Michal Å prlÃ¡k

List of Publications by Year
in descending order

39	509	623734	752698
papers	citations	14 h-index	20 g-index

41	41	41	257
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Assessment of Hydrologic- and Flood-Induced Land Deformation in Data-Sparse Regions Using GRACE/GRACE-FO Data Assimilation. Remote Sensing, 2021, 13, 235.	4.0	10
2	On the use of spherical harmonic series inside the minimum Brillouin sphere: Theoretical review and evaluation by GRAIL and LOLA satellite data. Earth-Science Reviews, 2021, 222, 103739.	9.1	9
3	On determination of the geoid from measured gradients of the Earth's gravity field potential. Earth-Science Reviews, 2021, 221, 103773.	9.1	4
4	Spheroidal forward modelling of the gravitational fields of 1 Ceres and the Moon. Icarus, 2020, 335, 113412.	2.5	11
5	Integral inversion of GRAIL inter-satellite gravitational accelerations for regional recovery of the lunar gravitational field. Advances in Space Research, 2020, 65, 630-649.	2.6	6
6	Crustal density and global gravitational field estimation of the Moon from GRAIL and LOLA satellite data. Planetary and Space Science, 2020, 192, 105032.	1.7	5
7	Improving regional groundwater storage estimates from GRACE and global hydrological models over Tasmania, Australia. Hydrogeology Journal, 2020, 28, 1809-1825.	2.1	28
8	Downward continuation of gravitational field quantities to an irregular surface by spectral weighting. Journal of Geodesy, 2020, 94, 1.	3.6	6
9	Higher-order gravitational potential gradients for geoscientific applications. Earth-Science Reviews, 2019, 198, 102937.	9.1	12
10	Quantifying water storage change and land subsidence induced by reservoir impoundment using GRACE, Landsat, and GPS data. Remote Sensing of Environment, 2019, 233, 111385.	11.0	24
11	Determination of ellipsoidal surface mass change from GRACE time-variable gravity data. Geophysical Journal International, 2019, 219, 248-259.	2.4	16
12	Spectral combination of spherical gravitational curvature boundary-value problems. Geophysical Journal International, 2018, 214, 773-791.	2.4	10
13	Forward modelling of global gravity fields with 3D density structures and an application to the high-resolution (~Ã2Âkm) gravity fields of the Moon. Journal of Geodesy, 2018, 92, 847-862.	3.6	17
14	Spheroidal Integral Equations for Geodetic Inversion of Geopotential Gradients. Surveys in Geophysics, 2018, 39, 245-270.	4.6	2
15	Vertical and horizontal spheroidal boundary-value problems. Journal of Geodesy, 2018, 92, 811-826.	3.6	2
16	Effect of the Earth's inner structure on the gravity in definitions of height systems. Geophysical Journal International, 2017, , ggx024.	2.4	2
17	Integral formulas for transformation of potential field parameters inÂgeosciences. Earth-Science Reviews, 2017, 164, 208-231.	9.1	17
18	Spherical integral transforms of second-order gravitational tensor components onto third-order gravitational tensor components. Journal of Geodesy, 2017, 91, 167-194.	3.6	13

#	Article	IF	Citations
19	Regional gravity field modelling from GOCE observables. Advances in Space Research, 2017, 59, 114-127.	2.6	6
20	Possibilities of inversion of satellite third-order gravitational tensor onto gravity anomalies: a case study for central Europe. Geophysical Journal International, 2017, 209, 799-812.	2.4	12
21	Spherical gravitational curvature boundary-value problem. Journal of Geodesy, 2016, 90, 727-739.	3.6	24
22	Local Recovery of Sub-Crustal Stress Due to Mantle Convection from Satellite-to-Satellite Tracking Data. Acta Geophysica, 2016, 64, 904-929.	2.0	3
23	Regional recovery of the disturbing gravitational potential by inverting satellite gravitational gradients. Geophysical Journal International, 2016, 205, 89-98.	2.4	12
24	Non-singular expressions for the spherical harmonic synthesis of gravitational curvatures in a local north-oriented reference frame. Computers and Geosciences, 2016, 88, 152-162.	4.2	14
25	Spherical Harmonic Analysis of Gravitational Curvatures and Its Implications for Future Satellite Missions. Surveys in Geophysics, 2016, 37, 681-700.	4.6	18
26	Contribution of mass density heterogeneities to the quasigeoid-to-geoid separation. Journal of Geodesy, 2016, 90, 65-80.	3.6	23
27	On the integral inversion of satellite-to-satellite velocity differences for local gravity field recovery: a theoretical study. Celestial Mechanics and Dynamical Astronomy, 2016, 124, 127-144.	1.4	4
28	Integral formulas for computing a third-order gravitational tensor from volumetric mass density, disturbing gravitational potential, gravity anomaly and gravity disturbance. Journal of Geodesy, 2015, 89, 141-157.	3.6	20
29	Alternative validation method of satellite gradiometric data by integral transform of satellite altimetry data. Journal of Geodesy, 2015, 89, 757-773.	3.6	13
30	Integral transformations of gradiometric data onto a GRACE type of observable. Journal of Geodesy, 2014, 88, 377-390.	3.6	10
31	Iterative Spherical Downward Continuation Applied to Magnetic and Gravitational Data from Satellite. Surveys in Geophysics, 2014, 35, 941-958.	4.6	34
32	Integral transformations of deflections of the vertical onto satellite-to-satellite tracking and gradiometric data. Journal of Geodesy, 2014, 88, 643-657.	3.6	12
33	Spherical integral formulas for upward/downward continuation of gravitational gradients onto gravitational gradients. Journal of Geodesy, 2014, 88, 179-197.	3.6	15
34	Comparison of GOCE Global Gravity Field Models to Test Fields in Southern Norway. International Association of Geodesy Symposia, 2014, , 59-65.	0.4	2
35	A graphical user interface application for evaluation of the gravitational tensor components generated by a level ellipsoid of revolution. Computers and Geosciences, 2012, 46, 77-83.	4.2	12
36	Validation of GOCE global gravity field models using terrestrial gravity data in Norway. Journal of Geodetic Science, 2012, 2, 134-143.	1.0	23

#	Article	IF	Citations
37	On the application of the coupled finite-infinite element method to geodetic boundary-value problem. Studia Geophysica Et Geodaetica, 2011, 55, 479-487.	0.5	7
38	The enigmatic Chad lineament revisited with global gravity and gravity-gradient fields. Geological Society Special Publication, 2011, 357, 329-341.	1.3	46
39	Generalized geoidal estimators for deterministic modifications of spherical Stokes' function. Contributions To Geophysics and Geodesy, 2010, 40, 45-64.	0.6	4