Arnaud Chulliat

List of Publications by Year
in descending order

58 papers	4,034 citations	218677 26 h-index	144013 57 g-index
64 all docs	64 docs citations	64 times ranked	4120 citing authors

#	Article	IF	Citations
1	Investigation of geomagnetic reference models based on the Iridium$$^{circledR }$$ constellation. Earth, Planets and Space, 2022, 74, .	2.5	4
2	Evaluation of candidate models for the 13th generation International Geomagnetic Reference Field. Earth, Planets and Space, 2021, 73, .	2.5	33
3	NOAA/NCEI and University of Colorado candidate models for IGRF-13. Earth, Planets and Space, 2021, 73, .	2.5	9
4	International Geomagnetic Reference Field: the thirteenth generation. Earth, Planets and Space, 2021, 73, .	2.5	319
5	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.	2.4	2
6	Next Generation High-Definition Geomagnetic Model for Wellbore Positioning, Incorporating New Crustal Magnetic Data. , 2021, , .		2
7	Modeling Earthâ€™s Ever-Shifting Magnetism. Eos, 2021, 102, .	0.1	1
8	Key Ground-Based and Space-Based Assets to Disentangle Magnetic Field Sources in the Earthâ€™s Environment. Space Sciences Series of ISSI, 2018, , 125-158.	0.0	1
9	Detection of secular acceleration pulses from magnetic observatory data. Physics of the Earth and Planetary Interiors, 2017, 270, 128-142.	1.9	27
10	Derivation and Error Analysis of the Earth Magnetic Anomaly Grid at 2 arc min Resolution Version 3 (EMAG2v3). Geochemistry, Geophysics, Geosystems, 2017, 18, 4522-4537.	2.5	74
11	Key Ground-Based and Space-Based Assets to Disentangle Magnetic Field Sources in the Earthâ€™s Environment. Space Science Reviews, 2017, 206, 123-156.	8.1	14
12	First results from the Swarm Dedicated Ionospheric Field Inversion chain. Earth, Planets and Space, 2016, 68, .	2.5	41
13	Fast equatorial waves propagating at the top of the Earth's core. Geophysical Research Letters, 2015, 42, 3321-3329.	4.0	63
14	International Geomagnetic Reference Field: the 12th generation. Earth, Planets and Space, 2015, 67, .	2.5	1,015
15	Evaluation of candidate geomagnetic field models for IGRF-12. Earth, Planets and Space, 2015, 67, .	2.5	66
16	A 2015 International Geomagnetic Reference Field (IGRF) candidate model based on Swarmâ€™s experimental absolute magnetometer vector mode data. Earth, Planets and Space, 2015, 67, .	2.5	17
17	In-flight performance of the Absolute Scalar Magnetometer vector mode on board the Swarm satellites. Earth, Planets and Space, 2015, 67, .	2.5	27
18	Swarm equatorial electric field chain: First results. Geophysical Research Letters, 2015, 42, 673-680.	4.0	38

#	Article	IF	Citations
19	The Swarm Initial Field Model for the 2014 geomagnetic field. Geophysical Research Letters, 2015, 42, 1092-1098.	4.0	77
20	NOAA/NGDC candidate models for the 12th generation International Geomagnetic Reference Field. Earth, Planets and Space, 2015, 67, .	2.5	28
21	Geomagnetic secular acceleration, jerks, and a localized standing wave at the core surface from 2000 to 2010. Journal of Geophysical Research: Solid Earth, 2014, 119, 1531-1543.	3.4	92
22	Longitudinal and seasonal structure of the ionospheric equatorial electric field. Journal of Geophysical Research: Space Physics, 2013, 118, 1298-1305.	2.4	23
23	An International Network of Magnetic Observatories. Eos, 2013, 94, 373-374.	0.1	91
24	Swarm SCARF Dedicated Ionospheric Field Inversion chain. Earth, Planets and Space, 2013, 65, 1271-1283.	2.5	26
25	The Swarm Satellite Constellation Application and Research Facility (SCARF) and Swarm data products. Earth, Planets and Space, 2013, 65, 1189-1200.	2.5	222
26	Swarm SCARF Dedicated Lithospheric Field Inversion chain. Earth, Planets and Space, 2013, 65, 1257-1270.	2.5	21
27	Automated recognition of spikes in 1 Hz data recorded at the Easter Island magnetic observatory. Earth, Planets and Space, 2012, 64, 743-752.	2.5	28
28	Recognition of disturbances with specified morphology in time series: Part 2. Spikes on 1-s magnetograms. Izvestiya, Physics of the Solid Earth, 2012, 48, 395-409.	0.9	30
29	Observation of Magnetic Fields Generated by Tsunamis. Eos, 2011, 92, 13-14.	0.1	64
30	Short Timescale Core Dynamics: TheoryÂandÂObservations. Space Science Reviews, 2010, 155, 177-218.	8.1	98
31	Geomagnetic Observations for Main Field Studies: FromÂGround to Space. Space Science Reviews, 2010, 155, 29-64.	8.1	57
32	International Geomagnetic Reference Field: the eleventh generation. Geophysical Journal International, 2010, 183, 1216-1230.	2.4	907
33	On the feasibility of promptly producing quasi-definitive magnetic observatory data. Earth, Planets and Space, 2010, 62, e5-e8.	2.5	38
34	Testing IGRF-11 candidate models against CHAMP data and quasi-definitive observatory data. Earth, Planets and Space, 2010, 62, 805-814.	2.5	6
35	IGRF candidate models at times of rapid changes in core field acceleration. Earth, Planets and Space, 2010, 62, 753-763.	2.5	13
36	Candidate models for the IGRF-11th generation making use of extrapolated observatory data. Earth, Planets and Space, 2010, 62, 745-751.	2.5	3

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37	Core field acceleration pulse as a common cause of the 2003 and 2007 geomagnetic jerks. Geophysical Research Letters, 2010, 37, .	4.0	80
38	Observation of magnetic diffusion in the Earth's outer core from Magsat, Ã˜rsted, and CHAMP data. Journal of Geophysical Research, 2010, 115, .	3.3	26
39	Magnetic flux expulsion from the core as a possible cause of the unusually large acceleration of the north magnetic pole during the 1990s. Journal of Geophysical Research, 2010, 115, .	3.3	29
40	What Caused Recent Acceleration of the North Magnetic Pole Drift?. Eos, 2010, 91, 501-502.	0.1	2
41	Geomagnetic Observations for Main Field Studies: FromÂGround to Space. Space Sciences Series of ISSI, 2010, , 29-64.	0.0	2
42	Short Timescale Core Dynamics: TheoryÂandÂObservations. Space Sciences Series of ISSI, 2010, , 177-218.	0.0	2
43	Location of the North Magnetic Pole in April 2007. Earth, Planets and Space, 2009, 61, 703-710.	2.5	46
44	Geomagnetic field hemispheric asymmetry and archeomagnetic jerks. Earth and Planetary Science Letters, 2009, 284, 179-186.	4.4	68
45	Equivalent ionospheric currents for the 5 December 2006 solar flare effect determined from spherical cap harmonic analysis. Journal of Geophysical Research, 2008, 113, .	3.3	18
46	Information-measuring complex and database of mid-latitude Borok Geophysical Observatory. Russian Journal of Earth Sciences, 2008, 10, 1-14.	0.7	11
47	The Borok INTERMAGNET magnetic observatory. Russian Journal of Earth Sciences, 2008, 10, 1-7.	0.7	13
48	Comment on â€œWill the Magnetic North Pole Move to Siberia?â€. Eos, 2007, 88, 571.	0.1	1
49	The field of the equatorial electrojet from CHAMP data. Annales Geophysicae, 2006, 24, 515-527.	1.6	26
50	On the seasonal asymmetry of the diurnal and semidiurnal geomagnetic variations. Journal of Geophysical Research, 2005, 110, .	3.3	22
51	Buoyancy-driven perturbations in a rapidly rotating, electrically conducting fluid: part III â€“ effect of the lorentz force. Geophysical and Astrophysical Fluid Dynamics, 2004, 98, 507-535.	1.2	2
52	Geomagnetic secular variation generated by a tangentially geostrophic flow under the frozen-flux assumption-II. Sufficient conditions. Geophysical Journal International, 2004, 157, 537-552.	2.4	11
53	On the semiannual and annual variations of geomagnetic activity and components. Annales Geophysicae, 2004, 22, 3583-3588.	1.6	22
54	On the possibility of quantifying diffusion and horizontal Lorentz forces at the Earthâ€™s core surface. Physics of the Earth and Planetary Interiors, 2003, 135, 47-54.	1.9	13

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55	Buoyancy-driven perturbations in a rapidly rotating, electrically conducting fluid: part I â€“ flow and magnetic field. Geophysical and Astrophysical Fluid Dynamics, 2003, 97, 429-469.	1.2	8
56	Buoyancy-driven perturbations in a rapidly rotating, electrically conducting fluid: part II â€“ dynamo action. Geophysical and Astrophysical Fluid Dynamics, 2003, 97, 471-487.	1.2	3
57	Geomagnetic secular variation generated by a tangentially geostrophic flow under the frozen-flux assumption-I. NecessaryÂconditions. Geophysical Journal International, 2001, 147, 237-246.	2.4	15
58	Local computation of the geostrophic pressure at the top of the core. Physics of the Earth and Planetary Interiors, 2000, 117, 309-328.	1.9	30