Johannes Boehm

List of Publications by Year in descending order

108 papers	5,558 citations	186265 28 h-index	79698 73 g-index
126 all docs	126 docs citations	126 times ranked	2595 citing authors

#	Article	IF	Citations
1	Global Mapping Function (GMF): A new empirical mapping function based on numerical weather model data. Geophysical Research Letters, 2006, 33, .	4.0	1,010
2	Troposphere mapping functions for GPS and very long baseline interferometry from European Centre for Mediumâ€Range Weather Forecasts operational analysis data. Journal of Geophysical Research, 2006, 111, .	3.3	794
3	Short Note: A global model of pressure and temperature for geodetic applications. Journal of Geodesy, 2007, 81, 679-683.	3.6	530
4	GPT2: Empirical slant delay model for radio space geodetic techniques. Geophysical Research Letters, 2013, 40, 1069-1073.	4.0	397
5	Development of an improved empirical model for slant delays in the troposphere (GPT2w). GPS Solutions, 2015, 19, 433-441.	4.3	369
6	VMF3/GPT3: refined discrete and empirical troposphere mapping functions. Journal of Geodesy, 2018, 92, 349-360.	3.6	301
7	Vienna mapping functions in VLBI analyses. Geophysical Research Letters, 2004, 31, .	4.0	169
8	The third realization of the International Celestial Reference Frame by very long baseline interferometry. Astronomy and Astrophysics, 2020, 644, A159.	5.1	166
9	Comparison of GMF/GPT with VMF1/ECMWF and implications for atmospheric loading. Journal of Geodesy, 2009, 83, 943-951.	3.6	97
10	Improved Constraints on Models of Glacial Isostatic Adjustment: A Review of the Contribution of Ground-Based Geodetic Observations. Surveys in Geophysics, 2010, 31, 465-507.	4.6	97
11	Forecast Vienna Mapping Functions 1 for real-time analysis of space geodetic observations. Journal of Geodesy, 2009, 83, 397-401.	3.6	85
12	Multi-technique comparison of troposphere zenith delays and gradients during CONT08. Journal of Geodesy, 2011, 85, 395-413.	3.6	74
13	Multi-technique comparison of tropospheric zenith delays derived during the CONT02 campaign. Journal of Geodesy, 2006, 79, 613-623.	3.6	67
14	Atmospheric Effects in Space Geodesy. Springer Atmospheric Sciences, 2013, , .	0.3	66
15	The New Vienna VLBI Software VieVS. International Association of Geodesy Symposia, 2012, , 1007-1011.	0.4	58
16	Comparison of Ray-Tracing Packages for Troposphere Delays. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 469-481.	6.3	53
17	Path Delays in the Neutral Atmosphere. Springer Atmospheric Sciences, 2013, , 73-136.	0.3	51
18	Vienna VLBI and Satellite Software (VieVS) for Geodesy and Astrometry. Publications of the Astronomical Society of the Pacific, 2018, 130, 044503.	3.1	49

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19	Annual deformation signals from homogeneously reprocessed VLBI and GPS height time series. Journal of Geodesy, 2009, 83, 973-988.	3.6	48
20	Monte Carlo simulations of the impact of troposphere, clock and measurement errors on the repeatability of VLBI positions. Journal of Geodesy, 2011, 85, 39-50.	3.6	48
21	Evaluation of the impact of atmospheric pressure loading modeling on GNSS data analysis. Journal of Geodesy, 2011, 85, 75-91.	3.6	43
22	Refined discrete and empirical horizontal gradients in VLBI analysis. Journal of Geodesy, 2018, 92, 1387-1399.	3.6	42
23	Troposphere delays from space geodetic techniques, water vapor radiometers, and numerical weather models over a series of continuous VLBI campaigns. Journal of Geodesy, 2013, 87, 981-1001.	3.6	41
24	Effect of different tropospheric mapping functions on the TRF, CRF and position time-series estimated from VLBI. Journal of Geodesy, 2007, 81, 409-421.	3.6	40
25	Troposphere gradients from the ECMWF in VLBI analysis. Journal of Geodesy, 2007, 81, 403-408.	3.6	39
26	Application of ray-traced tropospheric slant delays to geodetic VLBI analysis. Journal of Geodesy, 2017, 91, 945-964.	3.6	38
27	New VLBI2010 scheduling strategies and implications on the terrestrial reference frames. Journal of Geodesy, 2014, 88, 449-461.	3.6	37
28	Rayâ€traced tropospheric delays in VLBI analysis. Radio Science, 2012, 47, .	1.6	32
29	Free core nutation observed by VLBI. Astronomy and Astrophysics, 2013, 555, A29.	5.1	28
30	Combination of long time-series of troposphere zenith delays observed by VLBI. Journal of Geodesy, 2007, 81, 483-501.	3.6	26
31	Combining VLBI and ring laser observations for determination of high frequency Earth rotation variation. Journal of Geodynamics, 2012, 62, 69-73.	1.6	26
32	Atmospheric Pressure Loading. Springer Atmospheric Sciences, 2013, , 137-157.	0.3	26
33	Modeling thermal deformation of VLBI antennas with a new temperature model. Journal of Geodesy, 2007, 81, 423-431.	3.6	24
34	VieSched++: A New VLBI Scheduling Software for Geodesy and Astrometry. Publications of the Astronomical Society of the Pacific, 2019, 131, 084501.	3.1	24
35	Earth Rotation Observed by Very Long Baseline Interferometry and Ring Laser. Pure and Applied Geophysics, 2009, 166, 1499-1517.	1.9	23
36	Atmospheric loading corrections at the observation level in VLBI analysis. Journal of Geodesy, 2009, 83, 1107-1113.	3.6	23

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37	VLBI-derived troposphere parameters during CONT08. Journal of Geodesy, 2011, 85, 377-393.	3.6	21
38	Tidal Love and Shida numbers estimated by geodetic VLBI. Journal of Geodynamics, 2013, 70, 21-27.	1.6	21
39	Very Long Baseline Interferometry for Geodesy and Astrometry. , 2013, , 339-376.		19
40	VLBI observations of GNSS-satellites: from scheduling to analysis. Journal of Geodesy, 2017, 91, 867-880.	3.6	18
41	High-resolution atmospheric angular momentum functions related to Earth rotation parameters during CONT08. Journal of Geodesy, 2011, 85, 425-433.	3.6	17
42	Observing APOD with the AuScope VLBI Array. Sensors, 2018, 18, 1587.	3.8	17
43	Asymmetric tropospheric delays from numerical weather models for UT1 determination from VLBI Intensive sessions on the baseline Wettzellâ€“Tsukuba. Journal of Geodesy, 2010, 84, 319-325.	3.6	16
44	Universal time from VLBI single-baseline observations during CONT08. Journal of Geodesy, 2011, 85, 415-423.	3.6	16
45	Precise station positions from VLBI observations to satellites: a simulation study. Journal of Geodesy, 2014, 88, 659-673.	3.6	16
46	Numerical simulation of troposphere-induced errors in GPS-derived geodetic time series over Japan. Journal of Geodesy, 2010, 84, 405-417.	3.6	15
47	Non-linear VLBI station motions and their impact on the celestial reference frame and Earth orientation parameters. Journal of Geodesy, 2015, 89, 1019-1033.	3.6	15
48	Sub-Diurnal Earth Rotation Variations Observed by VLBI. Artificial Satellites, 2010, 45, .	0.7	15
49	Improved Troposphere Blind Models Based on Numerical Weather Data. Navigation, Journal of the Institute of Navigation, 2014, 61, 203-211.	2.8	14
50	Challenges for geodetic VLBI in the southern hemisphere. Advances in Space Research, 2015, 56, 304-313.	2.6	13
51	The Global S $$_1$$ 1 Tide in Earthâ€™s Nutation. Surveys in Geophysics, 2016, 37, 643-680.	4.6	13
52	Assessment of ECMWF-derived tropospheric delay models within the EUREF Permanent Network. GPS Solutions, 2011, 15, 39-48.	4.3	12
53	Simulating the effects of quasar structure on parameters from geodetic VLBI. Journal of Geodesy, 2015, 89, 873-886.	3.6	12
54	GNSS zenith delays and gradients in the analysis of VLBI Intensive sessions. Advances in Space Research, 2015, 56, 1667-1676.	2.6	12

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55	Optimizing schedules for the VLBI global observing system. Journal of Geodesy, 2020, 94, 12.	3.6	12
56	The impact of mapping functions for the neutral atmosphere based on numerical weather models in GPS data analysis. , 2007, , 837-843.		12
57	Generation and Assessment of VMF1-Type Grids Using North-American Numerical Weather Models. International Association of Geodesy Symposia, 2014, , 3-9.	0.4	11
58	The AUSTRAL VLBI observing program. Journal of Geodesy, 2017, 91, 803-817.	3.6	10
59	VMF3o: the Vienna Mapping Functions for optical frequencies. Journal of Geodesy, 2020, 94, 57.	3.6	10
60	High-frequency Earth rotation variations deduced from altimetry-based ocean tides. Journal of Geodesy, 2016, 90, 1237-1253.	3.6	9
61	Optimal VLBI baseline geometry for UT1-UTC Intensive observations. Journal of Geodesy, 2021, 95, 75.	3.6	9
62	Atmospheric Effects on VLBI-Derived Terrestrial and Celestial Reference Frames. International Association of Geodesy Symposia, 2014, , 203-208.	0.4	9
63	Optimal antenna locations of the VLBI Global Observing System for the estimation of Earth orientation parameters. Earth, Planets and Space, 2020, 72, 87.	2.5	9
64	Contributions of GPS and VLBI for understanding station motions. Journal of Geodynamics, 2006, 41, 87-93.	1.6	7
65	Geodetic and Atmospheric Background. Springer Atmospheric Sciences, 2013, , 1-33.	0.3	7
66	Recent estimates of Earthâ€atmosphere interaction torques and their use in studying polar motion variability. Journal of Geophysical Research: Solid Earth, 2013, 118, 4586-4598.	3.4	7
67	Tropospheric delay modelling and the celestial reference frame at radio wavelengths. Astronomy and Astrophysics, 2017, 606, A143.	5.1	6
68	VLBI observations to the APOD satellite. Advances in Space Research, 2018, 61, 823-829.	2.6	6
69	Improving dUT1 from VLBI intensive sessions with GRAD gradients and ray-traced delays. Advances in Space Research, 2019, 63, 3429-3435.	2.6	6
70	Recent Progress in the VLBI2010 Development. International Association of Geodesy Symposia, 2009, , 833-840.	0.4	6
71	Investigation of crustal motion in Europe by analysing the European VLBI sessions. Acta Geodaetica Et Geophysica, 2013, 48, 389-404.	1.6	5
72	A Priori Gradients in the Analysis of Space Geodetic Observations. International Association of Geodesy Symposia, 2013, , 105-109.	0.4	5

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73	Importance of the Hartebeesthoek Radio Astronomy Observatory for the VLBI network. Acta Geodaetica Et Geophysica, 2014, 49, 313-325.	1.6	5
74	Earth and space observation at the German Antarctic Receiving Station Oâ€™Higgins. Polar Record, 2015, 51, 590-610.	0.8	5
75	Scheduling VLBI Observations to Satellites with VieVS. International Association of Geodesy Symposia, 2015, , 59-64.	0.4	5
76	Simulated VLBI Satellite Tracking of the GNSS Constellation: Observing Strategies. International Association of Geodesy Symposia, 2015, , 85-90.	0.4	5
77	Assessing the performance of Vienna Mapping Functions 3 for GNSS stations in Indonesia using Precise Point Positioning. Advances in Geosciences, 0, 50, 77-86.	12.0	5
78	Climatic signals observed by VLBI. Acta Geodaetica Et Geophysica Hungarica, 2006, 41, 159-170.	0.4	4
79	Effect of troposphere slant delays on regional double difference GPS processing. Earth, Planets and Space, 2009, 61, 845-852.	2.5	4
80	Neutral Atmosphere Delays: Empirical Models Versus Discrete Time Series from Numerical Weather Models. International Association of Geodesy Symposia, 2009, , 317-321.	0.4	4
81	Atmospheric Effects on Earth Rotation. Springer Atmospheric Sciences, 2013, , 181-231.	0.3	4
82	Influence of tropospheric zenith delays obtained by GPS and VLBI on station heights. International Association of Geodesy Symposia, 2002, , 107-112.	0.4	4
83	The effect of neglecting VLBI reference station clock offsets on UT1 estimates. Advances in Space Research, 2009, 43, 910-916.	2.6	3
84	Refined Tropospheric Delay Models for CONT11. International Association of Geodesy Symposia, 2015, , 65-69.	0.4	3
85	Comparing Vienna CRF solutions to Gaia-CRF2. International Association of Geodesy Symposia, 2020, , 1.	0.4	3
86	The Effect of Meteorological Input Data on the VLBI Reference Frames. International Association of Geodesy Symposia, 2009, , 245-251.	0.4	3
87	Atmospheric Effects on Gravity Space Missions. Springer Atmospheric Sciences, 2013, , 159-180.	0.3	3
88	Modelling Very Long Baseline Interferometry (VLBI) observations. Journal of Geodesy and Geoinformation, 2012, 1, 17-26.	0.2	3
89	Recent Activities of the GGOS Standing Committee on Performance Simulations and Architectural Trade-Offs (PLATO). International Association of Geodesy Symposia, 2018, , 161-164.	0.4	2
90	Unconstrained Estimation of VLBI Global Observing System Station Coordinates. Advances in Geosciences, 0, 55, 23-31.	12.0	2

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91	VieRDS: A Software to Simulate Raw Telescope Data for very Long Baseline Interferometry. Publications of the Astronomical Society of the Pacific, 2021, 133, 044503.	3.1	2
92	Spectra of rapid oscillations of Earth Rotation Parameters determined during the CONT02 Campaign. , 2007, , 208-214.		2
93	Comparing atmospheric data and models at station Wettzell during CONT17. Advances in Geosciences, 0, 50, 1-7.	12.0	2
94	Baseline-dependent clock offsets in VLBI data analysis. Journal of Geodesy, 2021, 95, 126.	3.6	2
95	Comparison of tropospheric gradients determined by VLBI and GPS. Physics and Chemistry of the Earth, 2001, 26, 385-388.	0.6	1
96	Results from the Regional AUSTRAL VLBI Sessions for Southern Hemisphere Reference Frames. International Association of Geodesy Symposia, 2015, , 129-134.	0.4	1
97	Loading Effects and Reference Frames. , 2016, , 1-5.		1
98	TOWARD A NEW VLBI SYSTEM FOR GEODESY AND ASTROMETRY. , 0, , 167-180.		1
99	Seasonal and intraseasonal polar motion variability as deduced from atmospheric torques. Journal of Geodesy and Geoinformation, 2012, 1, 89-95.	0.2	1
100	Systematic Errors of a VLBI Determined TRF Investigated by Simulations. International Association of Geodesy Symposia, 2013, , 197-202.	0.4	1
101	Determination of UT1 by VLBI. Proceedings of the International Astronomical Union, 2009, 5, 216-216.	0.0	0
102	The Effects of Simulated and Observed Quasar Structure on the VLBI Reference Frame. International Association of Geodesy Symposia, 2015, , 191-199.	0.4	0
103	Impact of Numerical Weather Models on Gravity Field Analysis. International Association of Geodesy Symposia, 2015, , 355-365.	0.4	0
104	Analysis Strategies for the Densification of the ICRF with VLBA Calibrator Survey Sources. International Association of Geodesy Symposia, 2016, , 17-23.	0.4	0
105	Ã‡ok Uzun Baz Enterferometrisi (VLBI) Ã¶lÃ§Ã¼lerinin modellenmesi. Journal of Geodesy and Geoinformation, 2012, 1, 65-74.	0.2	0
106	Atmosferik torklardan elde edilen mevsimsel ve mevsim-iÃ§i kutup gezinmesi deÄŸiÅŸimleri. Journal of Geodesy and Geoinformation, 2012, 1, 123-129.	0.2	0
107	GNSS Meteorology. , 2015, , 1-5.		0
108	Research Group for Advanced Geodesy. , 2015, , 69-71.		0