Konstantin Herbst

List of Publications by Year
in descending order

42 papers	924 citations	393982 19 h-index	454577 30 g-index
48 all docs	48 docs citations	48 times ranked	1233 citing authors

#	Article	IF	Citations
1	Impact of space weather on climate and habitability of terrestrial-type exoplanets. International Journal of Astrobiology, 2020, 19, 136-194.	0.9	125
2	On the importance of the local interstellar spectrum for the solar modulation parameter. Journal of Geophysical Research, 2010, 115, .	3.3	74
3	The Revised Sunspot Record in Comparison to Cosmogenic Radionuclide-Based Solar Activity Reconstructions. Solar Physics, 2016, 291, 3025-3043.	1.0	68
4	Temporal and spatial evolution of the solar energetic particle event on 20 January 2005 and resulting radiation doses in aviation. Journal of Geophysical Research, 2009, 114, .	3.3	47
5	The new local interstellar spectra and their influence on the production rates of the cosmogenic radionuclides ¹⁰Be and ¹⁴C. Journal of Geophysical Research: Space Physics, 2017, 122, 23-34.	0.8	47
6	An Empirical Modification of the Force Field Approach to Describe the Modulation of Galactic Cosmic Rays Close to Earth in a Broad Range of Rigidities. Journal of Geophysical Research: Space Physics, 2017, 122, 10,964.	0.8	40
7	Influence of the terrestrial magnetic field geometry on the cutoff rigidity of cosmic ray particles. Annales Geophysicae, 2013, 31, 1637-1643.	0.6	39
8	The first ground-level enhancement of solar cycle 25 on 28 October 2021. Astronomy and Astrophysics, 2022, 660, L5.	2.1	34
9	The Atmospheric Radiation Interaction Simulator (AtRIS): Description and Validation. Journal of Geophysical Research: Space Physics, 2019, 124, 50-67.	0.8	30
10	Consistently Simulating a Wide Range of Atmospheric Scenarios for K2-18b with a Flexible Radiative Transfer Module. Astrophysical Journal, 2020, 898, 44.	1.6	30
11	Implementation and validation of the GEANT4/AtRIS code to model the radiation environment at Mars. Journal of Space Weather and Space Climate, 2019, 9, A2.	1.1	25
12	From Starspots to Stellar Coronal Mass Ejectionsâ€”Revisiting Empirical Stellar Relations. Astrophysical Journal, 2021, 907, 89.	1.6	25
13	THE LOCAL INTERSTELLAR SPECTRUM BEYOND THE HELIOPAUSE: WHAT CAN BE LEARNED FROMVOYAGERIN THE INNER HELIOSHEATH?. Astrophysical Journal, 2012, 761, 17.	1.6	24
14	A new model suite to determine the influence of cosmic rays on (exo)planetary atmospheric biosignatures. Astronomy and Astrophysics, 2019, 631, A101.	2.1	23
15	From solar to stellar flare characteristics. Astronomy and Astrophysics, 2019, 621, A67.	2.1	23
16	MHD-shock structures of astrospheres: Î»ÂCepheiâ€‰-like astrospheres. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4172-4185.	1.6	23
17	Unusual Plasma and Particle Signatures at Mars and STEREO-A Related to CMEâ€“CME Interaction. Astrophysical Journal, 2019, 880, 18.	1.6	22
18	On the Diversity of M-star Astrospheres and the Role of Galactic Cosmic Rays Within. Astrophysical Journal Letters, 2020, 897, L27.	3.0	22

#	Article	IF	Citations
19	Proxima Centauri b: A Strong Case for Including Cosmic-Ray-induced Chemistry in Atmospheric Biosignature Studies. Astrophysical Journal, 2020, 893, 12.	1.6	21
20	EUropean Heliospheric FORecasting Information Asset 2.0. Journal of Space Weather and Space Climate, 2020, 10, 57.	1.1	21
21	The Signal of Solar Storms Embedded in Cosmogenic Radionuclides: Detectability and Uncertainties. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029351.	0.8	16
22	A Catalogue of Forbush Decreases Recorded on the Surface of Mars from 2012 Until 2016: Comparison with Terrestrial FDs. Solar Physics, 2019, 294, 1.	1.0	15
23	The mini-neutron monitor: a new approach in neutron monitor design. Journal of Space Weather and Space Climate, 2020, 10, 39.	1.1	15
24	Galactic Cosmic Ray induced absorbed dose rate in deep space â€“ Accounting for detector size, shape, material, as well as for the solar modulation. Journal of Space Weather and Space Climate, 2019, 9, A14.	1.1	12
25	Astrospheres of Planet-Hosting Cool Stars and Beyond â‹… When Modeling Meets Observations. Space Science Reviews, 2022, 218, 1.	3.7	12
26	Revisiting the cosmic-ray induced Venusian radiation dose in the context of habitability. Astronomy and Astrophysics, 2020, 633, A15.	2.1	11
27	Revisiting the cosmic-ray induced Venusian ionization with the Atmospheric Radiation Interaction Simulator (AtRIS). Astronomy and Astrophysics, 2019, 624, A124.	2.1	10
28	On the definition and calculation of a generalised McIlwain parameter. Astrophysics and Space Sciences Transactions, 2010, 6, 9-17.	1.0	10
29	Evolution of the Sunspot Number and Solar Wind B B Time Series. Space Science Reviews, 2018, 214, 1.	3.7	9
30	On the Rigidity Spectrum of Cosmic-Ray Variations within Propagating Interplanetary Disturbances: Neutron Monitor and SOHO/EPHIN Observations at â^¼1â€“10 GV. Astrophysical Journal, 2021, 908, 5.	1.6	9
31	Onâ€theâ€Fly Calculation of Absorbed and Equivalent Atmospheric Radiation Dose in A Water Phantom with the Atmospheric Radiation Interaction Simulator (AtRIS). Journal of Geophysical Research: Space Physics, 2019, 124, 9774-9790.	0.8	8
32	The residence-time of Jovian electrons in the inner heliosphere. Astronomy and Astrophysics, 2020, 642, A170.	2.1	8
33	Mini neutron monitor measurements at the Neumayer III station and on the German research vessel Polarstern. Journal of Physics: Conference Series, 2015, 632, 012057.	0.3	6
34	Numerical and experimental evidence for a new interpretation of residence times in space. Astronomy and Astrophysics, 2022, 657, A39.	2.1	5
35	Revisiting the Revisited Palmer Consensus: New Insights from Jovian Electron Transport. Astrophysical Journal, 2022, 929, 8.	1.6	4
36	Atmospheric processes affecting methane on Mars. Icarus, 2022, 382, 114940.	1.1	3

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37	Study of the Ground Level Enhancements effect on atmospheric electric properties and mineral dust particle charging. Journal of Atmospheric and Solar-Terrestrial Physics, 2022, 233-234, 105871.	0.6	3
38	10Be Production in the Atmosphere by Galactic Cosmic Rays. Space Science Reviews, 2013, 176, 333-342.	3.7	2
39	<scp>INCREASE</scp>: An updated model suite to study the <scp>INfluence</scp> of Cosmic Rays on Exoplanetary <scp>AtmoSpherEs</scp>. Astronomische Nachrichten, 2022, 343, .	0.6	2
40	Modelling the Production of Cosmogenic Radionuclides due to Galactic and Solar Cosmic Rays. , 2016, , .		1
41	Yield Function of the DOSimetry TELescope Count and Dose Rates Aboard the International Space Station. Space Weather, 2021, 19, e2020SW002510.	1.3	0
42	Evolution of the Sunspot Number and Solar Wind BB Time Series. Space Sciences Series of ISSI, 2019, , 81-111.	0.0	0