Erwan Thebault

List of Publications by Year
in descending order

70 papers	4,966 citations	147801 31 h-index	106344 65 g-index
77 all docs	77 docs citations	77 times ranked	4904 citing authors

#	Article	IF	Citations
1	International Geomagnetic Reference Field: the 12th generation. Earth, Planets and Space, 2015, 67, .	2.5	1,015
2	International Geomagnetic Reference Field: the eleventh generation. Geophysical Journal International, 2010, 183, 1216-1230.	2.4	907
3	EMAG2: A 2â€"arc min resolution Earth Magnetic Anomaly Grid compiled from satellite, airborne, and marine magnetic measurements. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	452
4	International Geomagnetic Reference Field: the thirteenth generation. Earth, Planets and Space, 2021, 73, .	2.5	319
5	The Swarm Satellite Constellation Application and Research Facility (SCARF) and Swarm data products. Earth, Planets and Space, 2013, 65, 1189-1200.	2.5	222
6	The Magnetic Field of the Earthâ€™s Lithosphere. Space Science Reviews, 2010, 155, 95-127.	8.1	117
7	Ensembles of low degree archeomagnetic field models for the past three millennia. Physics of the Earth and Planetary Interiors, 2013, 224, 38-67.	1.9	109
8	Revised spherical cap harmonic analysis (R-SCHA): Validation and properties. Journal of Geophysical Research, 2006, 111, .	3.3	99
9	Evidence for distinct modes of solar activity. Astronomy and Astrophysics, 2014, 562, L10.	5.1	97
10	Building the second version of the World Digital Magnetic Anomaly Map (WDMAM). Earth, Planets and Space, 2016, 68, .	2.5	94
11	A New Model of the Crustal Magnetic Field of Mars Using MGS and MAVEN. Journal of Geophysical Research E: Planets, 2019, 124, 1542-1569.	3.6	92
12	Core field acceleration pulse as a common cause of the 2003 and 2007 geomagnetic jerks. Geophysical Research Letters, 2010, 37, .	4.0	80
13	Evaluation of candidate geomagnetic field models for IGRF-12. Earth, Planets and Space, 2015, 67, .	2.5	66
14	Evaluation of candidate geomagnetic field models for IGRF-11. Earth, Planets and Space, 2010, 62, 787-804.	2.5	59
15	Challenges Handling Magnetospheric and Ionospheric Signals in Internal Geomagnetic Field Modelling. Space Science Reviews, 2017, 206, 157-189.	8.1	57
16	Special issue â€œInternational Geomagnetic Reference Fieldâ€”the twelfth generationâ€. Earth, Planets and Space, 2015, 67, .	2.5	54
17	A new proposal for spherical cap harmonic modelling. Geophysical Journal International, 2004, 159, 83-103.	2.4	53
18	Magnetic anomaly map of the world: merging satellite, airborne, marine and ground-based magnetic data sets. Earth and Planetary Science Letters, 2007, 260, 56-71.	4.4	53

#	Article	IF	Citations
19	New archeointensity data from French Early Medieval pottery production (6th–10th century AD). Tracing 1500 years of geomagnetic field intensity variations in Western Europe. Physics of the Earth and Planetary Interiors, 2016, 257, 205-219.	1.9	48
20	Geomagnetic field intensity variations in Western Europe over the past 1100 years. Geochemistry, Geophysics, Geosystems, 2013, 14, 2858-2872.	2.5	41
21	Electrical conductivity of the Earth's mantle from the first Swarm magnetic field measurements. Geophysical Research Letters, 2015, 42, 3338-3346.	4.0	40
22	A bootstrap algorithm for deriving the archeomagnetic field intensity variation curve in the Middle East over the past 4 millennia BC. Geophysical Research Letters, 2010, 37, .	4.0	38
23	Inference on core surface flow from observations and 3-D dynamo modelling. Geophysical Journal International, 2011, 186, 118-136.	2.4	38
24	A Swarm lithospheric magnetic field model to SH degree 80. Earth, Planets and Space, 2016, 68, .	2.5	38
25	New Late Neolithic (c. 7000–5000 BC) archeointensity data from Syria. Reconstructing 9000years of archeomagnetic field intensity variations in the Middle East. Physics of the Earth and Planetary Interiors, 2015, 238, 89-103.	1.9	36
26	Global equivalent magnetization of the oceanic lithosphere. Earth and Planetary Science Letters, 2015, 430, 54-65.	4.4	35
27	GeoForschungsZentrum Anomaly Magnetic Map (GAMMA): A candidate model for the World Digital Magnetic Anomaly Map. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	34
28	Crustal concealing of small-scale core-field secular variation. Geophysical Journal International, 2009, 177, 361-366.	2.4	34
29	On the geographical distribution of induced time‐varying crustal magnetic fields. Geophysical Research Letters, 2009, 36, .	4.0	33
30	Evaluation of candidate models for the 13th generation International Geomagnetic Reference Field. Earth, Planets and Space, 2021, 73, .	2.5	33
31	A proposal for regional modelling at the Earth's surface, R-SCHA2D. Geophysical Journal International, 2008, 174, 118-134.	2.4	32
32	A candidate secular variation model for IGRF-12 based on Swarm data and inverse geodynamo modelling. Earth, Planets and Space, 2015, 67, .	2.5	32
33	Global lithospheric magnetic field modelling by successive regional analysis. Earth, Planets and Space, 2006, 58, 485-495.	2.5	30
34	Post-processing scheme for modelling the lithospheric magnetic field. Solid Earth, 2013, 4, 105-118.	2.8	29
35	Global maps of the magnetic thickness and magnetization of the Earth's lithosphere. Earth, Planets and Space, 2015, 67, .	2.5	29
36	Correlated Time‐Varying Magnetic Fields and the Core Size of Mercury. Journal of Geophysical Research E: Planets, 2019, 124, 2178-2197.	3.6	29

#	ARTICLE	IF	CITATIONS
37	Modeling the lithospheric magnetic field over France by means of revised spherical cap harmonic analysis (R-SCHA). Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	27
38	The satellite along-track analysis in planetary magnetism. Geophysical Journal International, 2012, 188, 891-907.	2.4	27
39	Swarm SCARF Dedicated Ionospheric Field Inversion chain. Earth, Planets and Space, 2013, 65, 1271-1283.	2.5	26
40	A statistical spatial power spectrum of the Earth's lithospheric magnetic field. Geophysical Journal International, 2015, 201, 605-620.	2.4	26
41	A time-averaged regional model of the Hermean magnetic field. Physics of the Earth and Planetary Interiors, 2018, 276, 93-105.	1.9	24
42	Geomagnetic repeat station crustal biases and vectorial anomaly maps for Germany. Geophysical Journal International, 2007, 170, 81-92.	2.4	23
43	Swarm SCARF Dedicated Lithospheric Field Inversion chain. Earth, Planets and Space, 2013, 65, 1257-1270.	2.5	21
44	Applied comparisons between SCHA and Râ€SCHA regional modeling techniques. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	18
45	Special issue â€œInternational Geomagnetic Reference Field: the thirteenth generationâ€. Earth, Planets and Space, 2022, 74, .	2.5	18
46	Predicted and observed magnetic signatures of martian (de)magnetized impact craters. Icarus, 2011, 212, 568-578.	2.5	16
47	Geomagnetic core field models and secular variation forecasts for the 13th International Geomagnetic Reference Field (IGRF-13). Earth, Planets and Space, 2020, 72, .	2.5	16
48	Magnetic Field Data Correction in Space for Modelling the Lithospheric Magnetic Field. Space Science Reviews, 2017, 206, 191-223.	8.1	15
49	IGRF candidate models at times of rapid changes in core field acceleration. Earth, Planets and Space, 2010, 62, 753-763.	2.5	13
50	A high resolution lithospheric magnetic field model over China. Science China Earth Sciences, 2013, 56, 1759-1768.	5.2	11
51	A Spherical Harmonic model of Earthâ€™s lithospheric magnetic field up to degree 1050. Geophysical Research Letters, 2021, 48, e2021GL095147.	4.0	11
52	The Internal Structure of Mercury's Core Inferred From Magnetic Observations. Journal of Geophysical Research E: Planets, 2021, 126, .	3.6	11
53	Archeomagnetic intensity investigations of French medieval ceramic workshops: Contribution to regional field modeling and archeointensity-based dating. Physics of the Earth and Planetary Interiors, 2021, 318, 106750.	1.9	10
54	Main field and secular variation candidate models for the 12th IGRF generation after 10 months of Swarm measurements. Earth, Planets and Space, 2015, 67, .	2.5	9

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55	In situ and remote characterization of the external field temporal variations at Mars. Journal of Geophysical Research E: Planets, 2017, 122, 110-123.	3.6	9
56	A new model for the (geo)magnetic power spectrum, with application to planetary dynamo radii. Earth and Planetary Science Letters, 2014, 401, 347-358.	4.4	7
57	A high-resolution lithospheric magnetic field model over southern Africa based on a joint inversion of CHAMP, Swarm, WDMAM, and ground magnetic field data. Solid Earth, 2018, 9, 897-910.	2.8	7
58	Testing IGRF-11 candidate models against CHAMP data and quasi-definitive observatory data. Earth, Planets and Space, 2010, 62, 805-814.	2.5	6
59	On the possibility of extending the IGRF predictive secular variation model to a higher SH degree. Earth, Planets and Space, 2010, 62, 815-820.	2.5	5
60	The Magnetic Field of the Earth's Lithosphere. Space Sciences Series of ISSI, 2010, , 95-127.	0.0	5
61	Electrical conductivity and temperature of the Earth's mantle inferred from Bayesian inversion of Swarm vector magnetic data. Physics of the Earth and Planetary Interiors, 2021, 314, 106702.	1.9	4
62	Physics-based secular variation candidate models for the IGRF. Earth, Planets and Space, 2021, 73, .	2.5	4
63	Candidate models for the IGRF-11th generation making use of extrapolated observatory data. Earth, Planets and Space, 2010, 62, 745-751.	2.5	3
64	Challenges Handling Magnetospheric and Ionospheric Signals in Internal Geomagnetic Field Modelling. Space Sciences Series of ISSI, 2018, , 161-193.	0.0	3
65	Modelling Internal and External Geomagnetic Fields Using Satellite Data. , 2019, , 84-97.		2
66	Magnetic Anomalies, Interpretation. Encyclopedia of Earth Sciences Series, 2011, , 729-736.	0.1	1
67	The Global Lithospheric Magnetic Field. , 2019, , 133-140.		0
68	Magnetic Anomalies: Interpretation. Encyclopedia of Earth Sciences Series, 2021, , 935-943.	0.1	0
69	Magnetic Field Data Correction in Space for Modelling the Lithospheric Magnetic Field. Space Sciences Series of ISSI, 2018, , 195-227.	0.0	0
70	Magnetic Anomalies: Interpretation. Encyclopedia of Earth Sciences Series, 2020, , 1-9.	0.1	0