

Rudolf von Steiger

List of Publications by Year in descending order

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100
papers

5,117
citations

81839

39
h-index

88593

70
g-index

108
all docs

108
docs citations

108
times ranked

2501
citing authors

#	ARTICLE	IF	CITATIONS
1	Linking the Sun to the Heliosphere Using Composition Data and Modelling. <i>Space Science Reviews</i> , 2021, 217, .	3.7	11
2	Determination of Plasma, Pickup Ion, and Suprathermal Particle Spectrum in the Solar Wind Frame of Reference. <i>Astrophysical Journal</i> , 2019, 871, 60.	1.6	6
3	Editorial to the Topical Collection on Supernovae. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	0
4	Minimal Magnetic States of the Sun and the Solar Wind: Implications for the Origin of the Slow Solar Wind. <i>Space Science Reviews</i> , 2017, 210, 227-247.	3.7	9
5	Geoeffective Properties of Solar Transients and Stream Interaction Regions. <i>Space Science Reviews</i> , 2017, 212, 1271-1314.	3.7	133
6	Editorial: Measuring Solar Magnetic Fields – An Outline of History, Current Status and Challenges. <i>Space Science Reviews</i> , 2017, 210, 1-3.	3.7	1
7	Achievements and Challenges in the Science of Space Weather. <i>Space Science Reviews</i> , 2017, 212, 1137-1157.	3.7	45
8	SOLAR METALLICITY DERIVED FROM IN SITU SOLAR WIND COMPOSITION. <i>Astrophysical Journal</i> , 2016, 816, 13.	1.6	51
9	COMPOSITION OF CORONAL MASS EJECTIONS. <i>Astrophysical Journal</i> , 2016, 826, 10.	1.6	46
10	Slow Solar Wind: Observations and Modeling. <i>Space Science Reviews</i> , 2016, 201, 55-108.	3.7	147
11	SIXTEEN YEARS OF <i>ULYSSES</i> INTERSTELLAR DUST MEASUREMENTS IN THE SOLAR SYSTEM. III. SIMULATIONS AND DATA UNVEIL NEW INSIGHTS INTO LOCAL INTERSTELLAR DUST. <i>Astrophysical Journal</i> , 2015, 812, 141.	1.6	57
12	VARIATIONS IN SOLAR WIND FRACTIONATION AS SEEN BY <i>ACE</i> /SWICS AND THE IMPLICATIONS FOR <i>GENESIS</i> MISSION RESULTS. <i>Astrophysical Journal</i> , 2015, 812, 1.	1.6	24
13	The Solar Activity Cycle. <i>Space Sciences Series of ISSI</i> , 2015, , .	0.0	6
14	Introduction to the Solar Activity Cycle: Overview of Causes and Consequences. <i>Space Science Reviews</i> , 2014, 186, 1-15.	3.7	42
15	Invited Article: Characterization of background sources in space-based time-of-flight mass spectrometers. <i>Review of Scientific Instruments</i> , 2014, 85, 091301.	0.6	20
16	THE SOLAR WIND NEON ABUNDANCE OBSERVED WITH <i>ACE</i> /SWICS AND <i>ULYSSES</i> /SWICS. <i>Astrophysical Journal</i> , 2014, 789, 60.	1.6	44
17	Space physics – grand challenges for the 21st century. <i>Frontiers in Physics</i> , 2013, 1, .	1.0	6
18	SPATIALLY DEPENDENT HEATING AND IONIZATION IN AN ICME OBSERVED BY BOTH <i>ACE</i> AND <i>ULYSSES</i> . <i>Astrophysical Journal</i> , 2012, 760, 105.	1.6	26

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19	Sources of Solar Wind at Solar Minimum: Constraints from Composition Data. Space Science Reviews, 2012, 172, 41-55.	3.7	20
20	COMPOSITION OF THE SOLAR CORONA, SOLAR WIND, AND SOLAR ENERGETIC PARTICLES. Astrophysical Journal, 2012, 755, 33.	1.6	162
21	Cosmogenic Radionuclides. Physics of Earth and Space Environments, 2012, , .	0.5	106
22	Sources of Solar Wind at Solar Minimum: Constraints from Composition Data. Space Sciences Series of ISSI, 2012, , 41-55.	0.0	0
23	Polar coronal holes during the past solar cycle: Ulysses observations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	40
24	DIVISION II: SUN and HELIOSPHERE. Proceedings of the International Astronomical Union, 2010, 6, 146-157.	0.0	0
25	Turbulence in the Solar Atmosphere and Solar Wind. Space Science Reviews, 2010, 156, 135-238.	3.7	56
26	Oxygen flux in the solar wind: Ulysses observations. Geophysical Research Letters, 2010, 37, .	1.5	48
27	Turbulence and intermittency in the heliospheric magnetic field in fast and slow solar wind. Journal of Geophysical Research, 2009, 114, .	3.3	26
28	Quiescent current sheets in the solar wind and origins of slow wind. Journal of Geophysical Research, 2009, 114, .	3.3	69
29	From the Outer Heliosphere to the Local Bubble. Space Sciences Series of ISSI, 2009, , .	0.0	1
30	DIVISION II: SUN AND HELIOSPHERE. Proceedings of the International Astronomical Union, 2008, 4, 73-78.	0.0	0
31	COMMISSION 49: INTERPLANETARY PLASMA AND HELIOSPHERE. Proceedings of the International Astronomical Union, 2008, 4, 124-144.	0.0	0
32	The solar wind throughout the solar cycle. , 2008, , 41-78.		15
33	Encounter of the <i>Ulysses</i> Spacecraft with the Ion Tail of Comet McNaught. Astrophysical Journal, 2007, 667, 1262-1266.	1.6	51
34	Kinetic properties of heavy solar wind ions from Ulysses-SWICS. Geophysical Research Letters, 2006, 33, .	1.5	26
35	Dynamical processes in critical regions of the heliosphere. Advances in Space Research, 2006, 38, 1.	1.2	0
36	ICMEs in the Outer Heliosphere and at High Latitudes: An Introduction. Space Science Reviews, 2006, 123, 111-126.	3.7	27

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37	Understanding Interplanetary Coronal Mass Ejection Signatures. <i>Space Science Reviews</i> , 2006, 123, 177-216.	3.7	119
38	ICMEs at High Latitudes and in the Outer Heliosphere. <i>Space Science Reviews</i> , 2006, 123, 417-451.	3.7	18
39	The Heliospheric HeII 30.4 nm Solar Flux During Cycle 23. <i>Astrophysical Journal</i> , 2005, 625, 1036-1044.	1.6	29
40	Commission 49: Interplanetary Plasma and Heliosphere. <i>Proceedings of the International Astronomical Union</i> , 2005, 1, 103-120.	0.0	1
41	Model of the all-sky He II 30.4 nm solar flux. <i>Advances in Space Research</i> , 2005, 35, 388-392.	1.2	5
42	Solar wind from the coronal hole boundaries. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	31
43	Synopsis of the interstellar He parameters from combined neutral gas, pickup ion and UVÅscattering observations and related consequences. <i>Astronomy and Astrophysics</i> , 2004, 426, 897-907.	2.1	178
44	Heliospheric conditions that affect the interstellar gas inside the heliosphere. <i>Astronomy and Astrophysics</i> , 2004, 426, 885-895.	2.1	40
45	Observations of the helium focusing cone with pickup ions. <i>Astronomy and Astrophysics</i> , 2004, 426, 845-854.	2.1	110
46	A statistical study of oxygen freezing-in temperature and energetic particles inside magnetic clouds observed by Ulysses. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	26
47	Cometary Ions Trapped in a Coronal Mass Ejection. <i>Astrophysical Journal</i> , 2004, 604, L121-L124.	1.6	32
48	Bidirectional Proton Flows and Comparison of Freezing-in Temperatures in ICMEs and Magnetic Clouds. <i>Proceedings of the International Astronomical Union</i> , 2004, 2004, 420-427.	0.0	1
49	Interplanetary and solar surface properties of coronal holes observed during solar maximum. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	23
50	Solar wind from high-latitude coronal holes at solar maximum. <i>Geophysical Research Letters</i> , 2002, 29, 28-1-28-4.	1.5	51
51	The solar wind composition throughout the solar cycle: A continuum of dynamic states. <i>Geophysical Research Letters</i> , 2002, 29, 66-1-66-4.	1.5	156
52	The Sun at solar minimum: North - south asymmetry of the polar coronal holes. <i>Geophysical Research Letters</i> , 2002, 29, 77-1-77-4.	1.5	29
53	Kinetic properties of heavy solar wind ions from Ulysses-SWICS. <i>Advances in Space Research</i> , 2002, 30, 73-78.	1.2	5
54	Ionization state and magnetic topology of coronal mass ejections. <i>Journal of Geophysical Research</i> , 2001, 106, 10597-10613.	3.3	57

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55	An ICME observed by Voyager 2 at 58 AU and by Ulysses at 5 AU. <i>Geophysical Research Letters</i> , 2001, 28, 2755-2758.	1.5	32
56	The 3-D Heliosphere from the Ulysses and ACE Solar Wind Ion Composition Experiments. <i>Space Science Reviews</i> , 2001, 97, 123-127.	3.7	24
57	The Astrophysics of Galactic Cosmic Rays. <i>Space Science Reviews</i> , 2001, 99, 3-11.	3.7	5
58	The Astrophysics of Galactic Cosmic Rays. <i>Space Sciences Series of ISSI</i> , 2001, , 3-11.	0.0	5
59	Interception of comet Hyakutake's ion tail at a distance of 500 million kilometres. <i>Nature</i> , 2000, 404, 576-578.	13.7	44
60	Pick-up Ion Measurements in the Heliosphere – A Review. <i>Astrophysics and Space Science</i> , 2000, 274, 97-114.	0.5	29
61	The relation of temporal variations of soft X-ray emission from comet Hyakutake to variations of ion fluxes in the solar wind. <i>Journal of Geophysical Research</i> , 2000, 105, 20949-20955.	3.3	36
62	Inner source distributions: Theoretical interpretation, implications, and evidence for inner source protons. <i>Journal of Geophysical Research</i> , 2000, 105, 7465-7472.	3.3	62
63	Composition of quasi-stationary solar wind flows from Ulysses/Solar Wind Ion Composition Spectrometer. <i>Journal of Geophysical Research</i> , 2000, 105, 27217-27238.	3.3	445
64	The Transition Between Fast and Slow Solar Wind from Composition Data. <i>Space Science Reviews</i> , 1999, 87, 353-356.	3.7	49
65	Title is missing!. , 1999, 88, 611-612.		2
66	Corotating Interaction Regions at High Latitudes. <i>Space Science Reviews</i> , 1999, 89, 221-268.	3.7	21
67	Origin, Injection, and Acceleration of CIR Particles: Observations Report of Working Group 6. <i>Space Science Reviews</i> , 1999, 89, 327-367.	3.7	33
68	Solar wind stream interfaces in corotating interaction regions: New SWICS/Ulysses results. <i>Journal of Geophysical Research</i> , 1999, 104, 9933-9945.	3.3	39
69	Identification of trailing edge solar wind stream interfaces: A comparison of Ulysses plasma and composition measurements. <i>Journal of Geophysical Research</i> , 1999, 104, 9925-9932.	3.3	25
70	Composition Aspects of the Upper Solar Atmosphere Rapporteur Paper III. , 1998, 85, 407-418.		11
71	The Expansion of Coronal Plumes in the Fast Solar Wind. <i>Space Science Reviews</i> , 1998, 85, 349-356.	3.7	8
72	O5+ in High Speed Solar Wind Streams: SWICS/Ulysses Results. <i>Space Science Reviews</i> , 1998, 85, 387-396.	3.7	16

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73	Differences in the O7+/O6+ratio of magnetic cloud and non-cloud coronal mass ejections. Geophysical Research Letters, 1998, 25, 3465-3468.	1.5	68
74	Spatial structure of the solar wind and comparisons with solar data and models. Journal of Geophysical Research, 1998, 103, 14587-14599.	3.3	194
75	O5+ in High Speed Solar Wind Streams: SWICS/Ulysses Results. Space Sciences Series of ISSI, 1998, , 387-396.	0.0	6
76	Primordial Nuclei and Their Galactic Evolution. Space Sciences Series of ISSI, 1998, , .	0.0	10
77	Solar wind stream interfaces in corotating interaction regions: SWICS/Ulysses results. Journal of Geophysical Research, 1997, 102, 17407-17417.	3.3	82
78	Kinetic temperature ratios of O6+and He2+: Observations from Wind/MASS and Ulysses/SWICS. Geophysical Research Letters, 1996, 23, 1187-1190.	1.5	7
79	Foreword by the volume editors. Space Science Reviews, 1996, 78, xiii-xiv.	3.7	2
80	Origin of C+ ions in the heliosphere. Space Science Reviews, 1996, 78, 43-52.	3.7	43
81	The southern high-speed stream: results from the SWICS instrument on Ulysses. Science, 1995, 268, 1033-1036.	6.0	243
82	Origin of the solar wind from composition data. Space Science Reviews, 1995, 72, 49-60.	3.7	265
83	Solar wind helium isotopic composition from SWICS/ULYSSES. Space Science Reviews, 1995, 72, 61-64.	3.7	50
84	Solar wind charge states measured by ULYSSES/SWICS in the south polar hole. Space Science Reviews, 1995, 72, 65-70.	3.7	18
85	Kinetic properties of heavy ions in the solar wind from SWICS/Ulysses. Space Science Reviews, 1995, 72, 71-76.	3.7	99
86	Abundance variations in the solar wind. Advances in Space Research, 1995, 15, 3-12.	1.2	74
87	Observations of the solar wind and interstellar pick-up ion populations in the heliosphere with Ulysses. Advances in Space Research, 1995, 16, 343.	1.2	0
88	Radial gradients of ion densities and temperatures derived from SWICS/Ulysses observations. Geophysical Research Letters, 1995, 22, 2445-2448.	1.5	12
89	C+Pickup ions in the heliosphere and their origin. Journal of Geophysical Research, 1995, 100, 23373.	3.3	105
90	Solar and heliospheric processes from solar wind composition measurements. Philosophical Transactions of the Royal Society: Physical and Engineering Sciences, 1994, 349, 213-226.	1.0	35

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91	Diffusive fractionation in the chromosphere. Space Science Reviews, 1994, 70, 341-346.	3.7	2
92	Acceleration of interstellar pickup ions in the disturbed solar wind observed on Ulysses. Journal of Geophysical Research, 1994, 99, 17637.	3.3	230
93	Solar wind composition and expectations for high solar latitudes. Advances in Space Research, 1993, 13, 63-74.	1.2	11
94	Sulfur abundances in the solar wind measured by SWICS on Ulysses. Advances in Space Research, 1993, 13, 79-82.	1.2	12
95	Boundary layer ion composition at Jupiter during the inbound pass of the Ulysses flyby. Planetary and Space Science, 1993, 41, 869-876.	0.9	14
96	Detection of Interstellar Pick-Up Hydrogen in the Solar System. Science, 1993, 261, 70-73.	6.0	275
97	Plasma Composition in Jupiter's Magnetosphere: Initial Results from the Solar Wind Ion Composition Spectrometer. Science, 1992, 257, 1535-1539.	6.0	64
98	SILICON AND OXYGEN CHARGE STATE DISTRIBUTIONS AND RELATIVE ABUNDANCES IN THE SOLAR WIND MEASURED BY SWICS ON ULYSSES. , 1992, , 337-340.		15
99	Variable carbon and oxygen abundances in the solar wind as observed in earth's magnetosheath by AMPTE/CCE. Astrophysical Journal, 1992, 389, 791.	1.6	39
100	Transition Region: First Ionization Potential Effect. , 0, , .		2