Alik Ismail-Zadeh

List of Publications by Year
in descending order

85 papers	1,570 citations	331670 21 h-index	361022 35 g-index
89 all docs	89 docs citations	89 times ranked	1152 citing authors

#	Article	IF	Citations
1	Global risks: Pool knowledge to stem losses from disasters. Nature, 2015, 522, 277-279.	27.8	148
2	Geodynamics and intermediate-depth seismicity in Vrancea (the south-eastern Carpathians): Current state-of-the art. Tectonophysics, 2012, 530-531, 50-79.	2.2	129
3	Inverse problem of thermal convection: numerical approach and application to mantle plume restoration. Physics of the Earth and Planetary Interiors, 2004, 145, 99-114.	1.9	77
4	Salt structures and hydrocarbons in the Pricaspian basin. AAPG Bulletin, 2003, 87, 313-334.	1.5	64
5	Forging a paradigm shift in disaster science. Natural Hazards, 2017, 86, 969-988.	3.4	56
6	Lithosphereâ€“asthenosphere viscosity contrast and decoupling. Physics of the Earth and Planetary Interiors, 2011, 189, 1-8.	1.9	53
7	Three-dimensional numerical modeling of contemporary mantle flow and tectonic stress beneath the earthquake-prone southeastern Carpathians based on integrated analysis of seismic, heat flow, and gravity data. Physics of the Earth and Planetary Interiors, 2005, 149, 81-98.	1.9	48
8	Numerical modeling of crustal block-and-fault dynamics, earthquakes and slip rates in the Tibet-Himalayan region. Earth and Planetary Science Letters, 2007, 258, 465-485.	4.4	45
9	Geodynamics, seismicity, and seismic hazards of the Caucasus. Earth-Science Reviews, 2020, 207, 103222.	9.1	45
10	Non-linear dynamics of the lithosphere and intermediate-term earthquake prediction. Tectonophysics, 2001, 338, 247-260.	2.2	44
11	Three-dimensional forward and backward modelling of diapirism: numerical approach and its applicability to the evolution of salt structures in the Pricaspian basin. Tectonophysics, 2004, 387, 81-103.	2.2	38
12	Preventive disaster management of extreme natural events. Natural Hazards, 2007, 42, 459-467.	3.4	34
13	Seismic hazard assessment of the Shillong Plateau, India. Geomatics, Natural Hazards and Risk, 2018, 9, 841-861.	4.3	31
14	Thermal evolution and geometry of the descending lithosphere beneath the SE-Carpathians: An insight from the past. Earth and Planetary Science Letters, 2008, 273, 68-79.	4.4	30
15	Numerical models of a subsidence mechanism in intracratonic basins: application to North American basins. Geophysical Journal International, 1995, 123, 149-160.	2.4	29
16	Numerical modelling of earthquake flow in the southeastern Carpathians (Vrancea): effect of a sinking slab. Physics of the Earth and Planetary Interiors, 1999, 111, 267-274.	1.9	28
17	Dynamic restoration of profiles across diapiric salt structures: numerical approach and its applications. Tectonophysics, 2001, 337, 23-38.	2.2	28
18	Quasi-reversibility method for data assimilation in models of mantle dynamics. Geophysical Journal International, 2007, 170, 1381-1398.	2.4	26

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19	Seismic hazard from instrumentally recorded, historical and simulated earthquakes: Application to the Tibetâ€"Himalayan region. Tectonophysics, 2015, 657, 187-204.	2.2	25
20	Tectonic regimes and stress patterns in the Vrancea Seismic Zone: Insights into intermediate-depth earthquake nests in locked collisional settings. Tectonophysics, 2021, 799, 228688.	2.2	25
21	Three-dimensional numerical modeling of contemporary mantle flow and tectonic stress beneath the Central Mediterranean. Tectonophysics, 2010, 482, 226-236.	2.2	23
22	Linking mantle upwelling with the lithosphere descent and the Japan Sea evolution: a hypothesis. Scientific Reports, 2013, 3, 1137.	3.3	23
23	The Timan-Pechora Basin (northeastern European Russia): tectonic subsidence analysis and a model of formation mechanism. Tectonophysics, 1997, 283, 205-218.	2.2	20
24	Numerical approach to problems of gravitational instability of geostructures with advected material boundaries. Geophysical Journal International, 1998, 134, 473-483.	2.4	20
25	Three-dimensional forward and backward numerical modeling of mantle plume evolution: Effects of thermal diffusion. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	20
26	Buoyancy-driven deformation and contemporary tectonic stress in the lithosphere beneath Central Italy. Terra Nova, 2007, 19, 490-495.	2.1	20
27	On the Use of Multipleâ€Site Estimations in Probabilistic Seismicâ€Hazard Assessment. Bulletin of the Seismological Society of America, 2016, 106, 2233-2243.	2.3	20
28	Quantitative modeling of the lithosphere dynamics, earthquakes and seismic hazard. Tectonophysics, 2018, 746, 624-647.	2.2	19
29	Gravity anomalies and possible formation mechanism of the Dnieper-Donets Basin. Tectonophysics, 1996, 268, 281-292.	2.2	17
30	Quantitative reconstruction of thermal and dynamic characteristics of lava flow from surface thermal measurements. Geophysical Journal International, 2016, 205, 1767-1779.	2.4	17
31	Seismic hazard assessment of the Shillong Plateau using a probabilistic approach. Geomatics, Natural Hazards and Risk, 2020, 11, 2210-2238.	4.3	17
32	Numerical techniques for solving the inverse retrospective problem of thermal evolution of the Earth interior. Computers and Structures, 2009, 87, 802-811.	4.4	15
33	Gravitational and buckling instabilities of a rheologically layered structure: implications for salt diapirism. Geophysical Journal International, 2002, 148, 288-302.	2.4	14
34	Numerical modeling of fluid flow with rafts: An application to lava flows. Journal of Geodynamics, 2016, 97, 31-41.	1.6	13
35	The Devonian to Permian subsidence mechanisms in basins of the East-European platform. Journal of Geodynamics, 1998, 26, 69-83.	1.6	12
36	Lava dome morphology inferred from numerical modelling. Geophysical Journal International, 2020, 223, 1597-1609.	2.4	12

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37	Geoscience international: the role of scientific unions. History of Geo- and Space Sciences, 2016, 7, 103-123.	0.4	12
38	t*-â€ƒan unsuitable parameter to characterize anelastic attenuation in the Eastern Carpathians. Geophysical Journal International, 2007, 170, 1139-1150.	2.4	11
39	Natural hazards and climate change are not drivers of disasters. Natural Hazards, 2022, 111, 2147-2154.	3.4	11
40	Extreme seismic events: from basic science to disaster risk mitigation. , 2014, , 47-60.		9
41	Nonlinear dynamics of crustal blocks and faults and earthquake occurrences in the Transcaucasian region. Physics of the Earth and Planetary Interiors, 2019, 297, 106320.	1.9	9
42	A Method for Magma Viscosity Assessment by Lava Dome Morphology. Journal of Volcanology and Seismology, 2021, 15, 159-168.	0.7	9
43	Earthquake Prediction, M8 Algorithm. Encyclopedia of Earth Sciences Series, 2020, , 1-5.	0.1	9
44	Tectonic stress, seismicity, and seismic hazard in the southeastern Carpathians. Natural Hazards, 2007, 42, 493-514.	3.4	8
45	Geothermal evolution of the Astrakhan Arch region of the Pricaspian basin. International Journal of Earth Sciences, 2008, 97, 1029-1043.	1.8	8
46	The 2011 Tohoku, Japan, earthquake and tsunami. , 2014, , 310-321.		8
47	Analytical modelling of viscous diapirism through a strongly non-Newtonian overburden subject to horizontal forces. Journal of Geodynamics, 2001, 31, 447-458.	1.6	7
48	Earthquake Prediction, M8 Algorithm. Encyclopedia of Earth Sciences Series, 2011, , 178-182.	0.1	7
49	Quantitative modelling of the Tunguska Basin evolution in the Palaeozoic: A role of eclogitization within the uppermost mantle. Journal of Geodynamics, 1997, 23, 47-64.	1.6	6
50	Knowledge exchange through science diplomacy to assist disaster risk reduction. Progress in Disaster Science, 2021, 11, 100188.	2.7	6
51	International Cooperation in Geophysics to Benefit Society. Eos, 2009, 90, 493-502.	0.1	5
52	CRUST DEVELOPMENT INFERRED FROM NUMERICAL MODELS OF LA V A FLOW AND ITS SURFACE THERMAL MEASUREMENTS. Annals of Geophysics, 2019, 61, .	1.0	5
53	Poor planning compounded European flooding catastrophes. Nature, 2021, 598, 32-32.	27.8	5
54	Numerical Modelling of Lithospheric Block-and-Fault Dynamics: What Did We Learn About Large Earthquake Occurrences and Their Frequency?. Surveys in Geophysics, 0, , 1.	4.6	5

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55	Geohazard Analysis for Disaster Risk Reduction and Sustainability. , 0, , 349-363.		4
56	Lava Dome Morphology and Viscosity Inferred From Data-Driven Numerical Modeling of Dome Growth at VolcÃ¡n de Colima, Mexico During 2007-2009. Frontiers in Earth Science, 2021, 9, .	1.8	4
57	Extrusion and gravity current of a fluid: Implications for salt tectonics. Izvestiya, Physics of the Solid Earth, 2006, 42, 999-1006.	0.9	3
58	The Astrakhan Arch of the Pricaspian basin: Geothermal analysis and modelling. Basin Research, 2010, 22, 751-764.	2.7	3
59	Earthquake Hazard Modelling and Forecasting for Disaster Risk Reduction. Springer Natural Hazards, 2018, , 3-21.	0.3	3
60	Earthquake Risk Assessment for Seismic Safety and Sustainability. Springer Natural Hazards, 2018, , 225-236.	0.3	2
61	Science for Earthquake Risk Reduction. Journal of the Geological Society of India, 2020, 96, 213-216.	1.1	2
62	Earthquake Prediction, M8 Algorithm. Encyclopedia of Earth Sciences Series, 2021, , 204-208.	0.1	2
63	IUGG: beginning, establishment, and early development (1919–1939). History of Geo- and Space Sciences, 2019, 10, 25-44.	0.4	2
64	IUGG in the 21st century. History of Geo- and Space Sciences, 2019, 10, 73-95.	0.4	2
65	A focus on risk science and sustainable development. Eos, 2004, 85, 453.	0.1	1
66	Physical characteristics of a lava flow determined from thermal measurements at the lavaâ€™s surface. Doklady Earth Sciences, 2016, 467, 367-370.	0.7	1
67	3D Numerical Modeling of the Summit Lake Lava Flow, Yellowstone, USA. Izvestiya, Physics of the Solid Earth, 2021, 57, 257-265.	0.9	1
68	Active cloaking and illusion of electric potentials in electrostatics. Scientific Reports, 2021, 11, 10651.	3.3	1
69	Computational Geodynamics as a Component of Comprehensive Seismic Hazards Analysis. , 2009, , 161-177.		1
70	Making the Northern Indian Ocean a Hub of Geomagnetic Data. Eos, 2015, 96, .	0.1	1
71	International Union of Geodesy and Geophysics (IUGG)â€"Integrating Natural Hazard Science with Disaster Risk Reduction Policy. , 2017, , 167-172.		1
72	IUGG evolves (1940–2000). History of Geo- and Space Sciences, 2019, 10, 45-72.	0.4	1

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73	Evolution of thermal plumes in the Earthâ€™s mantle. Doklady Earth Sciences, 2006, 411, 1442-1444.	0.7	0
74	Preface to Natural Hazards Special Issue Georisks: Interactions Between Science and Society. Natural Hazards, 2007, 42, 455-457.	3.4	0
75	Extreme natural hazards and societal implications â€“ the ENHANS project. , 0, , 3-14.		0
76	Backward Advection Method and Its Application to Modelling of Salt Tectonics. SpringerBriefs in Earth Sciences, 2016, , 11-21.	0.5	0
77	A notable centenary for international science. Nature, 2019, 572, 32-32.	27.8	0
78	Data-driven Geodynamics. Journal of the Geological Society of India, 2021, 97, 223-226.	1.1	0
79	Variational Method and Its Application to Modelling of Mantle Plume Evolution. SpringerBriefs in Earth Sciences, 2016, , 23-39.	0.5	0
80	Comparison of Data Assimilation Methods. SpringerBriefs in Earth Sciences, 2016, , 101-105.	0.5	0
81	Application of the QRV Method to Modelling of Plate Subduction. SpringerBriefs in Earth Sciences, 2016, , 83-99.	0.5	0
82	Application of the Variational Method to Lava Flow Modelling. SpringerBriefs in Earth Sciences, 2016, , 41-58.	0.5	0
83	Quasi-Reversibility Method and Its Applications. SpringerBriefs in Earth Sciences, 2016, , 59-82.	0.5	0
84	Deterministic, Probabilistic, and Data-enhanced Models of Seismic Hazard Assessments with some Applications to Central Asian Regions. Journal of the Geological Society of India, 2021, 97, 1508-1513.	1.1	0
85	Guest Editorial: Special Issue on â€œLithosphere Dynamics and Earthquake Hazard Forecastingâ€• Surveys in Geophysics, 0, , .	4.6	0