

# Liang Zhao

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

2,767  
citations

159585

30  
h-index

197818

49  
g-index

83  
all docs

83  
docs citations

83  
times ranked

1774  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tectonic evolution and geodynamics of the Neo-Tethys Ocean. <i>Science China Earth Sciences</i> , 2022, 65, 1-24.	5.2	58
2	Opposite facing dipping structure in the uppermost mantle beneath the central Tien Shan from Pn travelttime tomography. <i>International Journal of Earth Sciences</i> , 2022, 111, 2571-2584.	1.8	2
3	Toward improved urban earthquake monitoring through deep-learning-based noise suppression. <i>Science Advances</i> , 2022, 8, eabl3564.	10.3	19
4	Novel Hybrid Numerical Simulation of the Wave Equation by Combining Physical and Numerical Representation Theorems and a Review of Hybrid Methodologies. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	3.4	2
5	The Role of Multiple Trapped Oceanic Basins in Continental Growth: Seismic Evidence From the Southern Altaids. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	12
6	Magmatic responses to Cretaceous subduction and tearing of the paleo-Pacific Plate in SE China: An overview. <i>Earth-Science Reviews</i> , 2021, 212, 103448.	9.1	45
7	Mixing of cogenetic magmas in the Cretaceous Zhangzhou calc-alkaline granite from southeast China recorded by in-situ apatite geochemistry. <i>American Mineralogist</i> , 2021, 106, 1679-1689.	1.9	12
8	Intrinsic non-uniqueness of the acoustic full waveform inverse problem. <i>Geophysical Journal International</i> , 2021, 226, 795-802.	2.4	9
9	Siamese Earthquake Transformer: A Pairwise Input Deep Learning Model for Earthquake Detection and Phase Picking on a Seismic Array. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021444.	3.4	29
10	3D Geodynamic Models for HP-UHP Rock Exhumation in Opposite Dip Double Subduction Collision Systems. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022326.	3.4	5
11	Removing the Courant-Friedrichs-Lewy stability criterion of the explicit time-domain very high degree spectral-element method with eigenvalue perturbation. <i>Geophysics</i> , 2021, 86, T411-T419.	2.6	5
12	Mantle Flow Patterns Beneath the Junction of Multiple Subduction Systems Between the Pacific and Tethys Domains, SE Asia: Constraints From SKS Wave Splitting Measurements. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2021GC009700.	2.5	7
13	Subduction Polarity Reversal Triggered by Oceanic Plateau Accretion: Implications for Induced Subduction Initiation. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095299.	4.0	23
14	Efficiency of the spectral element method with very high polynomial degree to solve the elastic wave equation. <i>Geophysics</i> , 2020, 85, T33-T43.	2.6	11
15	Lower Crustal Rheology Controls the Development of Large Offset Strike Slip Faults During the Himalayan-Tibetan Orogeny. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089435.	4.0	20
16	Sharpness of the Midlithospheric Discontinuities and Craton Evolution in North China. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018594.	3.4	9
17	The Chinese Mars ROVER Fluxgate Magnetometers. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	20
18	Evidence for a serpentinized plate interface favouring continental subduction. <i>Nature Communications</i> , 2020, 11, 2171.	12.8	32

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19	New Crustal Vs Model Along an Array in South-East China: Seismic Characters and Paleo-Tethys Continental Amalgamation. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009024.	2.5	11
20	Magmatic evolution and post-crystallization hydrothermal activity in the early Cretaceous Pingtan intrusive complex, SE China: records from apatite geochemistry. <i>Contributions To Mineralogy and Petrology</i> , 2020, 175, 1.	3.1	39
21	Imaging Karatungku Cu-Ni Mine in Xinjiang, Western China with a Passive Seismic Array. <i>Minerals (Basel)</i> , 2020, 10, 1078.	2.0	14
22	Amagmatic Subduction Produced by Mantle Serpentinization and Oceanic Crust Delamination. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086257.	4.0	13
23	Effects of the Compositional Viscosity Ratio on the Long-Term Evolution of Thermochemical Reservoirs in the Deep Mantle. <i>Geophysical Research Letters</i> , 2019, 46, 9591-9601.	4.0	11
24	Cyclical one-way continental rupture-drift in the Tethyan evolution: Subduction-driven plate tectonics. <i>Science China Earth Sciences</i> , 2019, 62, 2005-2016.	5.2	91
25	Nd-Hf-O isotopic evidence for subduction-induced crustal replacement in NE China. <i>Chemical Geology</i> , 2019, 525, 125-142.	3.3	19
26	3-D Pn tomography reveals continental subduction at the boundaries of the Adriatic microplate in the absence of a precursor oceanic slab. <i>Earth and Planetary Science Letters</i> , 2019, 510, 131-141.	4.4	21
27	Synchronous Periadriatic magmatism in the Western and Central Alps in the absence of slab breakoff. <i>Terra Nova</i> , 2019, 31, 120-128.	2.1	29
28	Mountain Building in Taiwan: Insights From 3-D Geodynamic Models. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 5924-5950.	3.4	7
29	Early Cretaceous subduction of Paleo-Pacific Ocean in the coastal region of SE China: Petrological and geochemical constraints from the mafic intrusions. <i>Lithos</i> , 2019, 334-335, 8-24.	1.4	47
30	Roles of Subducted Pelagic and Terrigenous Sediments in Early Jurassic Mafic Magmatism in NE China: Constraints on the Architecture of Paleo-Pacific Subduction Zone. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 2525-2550.	3.4	52
31	Insights Into Layering in the Cratonic Lithosphere Beneath Western Australia. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 1405-1418.	3.4	26
32	Lithospheric architecture of the South-Western Alps revealed by multiparameter teleseismic full-waveform inversion. <i>Geophysical Journal International</i> , 2018, 212, 1369-1388.	2.4	51
33	Active and fossil mantle flows in the western Alpine region unravelled by seismic anisotropy analysis and high-resolution P wave tomography. <i>Tectonophysics</i> , 2018, 731-732, 35-47.	2.2	32
34	Heterogeneous destruction of the North China Craton: Coupled constraints from seismology and geodynamic numerical modeling. <i>Science China Earth Sciences</i> , 2018, 61, 515-526.	5.2	8
35	Slab-triggered wet upwellings produce large volumes of melt: Insights into the destruction of the North China Craton. <i>Tectonophysics</i> , 2018, 746, 266-279.	2.2	23
36	Indication from finite-frequency tomography beneath the North China Craton: The heterogeneity of craton destruction. <i>Science China Earth Sciences</i> , 2018, 61, 1238-1260.	5.2	24

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37	Effects of Iron Spin Transition on the Structure and Stability of Large Primordial Reservoirs in Earth's Lower Mantle. <i>Geophysical Research Letters</i> , 2018, 45, 5918-5928.	4.0	5
38	Mantle wedge exhumation beneath the Dora-Maira (U)HP dome unravelled by local earthquake tomography (Western Alps). <i>Lithos</i> , 2018, 296-299, 623-636.	1.4	36
39	Geo-neutrino: Messenger from the Earth's interior. <i>Chinese Science Bulletin</i> , 2018, 63, 2853-2862.	0.7	0
40	Geodynamics of divergent double subduction: 3D numerical modeling of a Cenozoic example in the Molucca Sea region, Indonesia. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3977-3998.	3.4	47
41	Seismic probing of continental subduction zones. <i>Journal of Asian Earth Sciences</i> , 2017, 145, 37-45.	2.3	8
42	Earthquakes in the western Alpine mantle wedge. <i>Gondwana Research</i> , 2017, 44, 89-95.	6.0	25
43	Shear wave velocities in the upper mantle of the Western Alps: new constraints using array analysis of seismic surface waves. <i>Geophysical Journal International</i> , 2017, 210, 321-331.	2.4	21
44	Determining the key conditions for the formation of metamorphic core complexes by geodynamic modeling and insights into the destruction of North China Craton. <i>Science China Earth Sciences</i> , 2016, 59, 1873-1884.	5.2	7
45	Continuity of the Alpine slab unraveled by high-resolution P wave tomography. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 8720-8737.	3.4	95
46	On velocity anomalies beneath southeastern China: An investigation combining mineral physics studies and seismic tomography observations. <i>Gondwana Research</i> , 2016, 31, 200-217.	6.0	7
47	Permian back-arc extension in central Inner Mongolia, NE China: Elemental and Sr-Nd-Pb-Hf-O isotopic constraints from the Linxi high-MgO diabase dikes. <i>Island Arc</i> , 2015, 24, 404-424.	1.1	18
48	Seismological constraints on the crustal structures generated by continental rejuvenation in northeastern China. <i>Scientific Reports</i> , 2015, 5, 14995.	3.3	41
49	An observation related to directional attenuation of SKS waves propagating in anisotropic media. <i>Geophysical Journal International</i> , 2015, 201, 276-290.	2.4	1
50	Early Jurassic subduction of the Paleo-Pacific Ocean in NE China: Petrologic and geochemical evidence from the Tumen mafic intrusive complex. <i>Lithos</i> , 2015, 224-225, 46-60.	1.4	178
51	Seismic evidence for an Iceland thermo-chemical plume in the Earth's lowermost mantle. <i>Earth and Planetary Science Letters</i> , 2015, 417, 19-27.	4.4	19
52	Formation of metamorphic core complexes in non-over-thickened continental crust: A case study of Liaodong Peninsula (East Asia). <i>Lithos</i> , 2015, 238, 86-100.	1.4	19
53	Self-consistent subduction initiation induced by mantle flow. <i>Terra Nova</i> , 2015, 27, 130-138.	2.1	57
54	First seismic evidence for continental subduction beneath the Western Alps. <i>Geology</i> , 2015, 43, 815-818.	4.4	103

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55	Seismic imaging of crustal reworking and lithospheric modification in eastern China. <i>Geophysical Journal International</i> , 2014, 196, 656-670.	2.4	37
56	Strong intracontinental lithospheric deformation in South China: Implications from seismic observations and geodynamic modeling. <i>Journal of Asian Earth Sciences</i> , 2014, 86, 106-116.	2.3	15
57	Upper mantle seismic anisotropy beneath a convergent boundary: SKS waveform modeling in central Tibet. <i>Science China Earth Sciences</i> , 2014, 57, 759-776.	5.2	5
58	A metasomatized mantle wedge origin for low- $\delta^{18}O$ olivine in late Cretaceous Junan and Qingdao basalts in the Sulu orogen. <i>Science Bulletin</i> , 2013, 58, 3903-3913.	1.7	9
59	Distinct upper mantle deformation of cratons in response to subduction: Constraints from SKS wave splitting measurements in eastern China. <i>Gondwana Research</i> , 2013, 23, 39-53.	6.0	75
60	Intralithospheric mantle structures recorded continental subduction. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	29
61	High-resolution body wave tomography models of the upper mantle beneath eastern China and the adjacent areas. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	2.5	105
62	Thermal localization as a potential mechanism to rift cratons. <i>Physics of the Earth and Planetary Interiors</i> , 2011, 186, 125-137.	1.9	26
63	No direct correlation of mantle flow beneath the North China Craton to the India-Eurasia collision: constraints from new SKS wave splitting measurements. <i>Geophysical Journal International</i> , 2011, 187, 1027-1037.	2.4	31
64	Mantle dynamics of the reactivating North China Craton: Constraints from the topographies of the 410-km and 660-km discontinuities. <i>Science China Earth Sciences</i> , 2011, 54, 881-887.	5.2	39
65	Crustal evolution of the Shiwandashan area in South China: Zircon U-Pb-Hf isotopic records from granulite enclaves in Indo-Sinian granites. <i>Science Bulletin</i> , 2010, 55, 2028-2038.	1.7	39
66	Sr-Nd-Pb isotope mapping of Mesozoic igneous rocks in NE China: Constraints on tectonic framework and Phanerozoic crustal growth. <i>Lithos</i> , 2010, 120, 563-578.	1.4	156
67	Mantle flow pattern and geodynamic cause of the North China Craton reactivation: Evidence from seismic anisotropy. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	2.5	50
68	Early Paleozoic subduction of the Paleo-Asian Ocean: Geochronological and geochemical evidence from the Dashizhai basalts, Inner Mongolia. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 940-951.	0.9	45
69	Reactivation of an Archean craton: Constraints from P and S wave tomography in North China. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	90
70	New evidence from seismic imaging for subduction during assembly of the North China craton. <i>Geology</i> , 2009, 37, 395-398.	4.4	124
71	Insight into craton evolution: Constraints from shear wave splitting in the North China Craton. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 168, 153-162.	1.9	34
72	Insight into the geodynamics of cratonic reactivation from seismic analysis of the crust-mantle boundary. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	43

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73	Insight into modification of North China Craton from seismological study in the Shandong Province. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	56
74	A two-dimensional hybrid method for modeling seismic wave propagation in anisotropic media. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	17
75	Geochemistry of Neogene sedimentary rocks from the Jiyang basin, North China Block: The roles of grain size and clay minerals. <i>Geochemical Journal</i> , 2008, 42, 381-402.	1.0	24
76	Crustal structure across the Yanshan belt at the northern margin of the North China Craton. <i>Physics of the Earth and Planetary Interiors</i> , 2007, 161, 36-49.	1.9	64
77	Shear wave splitting in eastern and central China: Implications for upper mantle deformation beneath continental margin. <i>Physics of the Earth and Planetary Interiors</i> , 2007, 162, 73-84.	1.9	51
78	Complex upper-mantle deformation beneath the North China Craton: implications for lithospheric thinning. <i>Geophysical Journal International</i> , 2007, 170, 1095-1099.	2.4	19
79	Using shear wave splitting measurements to investigate the upper mantle anisotropy beneath the North China Craton: Distinct variation from east to west. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	58
80	Calculation and Analysis of Sensitivity Field for Multiphase Flow Electromagnetic Tomography (EMT) In Well Logging. <i>Chinese Journal of Geophysics</i> , 2003, 46, 1251-1258.	0.2	2