Sarah A Matthews

List of Publications by Year
in descending order

80 papers	1,273 citations	331670 21 h-index	414414 32 g-index
80 all docs	80 docs citations	80 times ranked	1169 citing authors

#	Article	IF	Citations
1	The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?. Solar Physics, 2016, 291, 1761-1782.	2.5	69
2	A catalogue of white-light flares observed byYohkoh. Astronomy and Astrophysics, 2003, 409, 1107-1125.	5.1	69
3	Nonthermal Velocity Evolution in the Precursor Phase of a Solar Flare. Astrophysical Journal, 2001, 549, L245-L248.	4.5	58
4	2011 FEBRUARY 15: SUNQUAKES PRODUCED BY FLUX ROPE ERUPTION. Astrophysical Journal Letters, 2011, 741, L35.	8.3	53
5	CORONAL MAGNETIC RECONNECTION DRIVEN BY CME EXPANSIONâ€”THE 2011 JUNE 7 EVENT. Astrophysical Journal, 2014, 788, 85.	4.5	53
6	Multi-wavelength observations of an X-class flare without a coronal mass ejection.. Solar Physics, 2002, 205, 325-339.	2.5	50
7	INVESTIGATING THE DYNAMICS AND DENSITY EVOLUTION OF RETURNING PLASMA BLOBS FROM THE 2011 JUNE 7 ERUPTION. Astrophysical Journal, 2014, 782, 87.	4.5	45
8	Relative Timing of Soft X-Ray Nonthermal Line Broadening and Hard X-Ray Emission in Solar Flares. Astrophysical Journal, 1998, 494, L235-L238.	4.5	35
9	Solar magnetism eXplorer (SolmeX). Experimental Astronomy, 2012, 33, 271-303.	3.7	34
10	Analysis of a coronal mass ejection and corotating interaction region as they travel from the Sun passing Venus, Earth, Mars, and Saturn. Journal of Geophysical Research: Space Physics, 2015, 120, 1566-1588.	2.4	33
11	Evidence of Flaring in a Transequatorial Loop on the Sun. Astrophysical Journal, 2003, 598, L59-L62.	4.5	30
12	THE LOCATION OF NON-THERMAL VELOCITY IN THE EARLY PHASES OF LARGE FLARESâ€”REVEALING PRE-ERUPTION FLUX ROPES. Astrophysical Journal, 2013, 774, 122.	4.5	29
13	Flows in the solar atmosphere due to the eruptions on the 15th July, 2002. Astronomy and Astrophysics, 2005, 438, 1099-1106.	5.1	28
14	The soft X-ray characteristics of solar flares, both with and without associated CMEs. Astronomy and Astrophysics, 2003, 400, 779-784.	5.1	26
15	Plasma Evolution within an Erupting Coronal Cavity. Astrophysical Journal, 2018, 855, 74.	4.5	25
16	A Multiple Flare Scenario where the Classic Long-Duration Flare Was Not the Source of a CME. Solar Physics, 2007, 240, 283-299.	2.5	24
17	An Investigation of the CME of 3 November 2011 and Its Associated Widespread Solar Energetic Particle Event. Solar Physics, 2014, 289, 1731-1744.	2.5	24
18	Solar source of energetic particles in interplanetary space during the 2006 December 13 event. Astronomy and Astrophysics, 2009, 503, 1013-1021.	5.1	24

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19	A slow coronal mass ejection with rising X-ray source. Astronomy and Astrophysics, 2005, 434, 761-771.	5.1	23
20	Observations and Modelling of the Pre-flare Period of the 29 March 2014 X1 Flare. Solar Physics, 2017, 292, 38.	2.5	23
21	Beam electrons as a source of HÎ± flare ribbons. Nature Communications, 2017, 8, 15905.	12.8	23
22	Properties of the 15 February 2011 Flare Seismic Sources. Solar Physics, 2013, 284, 315-327.	2.5	22
23	Transient Inverse-FIP Plasma Composition Evolution within a Solar Flare. Astrophysical Journal, 2019, 875, 35.	4.5	22
24	Spectropolarimetric Insight into Plasma Sheet Dynamics of a Solar Flare. Astrophysical Journal Letters, 2019, 887, L34.	8.3	20
25	Solar And Cosmic Ray Physics And The Space Environment: Studies For And With LISA. AIP Conference Proceedings, 2006, , .	0.4	19
26	ANATOMY OF A SOLAR FLARE: MEASUREMENTS OF THE 2006 DECEMBER 14 X-CLASS FLARE WITH GONG,HINODE, ANDRHESSI. Astrophysical Journal, 2011, 739, 71.	4.5	19
27	SPECTROSCOPIC SIGNATURES RELATED TO A SUNQUAKE. Astrophysical Journal, 2015, 812, 35.	4.5	19
28	Coronal mass ejections and their association to active region flaring.. Solar Physics, 2001, 200, 189-202.	2.5	18
29	The association of transequatorial loops in the solar corona with coronal mass ejection onset. Astronomy and Astrophysics, 2003, 400, 759-767.	5.1	18
30	Evidence for a Flux Rope driven EUV wave and CME: Comparison with the Piston Shock Model. Astronomy and Astrophysics, 2003, 399, 749-754.	5.1	16
31	COMPARISON OF SEISMIC SIGNATURES OF FLARES OBTAINED BYSOHO/MICHELSON DOPPLER IMAGER AND GONG INSTRUMENTS. Astrophysical Journal, 2011, 739, 70.	4.5	16
32	The Solar Activity Monitor Network â€“ SAMNet. Journal of Space Weather and Space Climate, 2022, 12, 2.	3.3	16
33	Decametric N Burst: A Consequence of the Interaction of Two Coronal Mass Ejections. Solar Physics, 2007, 240, 301-313.	2.5	15
34	The Triggering of the 2014 March 29 Filament Eruption. Astrophysical Journal, 2018, 860, 163.	4.5	15
35	Relating magnetic field strengths to hard X-ray emission in solar flares. Astronomy and Astrophysics, 2004, 423, 363-372.	5.1	14
36	The timing of non-thermal soft X-ray emission line broadenings in solar flares. Astronomy and Astrophysics, 2001, 379, 616-621.	5.1	13

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37	Dynamics of Late-stage Reconnection in the 2017 September 10 Solar Flare. Astrophysical Journal, 2020, 900, 192.	4.5	13
38	Long term evolution of a non-active region sigmoid and its CME activity. Astronomy and Astrophysics, 2001, 378, 239-246.	5.1	12
39	The relationship between UV and X-ray active region structures. Solar Physics, 1997, 175, 541-551.	2.5	11
40	Relating near-Earth observations of an interplanetary coronal mass ejection to the conditions at its site of origin in the solar corona. Geophysical Research Letters, 2005, 32, .	4.0	11
41	Measuring Velocities in the Early Stage of an Eruption: Using â€œOverlappogramâ€•Data from Hinode EIS. Astrophysical Journal, 2017, 842, 58.	4.5	10
42	The 2013 February 17 Sunquake in the Context of the Active Region's Magnetic Field Configuration. Astrophysical Journal, 2017, 849, 40.	4.5	10
43	Lost and found sunquake in the 6 September 2011 flare caused by beam electrons. Astronomy and Astrophysics, 2018, 619, A65.	5.1	10
44	Flare characteristics: Properties of eruptive and non-eruptive events and their associations. Advances in Space Research, 2003, 32, 1051-1056.	2.6	9
45	What causes solar active region loops to exist at transition region temperatures?. Solar Physics, 2004, 223, 57-76.	2.5	9
46	Multi-scale reconnections in a complex CME. Advances in Space Research, 2008, 42, 858-865.	2.6	9
47	Flare-induced signals in polarization measurements during the X2.6 flare on 2005 January 15. Research in Astronomy and Astrophysics, 2009, 9, 812-828.	1.7	9
48	Pre-Flare Flows in the Corona. Solar Physics, 2010, 267, 361-375.	2.5	9
49	On the Seismicity of September 7, 2011 X1.8-class Flare. Journal of Physics: Conference Series, 2013, 440, 012046.	0.4	9
50	THE IMPACT OF A FILAMENT ERUPTION ON NEARBY HIGH-LYING COOL LOOPS. Astrophysical Journal, 2014, 792, 93.	4.5	9
51	Sunquake with a second bounce, other sunquakes, and emission associated with the X9.3 flare of 6 September 2017. Astronomy and Astrophysics, 2020, 639, A78.	5.1	7
52	Proposed mission concept for the Astrophysical Plasmadynamic Explorer (APEX): an EUV high-resolution spectroscopic SMEX. , 2003, , .		6
53	MAJOR ELECTRON EVENTS AND CORONAL MAGNETIC CONFIGURATIONS OF THE RELATED SOLAR ACTIVE REGIONS. Astrophysical Journal Letters, 2010, 720, L36-L40.	8.3	6
54	CORONAL JETS, MAGNETIC TOPOLOGIES, AND THE PRODUCTION OF INTERPLANETARY ELECTRON STREAMS. Astrophysical Journal, 2011, 735, 43.	4.5	6

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55	Locating Hot Plasma in Small Flares using Spectroscopic Overlappogram Data from the Hinode EUV Imaging Spectrometer. Solar Physics, 2020, 295, 1.	2.5	6
56	A Survey of the Hard X-Ray Characteristics of Seismically Active and Quiet White-Light Flares. Solar Physics, 2012, 277, 317-335.	2.5	5
57	Flare-related Recurring Active Region Jets: Evidence for Very Hot Plasma. Solar Physics, 2018, 293, 1.	2.5	5
58	Serial Flaring in an Active Region: Exploring Why Only One Flare Is Eruptive. Astrophysical Journal, 2020, 890, 84.	4.5	5
59	The apparent longitude distribution of solar flares. Astronomy and Astrophysics, 2003, 401, 1151-1157.	5.1	5
60	Sunquake with a second bounce, other sunquakes, and emission associated with the X9.3 flare of 6 September 2017. Astronomy and Astrophysics, 2020, 639, A79.	5.1	5
61	Probing Current Sheet Instabilities from Flare Ribbon Dynamics. Astrophysical Journal, 2021, 922, 117.	4.5	5
62	The magnetic topology of a sigmoid. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 497-504.	1.6	4
63	Solar Particle Acceleration Radiation and Kinetics (SPARK). Experimental Astronomy, 2012, 33, 237-269.	3.7	4
64	Multi-wavelength observations of Yohkoh white-light flares. COSPAR Colloquia Series, 2002, , 289-290.	0.2	3
65	Magnetic coupling of the Sunâ€“Earth system â€“ The view from STEREO. Advances in Space Research, 2007, 39, 1791-1803.	2.6	3
66	Stellar And Galactic Environment survey (SAGE). Experimental Astronomy, 2009, 23, 169-191.	3.7	3
67	Properties of EUV and X-ray emission in solar active regions. Astronomy and Astrophysics, 2001, 365, 186-197.	5.1	3
68	Non-thermal broadening of coronal emission lines in the onset phase of solar flares and CMEs. Astronomy and Astrophysics, 2006, 447, 719-725.	5.1	3
69	The high-energy Sun - probing the origins of particle acceleration on our nearest star. Experimental Astronomy, 2022, 54, 335-360.	3.7	3
70	Trajectory design of Earth-enabled Sun occultation missions. Acta Astronautica, 2022, 195, 251-264.	3.2	3
71	Particle acceleration and the decay of soft X-ray non-thermal line broadening in solar flares. Solar Physics, 1994, 154, 157-175.	2.5	1
72	The Coronal Emission of Photospheric Magnetic Fragments. Solar Physics, 2002, 211, 125-134.	2.5	1

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73	Stellar and galactic environment survey (SAGE). Astrophysics and Space Science, 2009, 320, 231-238.	1.4	1
74	Anatomy of a flare and coronal mass ejection. COSPAR Colloquia Series, 2002, 13, 253-256.	0.2	0
75	Magnetic coupling in the solar system. Astronomy and Geophysics, 2009, 50, 2.31-2.35.	0.2	0
76	Magnetic reconnection driven by filament eruption in the 7 June 2011 event. Proceedings of the International Astronomical Union, 2013, 8, 502-503.	0.0	0
77	Space Weather. , 2004, , 157-185.		0
78	Stellar and galactic environment survey (SAGE). , 2008, , 235-242.		0
79	Non-Thermal Velocities Observed by Yohkoh. Astrophysics and Space Science Library, 1998, , 113-114.	2.7	0
80	The Relationship Between UV and X-Ray Brightenings. Astrophysics and Space Science Library, 1998, , 249-250.	2.7	0