

# Sia Ghelichkhan

## List of Publications by Year in descending order

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Version: 2024-02-01

16  
papers

521  
citations

840776

11  
h-index

888059

17  
g-index

19  
all docs

19  
docs citations

19  
times ranked

432  
citing authors

#	ARTICLE	IF	CITATIONS
1	Global distribution of sediment-hosted metals controlled by craton edge stability. <i>Nature Geoscience</i> , 2020, 13, 504-510.	12.9	114
2	On the ratio of dynamic topography and gravity anomalies in a dynamic Earth. <i>Geophysical Research Letters</i> , 2016, 43, 2510-2516.	4.0	68
3	Retrodictions of Mid Paleogene mantle flow and dynamic topography in the Atlantic region from compressible high resolution adjoint mantle convection models: Sensitivity to deep mantle viscosity and tomographic input model. <i>Gondwana Research</i> , 2018, 53, 252-272.	6.0	62
4	Stratigraphic framework for the plume mode of mantle convection and the analysis of interregional unconformities on geological maps. <i>Gondwana Research</i> , 2018, 53, 159-188.	6.0	44
5	Fast asthenosphere motion in high-resolution global mantle flow models. <i>Geophysical Research Letters</i> , 2015, 42, 7429-7435.	4.0	39
6	Quantifying the Relationship Between Short-Wavelength Dynamic Topography and Thermomechanical Structure of the Upper Mantle Using Calibrated Parameterization of Anelasticity. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019062.	3.4	34
7	Constraining central Neo-Tethys Ocean reconstructions with mantle convection models. <i>Geophysical Research Letters</i> , 2016, 43, 9595-9603.	4.0	33
8	Large-scale simulation of mantle convection based on a new matrix-free approach. <i>Journal of Computational Science</i> , 2019, 31, 60-76.	2.9	24
9	The compressible adjoint equations in geodynamics: derivation and numerical assessment. <i>GEM - International Journal on Geomathematics</i> , 2016, 7, 1-30.	1.6	23
10	Structure and dynamics of the oceanic lithosphere-asthenosphere system. <i>Physics of the Earth and Planetary Interiors</i> , 2020, 309, 106559.	1.9	21
11	The adjoint equations for thermochemical compressible mantle convection: derivation and verification by twin experiments. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018, 474, 20180329.	2.1	13
12	Global mantle flow retrodictions for the early Cenozoic using an adjoint method: evolving dynamic topographies, deep mantle structures, flow trajectories and sublithospheric stresses. <i>Geophysical Journal International</i> , 2021, 226, 1432-1460.	2.4	12
13	On the observability of epeirogenic movement in current and future gravity missions. <i>Gondwana Research</i> , 2018, 53, 273-284.	6.0	11
14	TerraNeo”Mantle Convection Beyond a Trillion Degrees of Freedom. <i>Lecture Notes in Computational Science and Engineering</i> , 2020, , 569-610.	0.3	8
15	The precession constant and its long-term variation. <i>Icarus</i> , 2021, 358, 114172.	2.5	6
16	Towards automatic finite-element methods for geodynamics via Firedrake. <i>Geoscientific Model Development</i> , 2022, 15, 5127-5166.	3.6	4