Patrick Alken

List of Publications by Year
in descending order

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45 papers	2,807 citations	318942 23 h-index	263392 45 g-index
51 all docs	51 docs citations	51 times ranked	3298 citing authors

#	Article	IF	Citations
1	Special issue â€œInternational Geomagnetic Reference Field: the thirteenth generationâ€• Earth, Planets and Space, 2022, 74, .	0.9	18
2	Impacts of the January 2022 Tonga Volcanic Eruption on the Ionospheric Dynamo: ICONâ€MIGHTI and Swarm Observations of Extreme Neutral Winds and Currents. Geophysical Research Letters, 2022, 49, .	1.5	67
3	Evaluation of candidate models for the 13th generation International Geomagnetic Reference Field. Earth, Planets and Space, 2021, 73, .	0.9	33
4	NOAA/NCEI and University of Colorado candidate models for IGRF-13. Earth, Planets and Space, 2021, 73, .	0.9	9
5	International Geomagnetic Reference Field: the thirteenth generation. Earth, Planets and Space, 2021, 73, .	0.9	319
6	Shortâ€Term Variability of Equatorial Electrojet Modulation by Solar Tidal and Planetary Waves, as Derived From the Swarm Constellation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028884.	0.8	4
7	Multispacecraft Current Density Estimates in the Lowâ€and Midâ€Latitude Fâ€Region Ionosphere Using the Swarm Constellation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028872.	0.8	2
8	Modelling diurnal variation magnetic fields due to ionospheric currents. Geophysical Journal International, 2021, 225, 1086-1109.	1.0	12
9	Average Ionospheric Middle and Low Latitudes Nighttime Zonal Currents Deduced From CHAMP. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027702.	0.8	7
10	Evolution of the Geomagnetic Daily Variation at Tatuoca, Brazil, From 1957 to 2019: A Transition From Sq to EEJ. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028109.	0.8	9
11	September 2019 Antarctic Sudden Stratospheric Warming: Quasiâ€6â€Day Wave Burst and Ionospheric Effects. Geophysical Research Letters, 2020, 47, e2019GL086577.	1.5	94
12	Estimating Currents and Electric Fields at Low Latitudes from Satellite Magnetic Measurements. , 2020, , 233-254.		6
13	Co-estimation of geomagnetic field and in-orbit fluxgate magnetometer calibration parameters. Earth, Planets and Space, 2020, 72, .	0.9	26
14	Dipolar elementary current systems for ionospheric current reconstruction at low and middle latitudes. Earth, Planets and Space, 2020, 72, 146.	0.9	4
15	Longitudinal variability of the equatorial counter electrojet during the solar cycle 24. Studia Geophysica Et Geodaetica, 2019, 63, 304-319.	0.3	8
16	Study of the Equatorial and Lowâ€Latitude Electrodynamic and Ionospheric Disturbances During the 22â€“23 June 2015 Geomagnetic Storm Using Groundâ€Based and Spaceborne Techniques. Journal of Geophysical Research: Space Physics, 2018, 123, 2424-2440.	0.8	57
17	The Sidebands of the Equatorial Electrojet: General Characteristic of the Westward Currents, as Deduced From CHAMP. Journal of Geophysical Research: Space Physics, 2018, 123, 1457-1476.	0.8	8
18	Equatorial Counter Electrojet Longitudinal and Seasonal Variability in the American Sector. Journal of Geophysical Research: Space Physics, 2018, 123, 9906-9920.	0.8	29

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19	Comprehensive Analysis of the Counter Equatorial Electrojet: Average Properties as Deduced From CHAMP Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 5159-5181.	0.8	20
20	Quasiâ€6â€Day Wave Modulation of the Equatorial Electrojet. Journal of Geophysical Research: Space Physics, 2018, 123, 4094-4109.	0.8	26
21	The F F -Region Gravity and Pressure Gradient Current Systems: A Review. Space Sciences Series of ISSI, 2018, , 459-477.	0.0	2
22	An application of principal component analysis to the interpretation of ionospheric current systems. Journal of Geophysical Research: Space Physics, 2017, 122, 5687-5708.	0.8	15
23	Longitudinal Variation of the Lunar Tide in the Equatorial Electrojet. Journal of Geophysical Research: Space Physics, 2017, 122, 12,445.	0.8	24
24	The F-Region Gravity and Pressure Gradient Current Systems: A Review. Space Science Reviews, 2017, 206, 451-469.	3.7	23
25	Prompt penetration electric fields and the extreme topside ionospheric response to the June 22â€“23, 2015 geomagnetic storm as seen by the Swarm constellation. Earth, Planets and Space, 2016, 68, .	0.9	80
26	New perspectives on equatorial electrojet tidal characteristics derived from the Swarm constellation. Journal of Geophysical Research: Space Physics, 2016, 121, 7226-7237.	0.8	17
27	Observations and modeling of the ionospheric gravity and diamagnetic current systems from CHAMP and Swarm measurements. Journal of Geophysical Research: Space Physics, 2016, 121, 589-601.	0.8	25
28	Fast equatorial waves propagating at the top of the Earth's core. Geophysical Research Letters, 2015, 42, 3321-3329.	1.5	63
29	International Geomagnetic Reference Field: the 12th generation. Earth, Planets and Space, 2015, 67, .	0.9	1,015
30	Swarm equatorial electric field chain: First results. Geophysical Research Letters, 2015, 42, 673-680.	1.5	38
31	NOAA/NGDC candidate models for the 12th generation International Geomagnetic Reference Field. Earth, Planets and Space, 2015, 67, .	0.9	28
32	Longitudinal and seasonal structure of the ionospheric equatorial electric field. Journal of Geophysical Research: Space Physics, 2013, 118, 1298-1305.	0.8	23
33	Longâ€period promptâ€penetration electric fields derived from CHAMP satellite magnetic measurements. Journal of Geophysical Research: Space Physics, 2013, 118, 5919-5930.	0.8	16
34	Swarm SCARF equatorial electric field inversion chain. Earth, Planets and Space, 2013, 65, 1309-1317.	0.9	39
35	Direct comparison of nonmigrating tidal signatures in the electrojet, vertical plasma drift and equatorial ionization anomaly. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 75-76, 31-43.	0.6	47
36	The ionospheric gravity and diamagnetic current systems. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	20

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37	Electric fields in the equatorial ionosphere derived from CHAMP satellite magnetic field measurements. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 319-326.	0.6	29
38	Relationship between the ionospheric eastward electric field and the equatorial electrojet. Geophysical Research Letters, 2010, 37, .	1.5	30
39	A quiet time empirical model of equatorial vertical plasma drift in the Peruvian sector based on 150 km echoes. Journal of Geophysical Research, 2009, 114, .	3.3	21
40	Estimating the daytime Equatorial Ionization Anomaly strength from electric field proxies. Journal of Geophysical Research, 2008, 113, .	3.3	117
41	Improved horizontal wind model HWM07 enables estimation of equatorial ionospheric electric fields from satellite magnetic measurements. Geophysical Research Letters, 2008, 35, .	1.5	19
42	The influence of nonmigrating tides on the longitudinal variation of the equatorial electrojet. Journal of Geophysical Research, 2008, 113, .	3.3	143
43	Penetration characteristics of the interplanetary electric field to the daytime equatorial ionosphere. Journal of Geophysical Research, 2008, 113, .	3.3	76
44	Electric fields and zonal winds in the equatorial ionosphere inferred from CHAMP satellite magnetic measurements. Geophysical Research Letters, 2007, 34, .	1.5	12
45	Spatioâ€temporal characterization of the equatorial electrojet from CHAMP, Ã˜rsted, and SACâ€C satellite magnetic measurements. Journal of Geophysical Research, 2007, 112, .	3.3	113