Liang Zhao

List of Publications by Year
in descending order

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	Early Jurassic subduction of the Paleo-Pacific Ocean in NE China: Petrologic and geochemical evidence from the Tumen mafic intrusive complex. Lithos, 2015, 224-225, 46-60.	1.4	178
2	Srâ€“Ndâ€“Pb isotope mapping of Mesozoic igneous rocks in NE China: Constraints on tectonic framework and Phanerozoic crustal growth. Lithos, 2010, 120, 563-578.	1.4	156
3	New evidence from seismic imaging for subduction during assembly of the North China craton. Geology, 2009, 37, 395-398.	4.4	124
4	Highâ€resolution body wave tomography models of the upper mantle beneath eastern China and the adjacent areas. Geochemistry, Geophysics, Geosystems, 2012, 13, .	2.5	105
5	First seismic evidence for continental subduction beneath the Western Alps. Geology, 2015, 43, 815-818.	4.4	103
6	Continuity of the Alpine slab unraveled by highâ€resolution P wave tomography. Journal of Geophysical Research: Solid Earth, 2016, 121, 8720-8737.	3.4	95
7	Cyclical one-way continental rupture-drift in the Tethyan evolution: Subduction-driven plate tectonics. Science China Earth Sciences, 2019, 62, 2005-2016.	5.2	91
8	Reactivation of an Archean craton: Constraints from Pâ€and Sâ€wave tomography in North China. Geophysical Research Letters, 2009, 36, .	4.0	90
9	Distinct upper mantle deformation of cratons in response to subduction: Constraints from SKS wave splitting measurements in eastern China. Gondwana Research, 2013, 23, 39-53.	6.0	75
10	Crustal structure across the Yanshan belt at the northern margin of the North China Craton. Physics of the Earth and Planetary Interiors, 2007, 161, 36-49.	1.9	64
11	Using shear wave splitting measurements to investigate the upper mantle anisotropy beneath the North China Craton: Distinct variation from east to west. Geophysical Research Letters, 2005, 32, .	4.0	58
12	Tectonic evolution and geodynamics of the Neo-Tethys Ocean. Science China Earth Sciences, 2022, 65, 1-24.	5.2	58
13	Selfâ€consistent subduction initiation induced by mantle flow. Terra Nova, 2015, 27, 130-138.	2.1	57
14	Insight into modification of North China Craton from seismological study in the Shandong Province. Geophysical Research Letters, 2008, 35, .	4.0	56
15	Roles of Subducted Pelagic and Terrigenous Sediments in Early Jurassic Mafic Magmatism in NE China: Constraints on the Architecture of Paleoâ€Pacific Subduction Zone. Journal of Geophysical Research: Solid Earth, 2019, 124, 2525-2550.	3.4	52
16	Shear wave splitting in eastern and central China: Implications for upper mantle deformation beneath continental margin. Physics of the Earth and Planetary Interiors, 2007, 162, 73-84.	1.9	51
17	Lithospheric architecture of the South-Western Alps revealed by multiparameter teleseismic full-waveform inversion. Geophysical Journal International, 2018, 212, 1369-1388.	2.4	51
18	Mantle flow pattern and geodynamic cause of the North China Craton reactivation: Evidence from seismic anisotropy. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	50

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19	Geodynamics of divergent double subduction: 3â€D numerical modeling of a Cenozoic example in the Molucca Sea region, Indonesia. Journal of Geophysical Research: Solid Earth, 2017, 122, 3977-3998.	3.4	47
20	Early Cretaceous subduction of Paleo-Pacific Ocean in the coastal region of SE China: Petrological and geochemical constraints from the mafic intrusions. Lithos, 2019, 334-335, 8-24.	1.4	47
21	Early Paleozoic subduction of the Paleo-Asian Ocean: Geochronological and geochemical evidence from the Dashizhai basalts, Inner Mongolia. Science in China Series D: Earth Sciences, 2009, 52, 940-951.	0.9	45
22	Magmatic responses to Cretaceous subduction and tearing of the paleo-Pacific Plate in SE China: An overview. Earth-Science Reviews, 2021, 212, 103448.	9.1	45
23	Insight into the geodynamics of cratonic reactivation from seismic analysis of the crustâ€mantle boundary. Geophysical Research Letters, 2008, 35, .	4.0	43
24	Seismological constraints on the crustal structures generated by continental rejuvenation in northeastern China. Scientific Reports, 2015, 5, 14995.	3.3	41
25	Crustal evolution of the Shiwandashan area in South China: Zircon U-Pb-Hf isotopic records from granulite enclaves in Indo-Sinian granites. Science Bulletin, 2010, 55, 2028-2038.	1.7	39
26	Mantle dynamics of the reactivating North China Craton: Constraints from the topographies of the 410-km and 660-km discontinuities. Science China Earth Sciences, 2011, 54, 881-887.	5.2	39
27	Magmatic evolution and post-crystallization hydrothermal activity in the early Cretaceous Pingtan intrusive complex, SE China: records from apatite geochemistry. Contributions To Mineralogy and Petrology, 2020, 175, 1.	3.1	39
28	Seismic imaging of crustal reworking and lithospheric modification in eastern China. Geophysical Journal International, 2014, 196, 656-670.	2.4	37
29	Mantle wedge exhumation beneath the Dora-Maira (U)HP dome unravelled by local earthquake tomography (Western Alps). Lithos, 2018, 296-299, 623-636.	1.4	36
30	Insight into craton evolution: Constraints from shear wave splitting in the North China Craton. Physics of the Earth and Planetary Interiors, 2008, 168, 153-162.	1.9	34
31	Active and fossil mantle flows in the western Alpine region unravelled by seismic anisotropy analysis and high-resolution P wave tomography. Tectonophysics, 2018, 731-732, 35-47.	2.2	32
32	Evidence for a serpentinized plate interface favouring continental subduction. Nature Communications, 2020, 11, 2171.	12.8	32
33	No direct correlation of mantle flow beneath the North China Craton to the India-Eurasia collision: constraints from newâ€,SKSâ€,wave splitting measurements. Geophysical Journal International, 2011, 187, 1027-1037.	2.4	31
34	Intralithospheric mantle structures recorded continental subduction. Journal of Geophysical Research, 2012, 117, .	3.3	29
35	Synchronous Periadriatic magmatism in the Western and Central Alps in the absence of slab breakoff. Terra Nova, 2019, 31, 120-128.	2.1	29
36	Siamese Earthquake Transformer: A Pairâ€Input Deepâ€Learning Model for Earthquake Detection and Phase Picking on a Seismic Array. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021444.	3.4	29

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37	Thermal localization as a potential mechanism to rift cratons. Physics of the Earth and Planetary Interiors, 2011, 186, 125-137.	1.9	26
38	Insights Into Layering in the Cratonic Lithosphere Beneath Western Australia. Journal of Geophysical Research: Solid Earth, 2018, 123, 1405-1418.	3.4	26
39	Earthquakes in the western Alpine mantle wedge. Gondwana Research, 2017, 44, 89-95.	6.0	25
40	Geochemistry of Neogene sedimentary rocks from the Jiyang basin, North China Block: The roles of grain size and clay minerals. Geochemical Journal, 2008, 42, 381-402.	1.0	24
41	Indication from finite-frequency tomography beneath the North China Craton: The heterogeneity of craton destruction. Science China Earth Sciences, 2018, 61, 1238-1260.	5.2	24
42	Slab-triggered wet upwellings produce large volumes of melt: Insights into the destruction of the North China Craton. Tectonophysics, 2018, 746, 266-279.	2.2	23
43	Subduction Polarity Reversal Triggered by Oceanic Plateau Accretion: Implications for Induced Subduction Initiation. Geophysical Research Letters, 2021, 48, e2021GL095299.	4.0	23
44	Shear wave velocities in the upper mantle of the Western Alps: new constraints using array analysis of seismic surface waves. Geophysical Journal International, 2017, 210, 321-331.	2.4	21
45	3-D Pn tomography reveals continental subduction at the boundaries of the Adriatic microplate in the absence of a precursor oceanic slab. Earth and Planetary Science Letters, 2019, 510, 131-141.	4.4	21
46	Lower Crustal Rheology Controls the Development of Large Offset Strikeâ€Slip Faults During the Himalayanâ€Tibetan Orogeny. Geophysical Research Letters, 2020, 47, e2020GL089435.	4.0	20
47	The Chinese Mars ROVER Fluxgate Magnetometers. Space Science Reviews, 2020, 216, 1.	8.1	20
48	Complex upper-mantle deformation beneath the North China Craton: implications for lithospheric thinning. Geophysical Journal International, 2007, 170, 1095-1099.	2.4	19
49	Seismic evidence for an Iceland thermo-chemical plume in the Earth's lowermost mantle. Earth and Planetary Science Letters, 2015, 417, 19-27.	4.4	19
50	Formation of metamorphic core complexes in non-over-thickened continental crust: A case study of Liaodong Peninsula (East Asia). Lithos, 2015, 238, 86-100.	1.4	19
51	Nd-Hf-O isotopic evidence for subduction-induced crustal replacement in NE China. Chemical Geology, 2019, 525, 125-142.	3.3	19
52	Toward improved urban earthquake monitoring through deep-learning-based noise suppression. Science Advances, 2022, 8, eabl3564.	10.3	19
53	Permian backâ€arc extension in central Inner Mongolia, NE China: Elemental and Srâ€“Ndâ€“Pbâ€“Hfâ€“O isotopic constraints from the Linxi highâ€MgO diabase dikes. Island Arc, 2015, 24, 404-424.	1.1	18
54	A twoâ€dimensional hybrid method for modeling seismic wave propagation in anisotropic media. Journal of Geophysical Research, 2008, 113, .	3.3	17

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55	Strong intracontinental lithospheric deformation in South China: Implications from seismic observations and geodynamic modeling. Journal of Asian Earth Sciences, 2014, 86, 106-116.	2.3	15
56	Amagmatic Subduction Produced by Mantle Serpentinization and Oceanic Crust Delamination. Geophysical Research Letters, 2020, 47, e2019GL086257.	4.0	13
57	Mixing of cogenetic magmas in the Cretaceous Zhangzhou calc-alkaline granite from southeast China recorded by in-situ apatite geochemistry. American Mineralogist, 2021, 106, 1679-1689.	1.9	12
58	The Role of Multiple Trapped Oceanic Basins in Continental Growth: Seismic Evidence From the Southern Altaids. Geophysical Research Letters, 2022, 49, .	4.0	12
59	Effects of the Compositional Viscosity Ratio on the Longâ€Term Evolution of Thermochemical Reservoirs in the Deep Mantle. Geophysical Research Letters, 2019, 46, 9591-9601.	4.0	11
60	Efficiency of the spectral element method with very high polynomial degree to solve the elastic wave equation. Geophysics, 2020, 85, T33-T43.	2.6	11
61	New Crustal Vs Model Along an Array in Southâ€East China: Seismic Characters and Paleoâ€Tethys Continental Amalgamation. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009024.	2.5	11
62	A metasomatized mantle wedge origin for low-Î´18O olivine in late Cretaceous Junan and Qingdao basalts in the Sulu orogen. Science Bulletin, 2013, 58, 3903-3913.	1.7	9
63	Sharpness of the Midlithospheric Discontinuities and Craton Evolution in North China. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018594.	3.4	9
64	Intrinsic non-uniqueness of the acoustic full waveform inverse problem. Geophysical Journal International, 2021, 226, 795-802.	2.4	9
65	Seismic probing of continental subduction zones. Journal of Asian Earth Sciences, 2017, 145, 37-45.	2.3	8
66	Heterogeneous destruction of the North China Craton: Coupled constraints from seismology and geodynamic numerical modeling. Science China Earth Sciences, 2018, 61, 515-526.	5.2	8
67	Imaging Karatungk Cu-Ni Mine in Xinjiang, Western China with a Passive Seismic Array. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	8
68	Determining the key conditions for the formation of metamorphic core complexes by geodynamic modeling and insights into the destruction of North China Craton. Science China Earth Sciences, 2016, 59, 1873-1884.	5.2	7
69	On velocity anomalies beneath southeastern China: An investigation combining mineral physics studies and seismic tomography observations. Gondwana Research, 2016, 31, 200-217.	6.0	7
70	Mountain Building in Taiwan: Insights From 3â€Ð Geodynamic Models. Journal of Geophysical Research: Solid Earth, 2019, 124, 5924-5950.	3.4	7
71	Mantle Flow Patterns Beneath the Junction of Multiple Subduction Systems Between the Pacific and Tethys Domains, SE Asia: Constraints From SKSâ€Wave Splitting Measurements. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009700.	2.5	7
72	Upper mantle seismic anisotropy beneath a convergent boundary: SKS waveform modeling in central Tibet. Science China Earth Sciences, 2014, 57, 759-776.	5.2	5

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73	Effects of Iron Spin Transition on the Structure and Stability of Large Primordial Reservoirs in Earth's Lower Mantle. Geophysical Research Letters, 2018, 45, 5918-5928.	4.0	5
74	3D Geodynamic Models for HPâ€UHP Rock Exhumation in Oppositeâ€Dip Double Subductionâ€Collision Systems. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022326.	3.4	5
75	Removing the Courant-Friedrichs-Lewy stability criterion of the explicit time-domain very high degree spectral-element method with eigenvalue perturbation. Geophysics, 2021, 86, T411-T419.	2.6	5
76	Calculation and Analysis of Sensitivity Field for Multiphase Flow Electromagnetic Tomography (EMT) In Well Logging. Chinese Journal of Geophysics, 2003, 46, 1251-1258.	0.2	2
77	Opposite facing dipping structure in the uppermost mantle beneath the central Tien Shan from Pn traveltime tomography. International Journal of Earth Sciences, 2022, 111, 2571-2584.	1.8	2
78	Novel Hybrid Numerical Simulation of the Wave Equation by Combining Physical and Numerical Representation Theorems and a Review of Hybrid Methodologies. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	2
79	An observation related to directional attenuation of SKS waves propagating in anisotropic media. Geophysical Journal International, 2015, 201, 276-290.	2.4	1
80	Geo-neutrino: Messenger from the Earth's interior. Chinese Science Bulletin, 2018, 63, 2853-2862.	0.7	0