Volker Klemann

List of Publications by Year
in descending order

50	1,240	279701 23	377752 34
papers	citations	h-index	g-index

73	73	73	1420
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An approach for constraining mantle viscosities through assimilation of palaeo sea level data into a glacial isostatic adjustment model. Nonlinear Processes in Geophysics, 2022, 29, 53-75.	0.6	0
2	Hydrogeologic and Thermal Effects of Glaciations on the Intracontinental Basins in Central and Northern Europe. Frontiers in Water, 2022, 4, .	1.0	2
3	A Holocene relative sea-level database for the Baltic Sea. Quaternary Science Reviews, 2021, 266, 107071.	1.4	29
4	Anelasticity and Lateral Heterogeneities in Earth's Upper Mantle: Impact on Surface Displacements, Selfâ€Attraction and Loading, and Ocean Tide Dynamics. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022332.	1.4	4
5	Glacialâ€Isostatic Adjustment Models Using Geodynamically Constrained 3D Earth Structures. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009853.	1.0	13
6	Exploring the Drivers of Global and Local Seaâ€Level Change Over the 21st Century and Beyond. Earth's Future, 2020, 8, e2019EF001413.	2.4	55
7	Gravitationally Consistent Mean Barystatic Sea Level Rise From Leakageâ€Corrected Monthly GRACE Data. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020923.	1.4	17
8	Surface Loading of a Self-Gravitating, Laterally Heterogeneous Elastic Sphere: Preliminary Result for the 2D Case. International Association of Geodesy Symposia, 2019, , 157-163.	0.2	3
9	Relocation of River Storage From Global Hydrological Models to Georeferenced River Channels for Improved Loadâ€Induced Surface Displacements. Journal of Geophysical Research: Solid Earth, 2018, 123, 7151-7164.	1.4	12
10	A benchmark study of numerical implementations of the sea level equation in GIA modelling. Geophysical Journal International, 2018, 215, 389-414.	1.0	33
11	Ground Deformations around the Toktogul Reservoir, Kyrgyzstan, from Envisat ASAR and Sentinel-1 Dataâ€"A Case Study about the Impact of Atmospheric Corrections on InSAR Time Series. Remote Sensing, 2018, 10, 462.	1.8	23
12	Altimetry, gravimetry, GPS and viscoelastic modeling data for the joint inversion for glacial isostatic adjustment in Antarctica (ESA STSE Project REGINA). Earth System Science Data, 2018, 10, 493-523.	3.7	13
13	Joint inversion estimate of regional glacial isostatic adjustment in Antarctica considering a lateral varying Earth structure (ESA STSE Project REGINA). Geophysical Journal International, 2017, 211, 1534-1553.	1.0	31
14	Zukunft der globalen GeodÃsie und Fernerkundung aus Sicht des Deutschen GeoForschungsZentrum (GFZ), Potsdam. , 2017, , 443-497.		1
15	Palaeo-sea-level and palaeo-ice-sheet databases: problems, strategies, and perspectives. Climate of the Past, 2016, 12, 911-921.	1.3	27
16	Sea-level evolution of the Laptev Sea and the East Siberian Sea since the last glacial maximum. Arktos, 2015, 1, 1.	1.0	22
17	Potential of the solid-Earth response for limiting long-term West Antarctic Ice Sheet retreat in a warming climate. Earth and Planetary Science Letters, 2015, 432, 254-264.	1.8	49
18	The updated ESA Earth System Model for future gravity mission simulation studies. Journal of Geodesy, 2015, 89, 505-513.	1.6	70

#	Article	IF	Citations
19	Spectral-finite element approach to post-seismic relaxation in a spherical compressible Earth: application to gravity changes due to the 2004 Sumatraâ€“Andaman earthquake. Geophysical Journal International, 2015, 200, 299-321.	1.0	11
20	Applying local Green's functions to study the influence of the crustal structure on hydrological loading displacements. Journal of Geodynamics, 2015, 88, 14-22.	0.7	45
21	The effects of compressibility on the GIA in southeast Alaska. Journal of Geodynamics, 2015, 84, 55-61.	0.7	2
22	Zukunft der globalen GeodÃsie und Fernerkundung aus Sicht des Deutschen GeoForschungsZentrum (GFZ), Potsdam. , 2015, , 1-55.		0
23	Elastic and Viscoelastic Response of the Lithosphere to Surface Loading. , 2015, , 661-677.		0
24	The Deformational Response of a Viscoelastic Solid Earth Model Coupled to a Thermomechanical Ice Sheet Model. Surveys in Geophysics, 2014, 35, 1441-1458.	2.1	19
25	Mass Distribution and Mass Transport in the Earth System: Recent Scientific Progress Due to Interdisciplinary Research. Surveys in Geophysics, 2014, 35, 1243-1249.	2.1	6
26	Antarctic ice-mass balance 2003 to 2012: regional reanalysis of GRACE satellite gravimetry measurements with improved estimate of glacial-isostatic adjustment based on GPS uplift rates. Cryosphere, 2013, 7, 1499-1512.	1.5	75
27	Compressible viscoelastodynamics of a spherical body at long timescales and its isostatic equilibrium. Geophysical Journal International, 2013, 193, 1071-1082.	1.0	8
28	A Visual Analysis Concept for the Validation of Geoscientific Simulation Models. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 2216-2225.	2.9	27
29	Mass distribution and mass transport in the Earth system. Journal of Geodynamics, 2012, 59-60, 1-8.	0.7	32
30	Towards the inversion of GRACE gravity fields for present-day ice-mass changes and glacial-isostatic adjustment in North America and Greenland. Journal of Geodynamics, 2012, 59-60, 49-63.	0.7	42
31	Observing Gravity Change in the Fennoscandian Uplift Area with the Hanover Absolute Gravimeter. Pure and Applied Geophysics, 2012, 169, 1331-1342.	0.8	29
32	Spectral-finite element approach to viscoelastic relaxation in a spherical compressible Earth: application to GIA modelling. Geophysical Journal International, 2011, 184, 220-234.	1.0	37
33	A benchmark study for glacial isostatic adjustment codes. Geophysical Journal International, 2011, 185, 106-132.	1.0	97
34	Contribution of glacial-isostatic adjustment to the geocenter motion. Tectonophysics, 2011, 511, 99-108.	0.9	37
35	Assessing the quality of geoscientific simulation models with visual analytics methods â€“ a design study. International Journal of Geographical Information Science, 2010, 24, 1459-1479.	2.2	20
36	Temporal Gravity Variations near Shrinking VatnajÃ¶kull Ice Cap, Iceland. Pure and Applied Geophysics, 2009, 166, 1283-1302.	0.8	7

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37	Application of a Numerical Inverse Laplace Integration Method to Surface Loading on a Viscoelastic Compressible Earth Model. Pure and Applied Geophysics, 2009, 166, 1199-1216.	0.8	5
38	Spectral finite element approach to postseismic deformation in a viscoelastic self-gravitating spherical Earth. Geophysical Journal International, 2009, 176, 715-739.	1.0	19
39	DynaQlim â€“ Upper Mantle Dynamics and Quaternary Climate in Cratonic Areas. , 2009, , 349-372.		8
40	Glacial isostasy and plate motion. Journal of Geodynamics, 2008, 46, 95-103.	0.7	50
41	Models of active glacial isostasy roofing warm subduction: Case of the South Patagonian Ice Field. Journal of Geophysical Research, 2007, 112, .	3.3	34
42	Using Fuzzy Logic for the Analysis of Sea-level Indicators with Respect to Glacial-isostatic Adjustment: An Application to the Richmond-Gulf Region, Hudson Bay. Pure and Applied Geophysics, 2007, 164, 683-696.	0.8	5
43	Using Fuzzy Logic for the Analysis of Sea-level Indicators with Respect to Glacial-isostatic Adjustment: An Application to the Richmond-Gulf Region, Hudson Bay. , 2007, , 683-696.		1
44	A Reanalysis and Reinterpretation of Geodetic and Geological Evidence of Glacial-Isostatic Adjustment in the Churchill Region, Hudson Bay. Surveys in Geophysics, 2006, 27, 19-61.	2.1	41
45	The eustatic reduction of shoreline diagrams: implications for the inference of relaxation-rate spectra and the viscosity stratification below Fennoscandia. Geophysical Journal International, 2005, 162, 249-256.	1.0	13
46	Ice flow and isostasy of the north polar cap of Mars. Planetary and Space Science, 2003, 51, 193-204.	0.9	13
47	Compressible viscoelasticity: stability of solutions for homogeneous plane-Earth models. Geophysical Journal International, 2003, 153, 569-585.	1.0	39
48	Glacial isostatic stress shadowing by the Antarctic ice sheet. Journal of Geophysical Research, 2003, 108, .	3.3	31
49	Implications of a ductile crustal layer for the deformation caused by the Fennoscandian ice sheet. Geophysical Journal International, 1999, 139, 216-226.	1.0	33
50	Modelling of stresses in the Fennoscandian lithosphere induced by Pleistocene glaciations. Tectonophysics, 1998, 294, 291-303.	0.9	45