W Kent Tobiska

List of Publications by Year
in descending order

73 papers	3,777 citations	201674 27 h-index	138484 58 g-index
88 all docs	88 docs citations	88 times ranked	2479 citing authors

#	Article	IF	Citations
1	Solar EUV Experiment (SEE): Mission overview and first results. Journal of Geophysical Research, 2005, 110, .	3.3	448
2	Extreme Ultraviolet Variability Experiment (EVE) onÂtheÂSolar Dynamics Observatory (SDO): OverviewÂofÂScience Objectives, Instrument Design, DataÂProducts, and Model Developments. Solar Physics, 2012, 275, 115-143.	2.5	375
3	Improved solar Lyman Î± irradiance modeling from 1947 through 1999 based on UARS observations. Journal of Geophysical Research, 2000, 105, 27195-27215.	3.3	318
4	A New Empirical Thermospheric Density Model JB2008 Using New Solar and Geomagnetic Indices. , 2008, , .		236
5	High accuracy satellite drag model (HASDM). Advances in Space Research, 2005, 36, 2497-2505.	2.6	205
6	Periodicities of solar irradiance and solar activity indices, I. Solar Physics, 1990, 129, 165-189.	2.5	168
7	The Mg II index: A proxy for solar EUV. Geophysical Research Letters, 2001, 28, 1343-1346.	4.0	152
8	NEW SOLAR EXTREME-ULTRAVIOLET IRRADIANCE OBSERVATIONS DURING FLARES. Astrophysical Journal, 2011, 739, 59.	4.5	144
9	Direct and Indirect Thermospheric Heating Sources for Solar Cycles 21â€“23. Solar Physics, 2004, 224, 495-505.	2.5	143
10	The JB2006 empirical thermospheric density model. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 774-793.	1.6	106
11	Solarâ€terrestrial coupling: Lowâ€latitude thermospheric nitric oxide. Geophysical Research Letters, 1988, 15, 92-94.	4.0	99
12	Forecasting the Arrival Time of Coronal Mass Ejections: Analysis of the CCMC CME Scoreboard. Space Weather, 2018, 16, 1245-1260.	3.7	94
13	The development of new solar indices for use in thermospheric density modeling. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 803-819.	1.6	90
14	Euv97: Improvements to Euv Irradiance Modeling in the Soft X-Rays and FUV. Solar Physics, 1998, 177, 147-159.	2.5	86
15	Comparison of 10.7 cm radio flux with SME solar Lyman alpha flux. Geophysical Research Letters, 1990, 17, 571-574.	4.0	79
16	SOLAR2000 irradiances for climate change research, aeronomy and space system engineering. Advances in Space Research, 2004, 34, 1736-1746.	2.6	76
17	Model Evaluation Guidelines for Geomagnetic Index Predictions. Space Weather, 2018, 16, 2079-2102.	3.7	62
18	New developments in SOLAR2000 for space research and operations. Advances in Space Research, 2006, 37, 347-358.	2.6	61

#	Article	IF	Citations
19	Validating the solar EUV Proxy, E10.7. Journal of Geophysical Research, 2001, 106, 29969-29978.	3.3	56
20	Solar hydrogen Lyman-Î± variation during solar cycles 21 and 22. Geophysical Research Letters, 1997, 24, 1123-1126.	4.0	39
21	The thermospheric semiannual density response to solar EUV heating. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 1482-1496.	1.6	37
22	Space Radiation and Plasma Effects on Satellites and Aviation: Quantities and Metrics for Tracking Performance of Space Weather Environment Models. Space Weather, 2019, 17, 1384-1403.	3.7	32
23	Latitude variations in interplanetary Lyman-Î± data from the Galileo EUVS modeled with solar He 1083 nm images. Geophysical Research Letters, 1996, 23, 1893-1896.	4.0	30
24	Advances in Atmospheric Radiation Measurements and Modeling Needed to Improve Air Safety. Space Weather, 2015, 13, 202-210.	3.7	30
25	Cosmic radiation dose measurements from the RaD-X flight campaign. Space Weather, 2016, 14, 874-898.	3.7	30
26	Solar extreme ultraviolet and x-ray irradiance variations. Geophysical Monograph Series, 2004, , 127-140.	0.1	29
27	Predicting global average thermospheric temperature changes resulting from auroral heating. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	29
28	Climatology of extreme upper atmospheric heating events. Advances in Space Research, 2005, 36, 2506-2510.	2.6	27
29	Analysis of the orbital decay of spherical satellites using different solar flux proxies and atmospheric density models. Advances in Space Research, 2006, 37, 392-400.	2.6	27
30	Global real-time dose measurements using the Automated Radiation Measurements for Aerospace Safety (ARMAS) system. Space Weather, 2016, 14, 1053-1080.	3.7	27
31	Relativistic Electron Model in the Outer Radiation Belt Using a Neural Network Approach. Space Weather, 2021, 19, e2021SW002808.	3.7	27
32	Solar EUV and XUV energy input to thermosphere on solar rotation time scales derived from photoelectron observations. Journal of Geophysical Research, 2012, 117, .	3.3	24
33	The SET HASDM Density Database. Space Weather, 2021, 19, e2020SW002682.	3.7	24
34	The Anemomilos prediction methodology for Dst. Space Weather, 2013, 11, 490-508.	3.7	23
35	Benchmarking Forecasting Models for Space Weather Drivers. Space Weather, 2020, 18, e2020SW002496.	3.7	23
36	High correlations between temperature and nitric oxide in the thermosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 5998-6009.	2.4	21

#	Article	IF	Citations
37	Improving Neutral Density Predictions Using Exospheric Temperatures Calculated on a Geodesic, Polyhedral Grid. Space Weather, 2020, 18, e2019SW002355.	3.7	18
38	Machineâ€Learned HASDM Thermospheric Mass Density Model With Uncertainty Quantification. Space Weather, 2022, 20, .	3.7	18
39	Direct observations of the comet Shoemaker-Levy 9 fragment G impact by Galileo UVS. Geophysical Research Letters, 1995, 22, 1565-1568.	4.0	16
40	Intermediateâ€term variations of chromospheric and coronal solar flux during high solar cycle 21 activity. Geophysical Research Letters, 1989, 16, 779-782.	4.0	14
41	Qualitative and Quantitative Assessment of the SET HASDM Database. Space Weather, 2021, 19, e2021SW002798.	3.7	14
42	Ground-based evaluation of dosimeters for NASA high-altitude balloon flight. Space Weather, 2016, 14, 1011-1025.	3.7	13
43	Analytical Representations for Characterizing the Global Aviation Radiation Environment Based on Model and Measurement Databases. Space Weather, 2018, 16, 1523-1538.	3.7	13
44	Extreme Ultraviolet Variability Experiment (EVE) on the Solar Dynamics Observatory (SDO): Overview of Science Objectives, Instrument Design, Data Products, and Model Developments. , 2010, , 115-143.		13
45	Modeling the Dynamic Variability of Subâ€Relativistic Outer Radiation Belt Electron Fluxes Using Machine Learning. Space Weather, 2022, 20, .	3.7	13
46	Development of Nowcast of Atmospheric Ionizing Radiation for Aviation Safety (NAIRAS) Model. , 2009, , .		12
47	Fieldâ€aligned current response to solar indices. Journal of Geophysical Research: Space Physics, 2017, 122, 5798-5815.	2.4	10
48	Thermosphere-Ionsphere-Mesosphere Energetics and Dynamics (TIMED) Solar EUV Experiment. , 1994, 2266, 467.		9
49	Forecast E for Improved Low-Earth-Orbit Satellite Operations. Journal of Spacecraft and Rockets, 2003, 40, 405-410.	1.9	9
50	The development of new solar indices for use in thermospheric density modeling. , 2006, , .		9
51	The Current State and Future Directions of Modeling Thermosphere Density Enhancements During Extreme Magnetic Storms. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	9
52	Operational Space Weather Entering a New Era. Space Weather, 2009, 7, n/a-n/a.	3.7	8
53	A New Model for Ionospheric Total Electron Content: The Impact of Solar Flux Proxies and Indices. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028466.	2.4	8
54	SOLAR2000 v2.30 and SOLARFLARE v1.01: New Capabilities for Space System Operations. , 2007, , .		7

#	Article	IF	Citations
55	A Third Generation Fieldâ€Aligned Current Model. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027249.	2.4	7
56	A Method for Calculating Atmospheric Radiation Produced by Relativistic Electron Precipitation. Space Weather, 2021, 19, e2021SW002735.	3.7	7
57	International Standards Will Enhance Space Weather Management. Space Weather, 2008, 6, n/a-n/a.	3.7	6
58	Tissue Equivalent Proportional Counter Microdosimetry Measurements Aboard High-Altitude and Commercial Aircraft. , 2012, , .		6
59	Solar EUV Irradiance Variations. Journal of Geomagnetism and Geoelectricity, 1991, 43, 823-833.	0.9	6
60	Improved Neutral Density Predictions Through Machine Learning Enabled Exospheric Temperature Model. Space Weather, 2021, 19, .	3.7	6
61	Forecasting of Space Environment Parameters for Satellite and Ground System Operations. , 2003, , .		5
62	U.S. Government shutdown degrades aviation radiation monitoring during solar radiation storm. Space Weather, 2014, 12, 41-45.	3.7	5
63	Atmospheric radiation modeling of galactic cosmic rays using LRO/CRaTER and the EMMREM model with comparisons to balloon and airline based measurements. Space Weather, 2016, 14, 659-667.	3.7	5
64	E10.7 Use for Global Atmospheric Density Forecasting in 2001. , 2002, , .		4
65	Comparison of a Neutral Density Model With the SET HASDM Density Database. Space Weather, 2021, 19, e2021SW002888.	3.7	4
66	Reply to comment by Rainer Facius et al. on â€œU.S. Government shutdown degrades aviation radiation monitoring during solar radiation stormâ€• Space Weather, 2014, 12, 320-321.	3.7	3
67	Characterizing the Variation in Atmospheric Radiation at Aviation Altitudes. , 2018, , 453-471.		3
68	Systems-Level Space Environment Specification for Satellite and Ground System Operations. , 2005, , .		2
69	Beamline and Flight Comparisons of the ARMAS Flight Module With the Tissue Equivalent Proportional Counter for Improving Atmospheric Radiation Monitoring Accuracy. Space Weather, 2020, 18, e2020SW002599.	3.7	2
70	Radiation Data Portal: Integration of Radiation Measurements at the Aviation Altitudes and Solarâ€Terrestrial Environment Observations. Space Weather, 2021, 19, e2020SW002653.	3.7	2
71	Supporting Evidence for a Galactic LyÎ± Background from Cassini UVIS Data. Astronomical Journal, 2022, 164, 46.	4.7	1
72	Mitigating Orbit Planning, Satellite Operations, and Communication Surprises from Adverse Space Weather. , 2008, , .		0

#	Article	IF	Citations
73	A framework to estimate local atmospheric densities with reduced dragâ€coefficient biases. Space Weather, 0, , .	3.7	0