Chigomezyo M Ngwira

List of Publications by Year
in descending order

33 papers	1,280 citations	430874 18 h-index	377865 34 g-index
39 all docs	39 docs citations	39 times ranked	1060 citing authors

#	Article	IF	Citations
1	A major solar eruptive event in July 2012: Defining extreme space weather scenarios. Space Weather, 2013, 11, 585-591.	3.7	189
2	Geomagnetically induced currents: Science, engineering, and applications readiness. Space Weather, 2017, 15, 828-856.	3.7	149
3	Simulation of the 23 July 2012 extreme space weather event: What if this extremely rare CME was Earth directed?. Space Weather, 2013, 11, 671-679.	3.7	87
4	Characteristics of extreme geoelectric fields and their possible causes: Localized peak enhancements. Geophysical Research Letters, 2015, 42, 6916-6921.	4.0	80
5	Extended study of extreme geoelectric field event scenarios for geomagnetically induced current applications. Space Weather, 2013, 11, 121-131.	3.7	77
6	Modeling extreme â€œCarringtonâ€typeâ€•space weather events using threeâ€dimensional global MHD simulations. Journal of Geophysical Research: Space Physics, 2014, 119, 4456-4474.	2.4	74
7	Model Evaluation Guidelines for Geomagnetic Index Predictions. Space Weather, 2018, 16, 2079-2102.	3.7	62
8	Regional-scale high-latitude extreme geoelectric fields pertaining to geomagnetically induced currents. Earth, Planets and Space, 2015, 67, .	2.5	60
9	Improved modeling of geomagnetically induced currents in the South African power network. Space Weather, 2008, 6, .	3.7	59
10	Geomagnetically Induced Currents Caused by Interplanetary Shocks With Different Impact Angles and Speeds. Space Weather, 2018, 16, 636-647.	3.7	58
11	A Study of Intense Local dB/dt Variations During Two Geomagnetic Storms. Space Weather, 2018, 16, 676-693.	3.7	52
12	An investigation of ionospheric disturbances over South Africa during the magnetic storm on 15 May 2005. Advances in Space Research, 2012, 49, 327-335.	2.6	33
13	Ionospheric observations during the geomagnetic storm events on 24â€“27 July 2004: Longâ€duration positive storm effects. Journal of Geophysical Research, 2012, 117, .	3.3	30
14	Geomagnetically Induced Currents: Principles. Brazilian Journal of Physics, 2017, 47, 552-560.	1.4	30
15	Limitations of the modeling of geomagnetically induced currents in the South African power network. Space Weather, 2009, 7, .	3.7	29
16	Recommendations for Nextâ€Generation Ground Magnetic Perturbation Validation. Space Weather, 2018, 16, 1912-1920.	3.7	27
17	Dynamic Response of Ionospheric Plasma Density to the Geomagnetic Storm of 22â€23 June 2015. Journal of Geophysical Research: Space Physics, 2019, 124, 7123-7139.	2.4	22
18	The interplanetary and magnetospheric causes of extreme dB/dt at equatorial locations. Geophysical Research Letters, 2016, 43, 11,501.	4.0	21

#	Article	IF	Citations
19	Responses of equatorialFregion to different geomagnetic storms observed by GPS in the African sector. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	16
20	Geomagnetic activity indicators for geomagnetically induced current studies in South Africa. Advances in Space Research, 2011, 48, 529-534.	2.6	16
21	Exploring the Influence of Lateral Conductivity Contrasts on the Storm Time Behavior of the Ground Electric Field in the Eastern United States. Space Weather, 2020, 18, e2019SW002216.	3.7	14
22	The Tsallis statistical distribution applied to geomagnetically induced currents. Space Weather, 2017, 15, 1094-1101.	3.7	12
23	Revisiting the Ground Magnetic Field Perturbations Challenge: A Machine Learning Perspective. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	11
24	A study of intense ionospheric scintillation observed during a quiet day in the East African lowâ€latitude region. Radio Science, 2013, 48, 396-405.	1.6	9
25	Impact Angle Control of Local Intense dB/dt Variations During Shockâ€Induced Substorms. Space Weather, 2021, 19, .	3.7	9
26	Auroral Eâ€Region as a Source Region for Ionospheric Scintillation. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029212.	2.4	7
27	Multi-Variate LSTM Prediction of Alaska Magnetometer Chain Utilizing a Coupled Model Approach. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	6
28	An Overview of Science Challenges Pertaining to Our Understanding of Extreme Geomagnetically Induced Currents. , 2018, , 187-208.		5
29	Geomagnetically Induced Currents at Middle Latitudes: 1. Quietâ€Time Variability. Space Weather, 2022, 20, e2021SW002729.	3.7	4
30	Equatorward Medium to Largeâ€Scale Traveling Ionospheric Disturbances of High Latitude Origin During Quiet Conditions. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
31	Revealing Novel Connections Between Space Weather and the Power Grid: Network Analysis of Groundâ€Based Magnetometer and Geomagnetically Induced Currents (GIC) Measurements. Space Weather, 2022, 20, .	3.7	3
32	Reply to Comments by Tsurutani et al. on â€œModeling Extreme â€˜Carrington-Typeâ€™ Space Weather Events Using Three-Dimensional Global MHD Simulationsâ€• Journal of Geophysical Research: Space Physics, 2018, 123, 1393-1395.	2.4	2
33	A Statistical Study of Poleward Traveling Ionospheric Disturbances Over the African and American Sectors During Geomagnetic Storms. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	0