
35	The Atmospheric Imaging Assembly (AIA) on the Solar Dynamics Observatory (SDO). Solar Physics, 2012, 275, 17-40.	1.0	3,385
36	The Helioseismic and Magnetic Imager (HMI) Investigation for the Solar Dynamics Observatory (SDO). Solar Physics, 2012, 275, 207-227.	1.0	1,677

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37	Long-range magnetic couplings between solar flares and coronal mass ejections observed by SDO and STEREO. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	142
38	The minimal solar activity in 2008-2009 and its implications for long-term climate modeling. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	84
39	THE 2011 FEBRUARY 15 X2 FLARE, RIBBONS, CORONAL FRONT, AND MASS EJECTION: INTERPRETING THE THREE-DIMENSIONAL VIEWS FROM THESOLAR DYNAMICS OBSERVATORYANDSTEREOGUIDED BY MAGNETOHYDRODYNAMIC FLUX-ROPE MODELING. Astrophysical Journal, 2011, 738, 167.	1.6	156
40	COMMISSION 10: SOLAR ACTIVITY. Proceedings of the International Astronomical Union, 2011, 7, 69-80.	0.0	3
41	NEW SOLAR EXTREME-ULTRAVIOLET IRRADIANCE OBSERVATIONS DURING FLARES. Astrophysical Journal, 2011, 739, 59.	1.6	144
42	CORONAL LOOP OSCILLATIONS OBSERVED WITH ATMOSPHERIC IMAGING ASSEMBLYâ€"KINK MODE WITH CROSS-SECTIONAL AND DENSITY OSCILLATIONS. Astrophysical Journal, 2011, 736, 102.	1.6	150
43	DIRECT IMAGING OF QUASI-PERIODIC FAST PROPAGATING WAVES OF âˆ¼2000 km s ^{â€"1} IN THE LOW SOLAR CORONA BY THE SOLAR DYNAMICS OBSERVATORY ATMOSPHERIC IMAGING ASSEMBLY. Astrophysical Journal Letters, 2011, 736, L13.	3.0	128
44	Solar spectral irradiance: measurements and models. , 2010, , 269-298.		14
45	Terrestrial ionospheres. , 2010, , 351-362.		2
46	Perspective on heliophysics. , 2010, , 1-14.		1
47	Introduction to space storms and radiation. , 2010, , 15-42.		1
48	In-situ detection of energetic particles. , 2010, , 43-78.		2
49	Energetic particles and manned spaceflight. , 2010, , 359-380.		2
50	The heliosphere and cosmic rays. , 2010, , 243-268.		1
51	Energetic particles and technology. , 2010, , 381-400.		2
52	Radiative signatures of energetic particles. , 2010, , 79-122.		2
53	Observations of solar and stellar eruptions, flares, and jets. , 2010, , 123-158.		7
54	Models of coronal mass ejections and flares. , 2010, , 159-192.		26

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55	ERUPTIONS FROM SOLAR EPHEMERAL REGIONS AS AN EXTENSION OF THE SIZE DISTRIBUTION OF CORONAL MASS EJECTIONS. Astrophysical Journal, 2010, 710, 1480-1485.	1.6	24
56	THE NATURE OF FLARE RIBBONS IN CORONAL NULL-POINT TOPOLOGY. Astrophysical Journal, 2009, 700, 559-578.	1.6	288
57	A CRITICAL ASSESSMENT OF NONLINEAR FORCE-FREE FIELD MODELING OF THE SOLAR CORONA FOR ACTIVE REGION 10953. Astrophysical Journal, 2009, 696, 1780-1791.	1.6	318
58	Driving major solar flares and eruptions: A review. Advances in Space Research, 2009, 43, 739-755.	1.2	173
59	Nonlinear Force-Free Modeling of Coronal Magnetic Fields. II. Modeling a Filament Arcade and Simulated Chromospheric and Photospheric Vector Fields. Solar Physics, 2008, 247, 269-299.	1.0	186
60	The Global Solar Magnetic Field Through a Full Sunspot Cycle: Observations and Model Results. Solar Physics, 2008, 252, 19-31.	1.0	63
61	Nonlinear Forceâ€free Field Modeling of a Solar Active Region around the Time of a Major Flare and Coronal Mass Ejection. Astrophysical Journal, 2008, 675, 1637-1644.	1.6	254
62	The Dependence of Ephemeral Region Emergence on Local Flux Imbalance. Astrophysical Journal, 2008, 678, 541-548.	1.6	52
63	A Characteristic Magnetic Field Pattern Associated with All Major Solar Flares and Its Use in Flare Forecasting. Astrophysical Journal, 2007, 655, L117-L120.	1.6	259
64	On Connecting the Dynamics of the Chromosphere and Transition Region with Hinode SOT and EIS. Publication of the Astronomical Society of Japan, 2007, 59, S699-S706.	1.0	16
65	Nonlinear Force-Free Modeling of Coronal Magnetic Fields Part I: A Quantitative Comparison of Methods. Solar Physics, 2006, 235, 161-190.	1.0	286
66	The Heating of Coolâ€Star Coronae: From Individual Loops to Global Fluxâ€Flux Scalings. Astrophysical Journal, 2005, 619, 1077-1083.	1.6	17
67	The Nonpotentiality of Activeâ€Region Coronae and the Dynamics of the Photospheric Magnetic Field. Astrophysical Journal, 2005, 628, 501-513.	1.6	142
68	Photospheric and heliospheric magnetic fields. Solar Physics, 2003, 212, 165-200.	1.0	560
69	The Properties of Small Magnetic Regions on the Solar Surface and the Implications for the Solar Dynamo(s). Astrophysical Journal, 2003, 584, 1107-1119.	1.6	169
70	Asterospheric Magnetic Fields and Winds of Cool Stars. Astrophysical Journal, 2003, 590, 493-501.	1.6	34
71	Title is missing!. Solar Physics, 2002, 206, 99-132.	1.0	344
72	Title is missing!. Solar Physics, 2002, 206, 69-98.	1.0	216

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73	What Is Missing from Our Understanding of Longâ€Term Solar and Heliospheric Activity?. Astrophysical Journal, 2002, 577, 1006-1012.	1.6	134
74	Simulations of the Photospheric Magnetic Activity and Outer Atmospheric Radiative Losses of Cool Stars Based on Characteristics of the Solar Magnetic Field. Astrophysical Journal, 2001, 547, 475-490.	1.6	138
75	On the Formation of Polar Spots in Sunâ€like Stars. Astrophysical Journal, 2001, 551, 1099-1106.	1.6	152
76	Time Variability of the â€œQuietâ€•Sun Observed withTRACE. II. Physical Parameters, Temperature Evolution, and Energetics of Extremeâ€Ultraviolet Nanoflares. Astrophysical Journal, 2000, 535, 1047-1065.	1.6	291
77	Coronal Loop Oscillations Observed with theTransition Region and Coronal Explorer. Astrophysical Journal, 1999, 520, 880-894.	1.6	801
78	Sustaining the Quiet Photospheric Network: The Balance of Flux Emergence, Fragmentation, Merging, and Cancellation. Astrophysical Journal, 1997, 487, 424-436.	1.6	303
79	The photospheric magnetic flux budget. Solar Physics, 1994, 150, 1-18.	1.0	121
80	Relations between the photospheric magnetic field and the emission from the outer atmospheres of cool stars. I - The solar CA II K line core emission. Astrophysical Journal, 1989, 337, 964.	1.6	188
81	Interconnectedness in heliophysics. , 0, , 1-10.		0
82	Long-term evolution of magnetic activity of Sun-like stars. , 0, , 11-48.		0
83	Formation and early evolution of stars and protoplanetary disks. , 0, , 49-78.		0
84	Planetary habitability on astronomical time scales. , 0, , 79-98.		2
85	Modeling solar and stellar dynamos. , 0, , 141-178.		0
86	Planetary fields and dynamos. , 0, , 179-216.		0
87	The structure and evolution of the three-dimensional solar wind. , 0, , 217-242.		1
88	Astrophysical influences on planetary climate systems. , 0, , 299-332.		0
89	Assessing the Sunâ€“climate relationship in paleoclimate records. , 0, , 333-350.		0
90	Long-term evolution of the geospace climate. , 0, , 363-388.		0

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91	Particle acceleration in shocks. , 0, , 209-232.		3
92	Energy conversion in planetary magnetospheres. , 0, , 263-292.		4
93	Energization of trapped particles. , 0, , 293-320.		0
94	Flares, coronal mass ejections, and atmospheric responses. , 0, , 321-358.		6
95	Energetic particle transport. , 0, , 233-262.		7
96	Solar variability, climate, and atmospheric photochemistry. , 0, , 425-448.		0
97	Waves and transport processes in atmospheres and oceans. , 0, , 389-424.		0
98	Solar internal flows and dynamo action. , 0, , 99-140.		0
99	Shocks in heliophysics. , 0, , 193-208.		1
100	Solar explosive activity throughout the evolution of the solar system. , 0, , 23-55.		3
101	Effects of stellar eruptions throughout astrospheres. , 0, , 80-103.		0
102	Characteristics of planetary systems. , 0, , 104-125.		0
103	Planetary dynamos: updates and new frontiers. , 0, , 126-146.		0
104	Climates of terrestrial planets. , 0, , 147-174.		2
105	Upper atmospheres of the giant planets. , 0, , 175-200.		0
106	Aeronomy of terrestrial upper atmospheres. , 0, , 201-225.		2
107	Moons, asteroids, and comets interacting with their surroundings. , 0, , 226-250.		0
108	Dusty plasmas. , 0, , 251-269.		0

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109	Energetic-particle environments in the solar system. , 0, , 270-288.		0
110	Heliophysics with radio scintillation and occultation. , 0, , 289-326.		5
111	Authors and editors. , 0, , 327-328.		0
112	Astrospheres, stellar winds, and the interstellar medium. , 0, , 56-79.		0