

Global transition zone tomography

Journal of Geophysical Research
109,

DOI: [10.1029/2003jb002610](https://doi.org/10.1029/2003jb002610)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Can finite-frequency effects be accounted for in ray theory surface wave tomography?. Geophysical Research Letters, 2004, 31, .	1.5	58
2	Mantle transition zone topography and structure beneath the Yellowstone hotspot. Geophysical Research Letters, 2004, 31, .	1.5	57
3	Automated multimode inversion of surface and Swaveforms. Geophysical Journal International, 2005, 162, 951-964.	1.0	84
4	Global azimuthal seismic anisotropy and the unique plate-motion deformation of Australia. Nature, 2005, 433, 509-512.	13.7	252
5	Thermochemical structures beneath Africa and the Pacific Ocean. Nature, 2005, 437, 1136-1139.	13.7	394
6	How the delamination and detachment of lower crust can influence basaltic magmatism. Earth-Science Reviews, 2005, 72, 21-38.	4.0	272
7	Carbonate-rich melts in the oceanic low-velocity zone and deep mantle. , 2005, , .		30
8	On the effect of a low viscosity asthenosphere on the temporal change of the geoidâ€”A challenge for future gravity missions. Journal of Geodynamics, 2005, 39, 493-511.	0.7	8
9	Lithosphere mechanical behavior inferred from tidal gravity anomalies: a comparison of Africa and South America. Earth and Planetary Science Letters, 2005, 230, 397-412.	1.8	18
10	Gravity anomalies, flexure and the elastic thickness structure of the Indiaâ€”Eurasia collisional system. Earth and Planetary Science Letters, 2005, 236, 732-750.	1.8	164
11	Upper mantle structure of the South American continent and neighboring oceans from surface wave tomography. Tectonophysics, 2005, 406, 115-139.	0.9	65
12	A Cenozoic diffuse alkaline magmatic province (DAMP) in the southwest Pacific without rift or plume origin. Geochemistry, Geophysics, Geosystems, 2005, 6, .	1.0	146
13	One-dimensional physical reference models for the upper mantle and transition zone: Combining seismic and mineral physics constraints. Journal of Geophysical Research, 2005, 110, .	3.3	53
14	Physical, chemical, and chronological characteristics of continental mantle. Reviews of Geophysics, 2005, 43, .	9.0	408
15	Influence of continental roots and asthenosphere on plate-mantle coupling. Geophysical Research Letters, 2006, 33, .	1.5	175
16	A global study of transition zone thickness using receiver functions. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	139
17	Impact of 3-D Earth structure on Fennoscandian glacial isostatic adjustment: Implications for space-geodetic estimates of present-day crustal deformations. Geophysical Research Letters, 2006, 33, .	1.5	41
18	Decontaminating tide gauge records for the influence of glacial isostatic adjustment: The potential impact of 3-D Earth structure. Geophysical Research Letters, 2006, 33, .	1.5	23

#	ARTICLE	IF	CITATIONS
19	The state of the upper mantle beneath southern Africa. <i>Tectonophysics</i> , 2006, 416, 101-112.	0.9	82
20	Theory and Observations of Seismic Tomography and Inverse Methods. , 2007, , 323-360.		13
22	The Kalahari Epeirogeny and climate change: differentiating cause and effect from core to space. <i>South African Journal of Geology</i> , 2007, 110, 367-392.	0.6	91
23	Seismic Anisotropy of the Deep Earth from a Mineral and Rock Physics Perspective. , 2007, , 437-491.		86
24	Deep Earth Structure of Upper Mantle Structure: Global Isotropic and Anisotropic Elastic Tomography. , 2007, , 559-589.		16
25	Deep Earth Structure of Transition Zone and Mantle Discontinuities. , 2007, , 591-618.		3
26	Does active mantle upwelling help drive plate motions?. <i>Physics of the Earth and Planetary Interiors</i> , 2007, 161, 103-114.	0.7	13
27	Converted waves reveal a thick and layered tectosphere beneath the Kalahari super-craton. <i>Earth and Planetary Science Letters</i> , 2007, 254, 404-415.	1.8	80
28	Locating scatterers in the mantle using array analysis of PKP precursors from an earthquake doublet. <i>Earth and Planetary Science Letters</i> , 2007, 255, 22-31.	1.8	34
29	Predicted elastic properties of the hydrous D phase at mantle pressures: Implications for the anisotropy of subducted slabs near 670-km discontinuity and in the lower mantle. <i>Earth and Planetary Science Letters</i> , 2007, 259, 283-296.	1.8	32
30	Upper mantle structure beneath continents: New constraints from multi-mode Rayleigh wave data in western North America and southern Africa. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	5
31	Upper mantle structure of South America from joint inversion of waveforms and fundamental mode group velocities of Rayleigh waves. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	140
32	Tomographic filtering of geodynamic models: Implications for model interpretation and large-scale mantle structure. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	77
33	Global mantle flow and the development of seismic anisotropy: Differences between the oceanic and continental upper mantle. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	134
34	Ubiquitous low-velocity layer atop the 410-km discontinuity in the northern Rocky Mountains. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, .	1.0	55
35	New insights into the lithosphere beneath the Superior Province from Rayleigh wave dispersion and receiver function analysis. <i>Geophysical Journal International</i> , 2007, 169, 1043-1068.	1.0	71
36	Cenozoic tectonic and depth/age evolution of the Indonesian gateway and associated back-arc basins. <i>Earth-Science Reviews</i> , 2007, 83, 177-203.	4.0	118
37	Controls of stable continental lithospheric thickness: the role of basal drag. <i>Lithos</i> , 2007, 96, 299-314.	0.6	5

#	ARTICLE	IF	CITATIONS
38	Global upper-mantle tomography with the automated multimode inversion of surface and <i>S</i> -wave forms. <i>Geophysical Journal International</i> , 2008, 173, 505-518.	1.0	198
39	The shear-wave velocity structure in the upper mantle beneath Eurasia. <i>Geophysical Journal International</i> , 2008, 174, 978-992.	1.0	60
40	Late Cretaceous to Miocene sea-level estimates from the New Jersey and Delaware coastal plain coreholes: an error analysis. <i>Basin Research</i> , 2008, 20, 211-226.	1.3	470
41	Formation of continental flood volcanism – The perspective of setting of melting. <i>Lithos</i> , 2008, 100, 49-65.	0.6	26
42	Age, spreading rates, and spreading asymmetry of the world's ocean crust. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .	1.0	1,539
43	Integrated geophysical- <i>petrological</i> modeling of the lithosphere and sublithospheric upper mantle: Methodology and applications. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .	1.0	200
44	Anisotropic shear-wave velocity structure of the Earth's mantle: A global model. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	466
45	The global attenuation structure of the upper mantle. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	131
46	Body tides of a convecting, laterally heterogeneous, and aspherical Earth. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	19
47	Long-Term Sea-Level Fluctuations Driven by Ocean Basin Dynamics. <i>Science</i> , 2008, 319, 1357-1362.	6.0	610
48	Glacial isostatic adjustment in 3-D earth models: Implications for the analysis of tide gauge records along the U.S. east coast. <i>Journal of Geodynamics</i> , 2008, 46, 90-94.	0.7	11
49	Subsidence in intracontinental basins due to dynamic topography. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 171, 252-264.	0.7	82
50	Comment on the article –Probability of radial anisotropy in the deep mantle–by Visser et al. (2008) <i>EPSL</i> 270:241–250. <i>Earth and Planetary Science Letters</i> , 2008, 276, 223-225.	1.8	5
51	Simultaneous inversion of mantle properties and initial conditions using an adjoint of mantle convection. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	61
52	Tails of two plume types in one mantle. <i>Geology</i> , 2009, 37, 127-130.	2.0	10
53	Seismic structure of Precambrian lithosphere: New constraints from broad-band surface-wave dispersion. <i>Lithos</i> , 2009, 109, 96-111.	0.6	114
54	The European Upper Mantle as Seen by Surface Waves. <i>Surveys in Geophysics</i> , 2009, 30, 463-501.	2.1	45
55	Radon Transform Methods and Their Applications in Mapping Mantle Reflectivity Structure. <i>Surveys in Geophysics</i> , 2009, 30, 327-354.	2.1	37

#	ARTICLE	IF	CITATIONS
56	Path-average kernels for long wavelength traveltime tomography. <i>Geophysical Journal International</i> , 2009, 177, 639-650.	1.0	7
57	An analysis of young ocean depth, gravity and global residual topography. <i>Geophysical Journal International</i> , 2009, 178, 1198-1219.	1.0	114
58	On establishing the accuracy of noise tomography travel-time measurements in a realistic medium. <i>Geophysical Journal International</i> , 2009, 178, 1555-1564.	1.0	165
59	Mantle reflectivity structure beneath oceanic hotspots. <i>Geophysical Journal International</i> , 2009, 178, 1456-1472.	1.0	30
60	Estimates of the transition zone temperature in a mechanically mixed upper mantle. <i>Earth and Planetary Science Letters</i> , 2009, 277, 244-252.	1.8	43
61	Synthetic tomography of plume clusters and thermochemical piles. <i>Earth and Planetary Science Letters</i> , 2009, 278, 152-162.	1.8	107
62	Global variations of temperature and water content in the mantle transition zone from higher mode surface waves. <i>Earth and Planetary Science Letters</i> , 2009, 282, 91-101.	1.8	80
63	The crust and mantle lithosphere in the Barents Sea/Kara Sea region. <i>Tectonophysics</i> , 2009, 470, 89-104.	0.9	69
64	The combined effects of continents and the 660km-depth endothermic phase boundary on the thermal regime in the mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2009, 173, 354-364.	0.7	1
65	Inferring radial models of mantle viscosity from gravity (GRACE) data and an evolutionary algorithm. <i>Physics of the Earth and Planetary Interiors</i> , 2009, 176, 19-32.	0.7	27
66	Thermal versus elastic heterogeneity in high-resolution mantle circulation models with pyrolite composition: High plume excess temperatures in the lowermost mantle. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	1.0	111
67	Incorporating self-consistently calculated mineral physics into thermochemical mantle convection simulations in a 3D spherical shell and its influence on seismic anomalies in Earth's mantle. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	1.0	76
68	Adjoint models of mantle convection with seismic, plate motion, and stratigraphic constraints: North America since the Late Cretaceous. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	1.0	85
69	Generation of plate-like behavior and mantle heterogeneity from a spherical, viscoplastic convection model. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	1.0	91
70	Tomographic filtering of high-resolution mantle circulation models: Can seismic heterogeneity be explained by temperature alone?. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	1.0	141
71	Modification of the lithospheric stress field by lateral variations in plate-mantle coupling. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	23
72	On mantle chemical and thermal heterogeneities and anisotropy as mapped by inversion of global surface wave data. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	45
73	Instantaneous dynamics of the cratonic Congo basin. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	46

#	ARTICLE	IF	CITATIONS
74	Does the mantle control the maximum thickness of cratons?. <i>Lithosphere</i> , 2009, 1, 67-72.	0.6	25
75	Influence of dynamic topography on sea level and its rate of change. <i>Lithosphere</i> , 2009, 1, 110-120.	0.6	112
76	Importance of crustal corrections in the development of a new global model of radial anisotropy. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	130
77	A simple method for improving crustal corrections in waveform tomography. <i>Geophysical Journal International</i> , 2010, , no-no.	1.0	25
78	Mantle upwellings above slab graveyards linked to the global geoid lows. <i>Nature Geoscience</i> , 2010, 3, 435-438.	5.4	50
79	Mantle upwelling after Gondwana subduction death explains anomalous topography and subsidence histories of eastern New Zealand and West Antarctica. <i>Geology</i> , 2010, 38, 155-158.	2.0	49
80	Constraints on lithosphere net rotation and asthenospheric viscosity from global mantle flow models and seismic anisotropy. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	1.0	132
81	Can we estimate local Love wave dispersion properties from collocated amplitude measurements of translations and rotations?. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	39
82	Modeling of craton stability using a viscoelastic rheology. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	14
83	Observations of S_{410p} and S_{350p} phases at seismograph stations in California. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	34
84	Constraints on upper mantle anisotropy surrounding the Cocos slab from $SK(K)S$ splitting. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	39
85	North American lithospheric discontinuity structure imaged by Ps and Sp receiver functions. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	233
86	Constraints on upper mantle viscosity from the flow-induced pressure gradient across the Australian continental keel. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	1.0	23
87	Triangulated finite difference methods for global-scale electromagnetic induction simulations of whole mantle electrical heterogeneity. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	1.0	14
88	Slab stress and strain rate as constraints on global mantle flow. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	31
89	Core-mantle boundary topography as a possible constraint on lower mantle chemistry and dynamics. <i>Earth and Planetary Science Letters</i> , 2010, 289, 232-241.	1.8	60
90	Deep mantle plumes and convective upwelling beneath the Pacific Ocean. <i>Earth and Planetary Science Letters</i> , 2010, 294, 143-151.	1.8	33
91	Seismic tomography: A window into deep Earth. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 178, 101-135.	0.7	200

#	ARTICLE	IF	CITATIONS
92	Fast P- and S-wave velocities associated with the "cold" stagnant slab beneath the northern Philippine Sea. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 179, 1-6.	0.7	6
93	Global scale models of the mantle flow field predicted by synthetic tomography models. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 182, 129-138.	0.7	27
94	High resolution CMB imaging from migration of short-period core reflected phases. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 183, 143-150.	0.7	16
95	Transmission electron microscopy characterization of dislocations and slip systems in K-lingunite: Implications for the seismic anisotropy of subducted crust. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 182, 50-58.	0.7	5
96	Mapping the Earth's thermochemical and anisotropic structure using global surface wave data. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	33
97	Trans-Pacific whole mantle structure. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	8
98	The thermo-chemical and physical structure beneath the North American continent from Bayesian inversion of surface-wave phase velocities. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	28
99	A statistical boundary layer model for the mantle's region. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	16
100	Oceanic Volcanism from the Low-velocity Zone " without Mantle Plumes. <i>Journal of Petrology</i> , 2011, 52, 1533-1546.	1.1	34
101	S40RTS: a degree-40 shear-velocity model for the mantle from new Rayleigh wave dispersion, teleseismic traveltimes and normal-mode splitting function measurements. <i>Geophysical Journal International</i> , 2011, 184, 1223-1236.	1.0	877
102	Tomographic errors from wave front healing: more than just a fast bias. <i>Geophysical Journal International</i> , 2011, 185, 385-402.	1.0	38
103	On the robustness of predictions of sea level fingerprints. <i>Geophysical Journal International</i> , 2011, 187, 729-742.	1.0	132
104	Solving or resolving global tomographic models with spherical wavelets, and the scale and sparsity of seismic heterogeneity. <i>Geophysical Journal International</i> , 2011, 187, 969-988.	1.0	83
105	Seismic, petrological and geodynamical constraints on thermal and compositional structure of the upper mantle: global thermochemical models. <i>Geophysical Journal International</i> , 2011, 187, 1301-1318.	1.0	50
106	Dominant role of tectonic inheritance in supercontinent cycles. <i>Nature Geoscience</i> , 2011, 4, 184-187.	5.4	184
107	The Gutenberg Discontinuity: Melt at the Lithosphere-Asthenosphere Boundary. <i>Science</i> , 2012, 335, 1480-1483.	6.0	203
108	A shear wave velocity model of the European upper mantle from automated inversion of seismic shear and surface waveforms. <i>Geophysical Journal International</i> , 2012, 191, 282-304.	1.0	90
109	A simple method for determining the spatial resolution of a general inverse problem. <i>Geophysical Journal International</i> , 2012, 191, 849-864.	1.0	47

#	ARTICLE	IF	CITATIONS
110	The importance of slab pull and a global asthenosphere to plate motions. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	39
111	Testing absolute plate reference frames and the implications for the generation of geodynamic mantle heterogeneity structure. <i>Earth and Planetary Science Letters</i> , 2012, 317-318, 204-217.	1.8	53
112	Plate motions, Andean orogeny, and volcanism above the South Atlantic convection cell. <i>Earth and Planetary Science Letters</i> , 2012, 317-318, 126-135.	1.8	70
113	Global strength and elastic thickness of the lithosphere. <i>Global and Planetary Change</i> , 2012, 90-91, 51-57.	1.6	66
114	Geophysics of Chemical Heterogeneity in the Mantle. <i>Annual Review of Earth and Planetary Sciences</i> , 2012, 40, 569-595.	4.6	129
115	Toward quantifying uncertainty in travel time tomography using the null-space shuttle. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	22
116	Seismic and mineralogical structures of the lower mantle from probabilistic tomography. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	93
117	The effective elastic thickness of the continental lithosphere: Comparison between rheological and inverse approaches. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	62
118	On the location of hotspots in the framework of mantle convection. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	11
119	Multi-scale dynamics and rheology of mantle flow with plates. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	65
120	Assessing the uncertainties on seismic source parameters: Towards realistic error estimates for centroid-moment-tensor determinations. <i>Physics of the Earth and Planetary Interiors</i> , 2012, 210-211, 36-49.	0.7	37
121	Trench migration and upper plate strain over a convecting mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2012, 212-213, 32-43.	0.7	37
122	Sea level and vertical motion of continents from dynamic earth models since the Late Cretaceous. <i>AAPG Bulletin</i> , 2012, 96, 2037-2064.	0.7	80
123	An analysis of SS precursors using spectral-element method seismograms. <i>Geophysical Journal International</i> , 2012, 188, 293-300.	1.0	18
124	Synthetic seismograms for a synthetic Earth: long-period P- and S-wave traveltimes variations can be explained by temperature alone. <i>Geophysical Journal International</i> , 2012, 188, 1393-1412.	1.0	58
125	Dynamics and evolution of the deep mantle resulting from thermal, chemical, phase and melting effects. <i>Earth-Science Reviews</i> , 2012, 110, 1-25.	4.0	153
126	The Red Sea – New insights from recent geophysical studies and the connection to the Dead Sea fault. <i>Journal of African Earth Sciences</i> , 2012, 68, 96-110.	0.9	23
127	Tomography of core-mantle boundary and lowermost mantle coupled by geodynamics. <i>Geophysical Journal International</i> , 2012, 189, 730-746.	1.0	33

#	ARTICLE	IF	CITATIONS
128	The role of Poiseuille flow in creating depth-variation of asthenospheric shear. <i>Geophysical Journal International</i> , 2012, 190, 1297-1310.	1.0	32
129	Could the mantle have caused subsidence of the Congo Basin?. <i>Tectonophysics</i> , 2012, 514-517, 62-80.	0.9	32
130	Full waveform tomography of the upper mantle in the South Atlantic region: Imaging a westward fluxing shallow asthenosphere?. <i>Tectonophysics</i> , 2013, 604, 26-40.	0.9	54
131	Global model for the lithospheric strength and effective elastic thickness. <i>Tectonophysics</i> , 2013, 602, 78-86.	0.9	51
132	Simplified mantle architecture and distribution of radiogenic power. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 2265-2285.	1.0	26
133	New constraints on the 3D shear wave velocity structure of the upper mantle underneath Southern Scandinavia revealed from non-linear tomography. <i>Tectonophysics</i> , 2013, 602, 38-54.	0.9	22
134	Diamonds and the Geology of Mantle Carbon. <i>Reviews in Mineralogy and Geochemistry</i> , 2013, 75, 355-421.	2.2	360
135	Mantle flow beneath La Réunion hotspot track from SKS splitting. <i>Earth and Planetary Science Letters</i> , 2013, 362, 108-121.	1.8	32
136	Stability of active mantle upwelling revealed by net characteristics of plate tectonics. <i>Nature</i> , 2013, 498, 479-482.	13.7	71
137	The difficulty for subducted oceanic crust to accumulate at the Earth's core-mantle boundary. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 1807-1816.	1.4	60
138	Study of the western edge of the African Large Low Shear Velocity Province. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 3109-3125.	1.0	23
139	Rolling hills on the core-mantle boundary. <i>Earth and Planetary Science Letters</i> , 2013, 361, 333-342.	1.8	37
140	A review of observations and models of dynamic topography. <i>Lithosphere</i> , 2013, 5, 189-210.	0.6	277
141	On the linearity of cross-correlation delay times in finite-frequency tomography. <i>Geophysical Journal International</i> , 2013, 192, 681-687.	1.0	43
142	Caveats on tomographic images. <i>Terra Nova</i> , 2013, 25, 259-281.	0.9	94
143	Convergence depths of tectonic regions from an ensemble of global tomographic models. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 4196-4225.	1.4	14
144	Lithospheric cooling trends and deviations in oceanic <i>PP</i> and <i>SS</i> differential traveltimes. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 996-1007.	1.4	15
145	The effect of large-scale shear-velocity heterogeneity on SS precursor amplitudes. <i>Geophysical Research Letters</i> , 2013, 40, 6054-6058.	1.5	8

#	ARTICLE	IF	CITATIONS
146	The effect of plate motion history on the longevity of deep mantle heterogeneities. <i>Earth and Planetary Science Letters</i> , 2014, 401, 172-182.	1.8	31
147	An anisotropic shear velocity model of the Earth's mantle using normal modes, body waves, surface waves and long-period waveforms. <i>Geophysical Journal International</i> , 2014, 199, 1713-1738.	1.0	144
148	Cretaceous eustasy revisited. <i>Global and Planetary Change</i> , 2014, 113, 44-58.	1.6	889
149	How Did Early Earth Become Our Modern World?. <i>Annual Review of Earth and Planetary Sciences</i> , 2014, 42, 151-178.	4.6	82
150	Origin of azimuthal seismic anisotropy in oceanic plates and mantle. <i>Earth and Planetary Science Letters</i> , 2014, 401, 236-250.	1.8	79
151	Global radially anisotropic mantle structure from multiple datasets: A review, current challenges, and outlook. <i>Tectonophysics</i> , 2014, 617, 1-19.	0.9	56
152	Shear velocity structure and mineralogy of the transition zone beneath the East Pacific Rise. <i>Earth and Planetary Science Letters</i> , 2014, 402, 313-323.	1.8	12
153	LITHO1.0: An updated crust and lithospheric model of the Earth. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 2153-2173.	1.4	304
154	A Cenozoic uplift history of Mexico and its surroundings from longitudinal river profiles. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 4734-4758.	1.0	42
155	Savani: A variable resolution whole-mantle model of anisotropic shear velocity variations based on multiple data sets. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 3006-3034.	1.4	194
156	The ups and downs of North America: Evaluating the role of mantle dynamic topography since the Mesozoic. <i>Reviews of Geophysics</i> , 2015, 53, 1022-1049.	9.0	85
157	Joint modeling of lithosphere and mantle dynamics: Evaluation of constraints from global tomography models. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 8633-8655.	1.4	26
158	Joint inversion for global isotropic and radially anisotropic mantle structure including crustal thickness perturbations. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 4278-4300.	1.4	136
159	PKiKP precursors: Implications for global scatterers. <i>Geophysical Research Letters</i> , 2015, 42, 3829-3838.	1.5	22
160	Rayleigh wave phase velocity and error maps up to the fifth overtone. <i>Geophysical Research Letters</i> , 2015, 42, 3266-3272.	1.5	12
161	Anomalously strong observations of PKiKP amplitude ratios on a global scale. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 5175-5190.	1.4	16
162	Sharp mantle transition from cratons to Cordillera in southwestern Canada. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 5051-5069.	1.4	17
163	Hydration of marginal basins and compositional variations within the continental lithospheric mantle inferred from a new global model of shear and compressional velocity. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 7789-7813.	1.4	45

#	ARTICLE	IF	CITATIONS
164	Influence of cratonic lithosphere on the formation and evolution of flat slabs: Insights from 3D time-dependent modeling. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 2933-2948.	1.0	32
165	Deep Earth Seismology: An Introduction and Overview. , 2015, , 1-28.		9
166	Deep Earth Structure - Transition Zone and Mantle Discontinuities. , 2015, , 655-682.		10
167	Theory and Observations - Seismic Tomography and Inverse Methods. , 2015, , 307-337.		7
168	Deep Earth Structure - Upper Mantle Structure: Global Isotropic and Anisotropic Elastic Tomography. , 2015, , 613-639.		5
169	CANaHK: An a Priori Crustal Model for the Canadian Shield. <i>Seismological Research Letters</i> , 2015, 86, 1374-1382.	0.8	6
170	Inherited landscapes and sea level change. <i>Science</i> , 2015, 347, 1258375.	6.0	70
171	Overriding plate thickness control on subducting plate curvature. <i>Geophysical Research Letters</i> , 2015, 42, 3802-3810.	1.5	32
172	Dynamics of Subducting Slabs: Numerical Modeling and Constraints from Seismology, Geoid, Topography, Geochemistry, and Petrology. , 2015, , 339-391.		10
173	Seismic Anisotropy of the Deep Earth from a Mineral and Rock Physics Perspective. , 2015, , 487-538.		38
174	Hotspots, Large Igneous Provinces, and Melting Anomalies. , 2015, , 393-459.		13
175	The Core-Mantle Boundary Region. , 2015, , 461-519.		43
176	A 3-D shear velocity model of the southern North American and Caribbean plates from ambient noise and earthquake tomography. <i>Solid Earth</i> , 2015, 6, 271-284.	1.2	15
177	Joint inversion of normal-mode and finite-frequency <i>S</i> -wave data using an irregular tomographic grid. <i>Geophysical Journal International</i> , 2015, 203, 1665-1681.	1.0	12
178	Multifrequency measurements of core-diffracted <i>P</i> -waves (<i>P</i> _{diff}) for global waveform tomography. <i>Geophysical Journal International</i> , 2015, 203, 506-521.	1.0	34
179	Upper-mantle shear-wave structure under East and Southeast Asia from Automated Multimode Inversion of waveforms. <i>Geophysical Journal International</i> , 2015, 203, 707-719.	1.0	30
180	Conjecture with water and rheological control for subducting slab in the mantle transition zone. <i>Geoscience Frontiers</i> , 2015, 6, 79-93.	4.3	6
181	Intraplate stress field in South America from earthquake focal mechanisms. <i>Journal of South American Earth Sciences</i> , 2016, 71, 278-295.	0.6	52

#	ARTICLE	IF	CITATIONS
182	Kinematics and dynamics of the East Pacific Rise linked to a stable, deep-mantle upwelling. <i>Science Advances</i> , 2016, 2, e1601107.	4.7	30
183	The relationships between large-scale variations in shear velocity, density, and compressional velocity in the Earth's mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 2737-2771.	1.4	77
184	3-D shear wave velocity model of Mexico and South US: bridging seismic networks with ambient noise cross-correlations (C^1) and correlation of coda of correlations (C^3). <i>Geophysical Journal International</i> , 2016, 206, 1795-1813.	1.0	49
185	Seismic evidence for a change in the large-scale tomographic pattern across the D'' layer. <i>Geophysical Research Letters</i> , 2016, 43, 7928-7936.	1.5	23
186	Effects of elastic focusing on global models of Rayleigh wave attenuation. <i>Geophysical Journal International</i> , 2016, 207, 1062-1079.	1.0	16
187	Hybrid Parallel Multigrid Methods for Geodynamical Simulations. <i>Lecture Notes in Computational Science and Engineering</i> , 2016, , 211-235.	0.1	7
188	Closure of the Mongol-Okhotsk Ocean: Insights from seismic tomography and numerical modelling. <i>Earth and Planetary Science Letters</i> , 2016, 445, 1-12.	1.8	55
189	Global seismic data reveal little water in the mantle transition zone. <i>Earth and Planetary Science Letters</i> , 2016, 448, 94-101.	1.8	53
190	The long-wavelength mantle structure and dynamics and implications for large-scale tectonics and volcanism in the Phanerozoic. <i>Gondwana Research</i> , 2016, 29, 83-104.	3.0	28
191	SP12RTS: a degree-12 model of shear- and compressional-wave velocity for Earth's mantle. <i>Geophysical Journal International</i> , 2016, 204, 1024-1039.	1.0	132
192	Topography caused by mantle density variations: observation-based estimates and models derived from tomography and lithosphere thickness. <i>Geophysical Journal International</i> , 2016, 205, 604-621.	1.0	67
193	Intermittent and lateral varying ULVZ structure at the northeastern margin of the Pacific LLSVP. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 1198-1220.	1.4	24
194	The origin of Patagonia revealed by Re-Os systematics of mantle xenoliths. <i>Precambrian Research</i> , 2017, 294, 15-32.	1.2	31
195	Signals of 660-km topography and harzburgite enrichment in seismic images of whole-mantle upwellings. <i>Geophysical Research Letters</i> , 2017, 44, 3600-3607.	1.5	13
196	Lithospheric Stress Tensor from Gravity and Lithospheric Structure Models. <i>Pure and Applied Geophysics</i> , 2017, 174, 2677-2688.	0.8	1
197	Attenuation tomography of the upper mantle. <i>Geophysical Research Letters</i> , 2017, 44, 7715-7724.	1.5	18
198	THE NATURE OF THE LITHOSPHERE-ASTHENOSPHERE BOUNDARY BENEATH THE CENTRAL SOUTH AMERICA AREA FROM THE STACKING OF sP PRECURSORS. <i>Chinese Journal of Geophysics</i> , 2017, 60, 358-367.	0.2	0
199	Crust and Mantle Structure Beneath the Azores Hotspot—Evidence from Geophysics. <i>Active Volcanoes of the World</i> , 2018, , 71-87.	1.0	7

#	ARTICLE	IF	CITATIONS
200	On the relative motions of long-lived Pacific mantle plumes. <i>Nature Communications</i> , 2018, 9, 854.	5.8	55
201	Exact free oscillation spectra, splitting functions and the resolvability of Earth's density structure. <i>Geophysical Journal International</i> , 2018, 213, 58-76.	1.0	23
202	Upper and Middle Crustal Velocity Structure of the Colombian Andes From Ambient Noise Tomography: Investigating Subduction-Related Magmatism in the Overriding Plate. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 1459-1485.	1.4	29
203	Constraints on dynamic topography from asymmetric subsidence of the mid-ocean ridges. <i>Earth and Planetary Science Letters</i> , 2018, 484, 264-275.	1.8	15
204	A comparison of lithospheric thickness models. <i>Tectonophysics</i> , 2018, 746, 325-338.	0.9	69
205	Dynamic topography of passive continental margins and their hinterlands since the Cretaceous. <i>Gondwana Research</i> , 2018, 53, 225-251.	3.0	55
206	The Size and Emergence of Geochemical Heterogeneities in the Hawaiian Mantle Plume Constrained by Sr- ⁸⁷ Rb- ⁸⁶ Sr Isotopic Variation Over ~47 Million Years. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 2823-2842.	1.0	22
208	HyMaTZ: A Python Program for Modeling Seismic Velocities in Hydrous Regions of the Mantle Transition Zone. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 2308-2324.	1.0	16
209	Predicting Rates and Distribution of Carbonate Melting in Oceanic Upper Mantle: Implications for Seismic Structure and Global Carbon Cycling. <i>Geophysical Research Letters</i> , 2018, 45, 6944-6953.	1.5	4
210	The influence of deep mantle compositional heterogeneity on Earth's thermal evolution. <i>Earth and Planetary Science Letters</i> , 2018, 500, 86-96.	1.8	19
211	Seismic anisotropy and mantle flow beneath East Africa and Arabia. <i>Journal of African Earth Sciences</i> , 2019, 149, 97-108.	0.9	4
212	Practical Tips for 3D Regional Gravity Inversion. <i>Geosciences (Switzerland)</i> , 2019, 9, 351.	1.0	11
213	Evidence for an upwelling mantle plume beneath the Songliao Basin, Northeast China. <i>Physics of the Earth and Planetary Interiors</i> , 2019, 297, 106316.	0.7	6
214	A Multivariate Approach for Mapping Lithospheric Domain Boundaries in East Antarctica. <i>Geophysical Research Letters</i> , 2019, 46, 10404-10416.	1.5	18
215	Mantle and sub-lithosphere mantle gravity maps from the LITHO1.0 global lithospheric model. <i>Earth-Science Reviews</i> , 2019, 194, 38-56.	4.0	21
216	How to Create New Subduction Zones: A Global Perspective. <i>Oceanography</i> , 2019, 32, 160-174.	0.5	41
217	Slab Control on the Northeastern Edge of the Mid-Pacific LLSVP Near Hawaii. <i>Geophysical Research Letters</i> , 2019, 46, 3142-3152.	1.5	22
218	Present-day dynamic topography and lower-mantle structure from palaeogeographically constrained mantle flow models. <i>Geophysical Journal International</i> , 2019, 216, 2158-2182.	1.0	31

#	ARTICLE	IF	CITATIONS
219	A review of large low shear velocity provinces and ultra low velocity zones. <i>Tectonophysics</i> , 2019, 760, 199-220.	0.9	116
220	Global mantle structure from multifrequency tomography using P, PP and P-diffracted waves. <i>Geophysical Journal International</i> , 2020, 220, 96-141.	1.0	104
221	Experimental elasticity of Earth's deep mantle. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 455-469.	12.2	17
222	Seismic Evidence for a Hot Mantle Transition Zone Beneath the Indian Ocean Geoid Low. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009079.	1.0	12
223	The relative contributions of scattering and viscoelasticity to the attenuation of S waves in Earth's mantle. <i>Solid Earth</i> , 2020, 11, 161-171.	1.2	0
224	Continental Drift with Deep Cratonic Roots. <i>Annual Review of Earth and Planetary Sciences</i> , 2021, 49, 117-139.	4.6	9
225	Pressure calibration and sound velocity measurement to 12 GPa in multi-anvil apparatus. <i>Acta Geochimica</i> , 2021, 40, 525-531.	0.7	3
228	Comparing global seismic tomography models using varimax principal component analysis. <i>Solid Earth</i> , 2021, 12, 1601-1634.	1.2	3
229	Global Heterogeneity of the Lithosphere and Underlying Mantle: A Seismological Appraisal Based on Multimode Surface-Wave Dispersion Analysis, Shear-Velocity Tomography, and Tectonic Regionalization. , 2015, , 3-46.		42
230	Once Again on Preliminary Reference Earth Model. <i>Earth and Space Science</i> , 2020, 7, e2019EA001007.	1.1	3
231	The Formation of Hot Thermal Anomalies in Cold Subduction-Influenced Regions of Earth's Lowermost Mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019312.	1.4	12
232	Semiclassical inverse spectral problem for seismic surface waves in isotropic media: part I. Love waves. <i>Inverse Problems</i> , 2020, 36, 075015.	1.0	3
234	Global reference seismological data sets: multimode surface wave dispersion. <i>Geophysical Journal International</i> , 2021, 228, 1808-1849.	1.0	9
235	Glacial-Isostatic Adjustment Models Using Geodynamically Constrained 3D Earth Structures. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2021GC009853.	1.0	13
236	Continental Tectonics Inferred From High-Resolution Imaging of the Mantle Beneath the United States, Through the Combination of USArray Data Types. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2021GC009674.	1.0	3
237	Radon Transform Methods and Their Applications in Mapping Mantle Reflectivity Structure. , 2009, , 59-86.		0
238	The European Upper Mantle as Seen by Surface Waves. , 2009, , 195-233.		0
239	Surface Waves. <i>Encyclopedia of Earth Sciences Series</i> , 2011, , 1406-1419.	0.1	0

#	ARTICLE	IF	CITATIONS
240	Application of SBRA Method in Mechanics of Continental Plates. Transactions of the VSB: Technical University of Ostrava, 2012, 58, 203-208.	0.1	1
241	Composition of the Crust and the Mantle. , 2015, , 3-28.		0
242	Thermo-Chemical Mantle Convection Simulations Using Gaia. , 2015, , 613-627.		0
244	Automatic measurement and quality control of S3KS-SKKS differential traveltimes and the influence of mantle heterogeneity. Geophysical Journal International, 2022, 229, 1448-1461.	1.0	2
245	Elastic properties of Fe-bearing Akimotoite at mantle conditions: Implications for composition and temperature in lower mantle transition zone. Fundamental Research, 2022, 2, 570-577.	1.6	9
246	Lithospheric structure of the eastern Mediterranean Sea: Inferences from surface wave tomography and stochastic inversions constrained by wide-angle refraction measurements. Tectonophysics, 2021, 821, 229159.	0.9	7
247	<i>P</i> -Wave Velocity Structure of the Lower Crust and Uppermost Mantle beneath the Sichuan–Yunnan (China) Region. Seismological Research Letters, 2022, 93, 2161-2175.	0.8	4
248	Links of high velocity anomalies in the mantle to the Proto-South China Sea slabs: Tomography-based review and perspective. Earth-Science Reviews, 2022, 231, 104074.	4.0	3
249	Achievements and Prospects of Global Broadband Seismographic Networks After 30 Years of Continuous Geophysical Observations. Reviews of Geophysics, 2022, 60, .	9.0	22
250	Influence of shear wave velocity heterogeneity on SH-wave reverberation imaging of the mantle transition zone. Geophysical Journal International, 2022, 231, 2144-2155.	1.0	2
251	Earth's Isostatic and Dynamic Topography—A Critical Perspective. Geochemistry, Geophysics, Geosystems, 0, , .	1.0	2
252	A generalized strategy from S-wave receiver functions reveals distinct lateral variations of lithospheric thickness in southeastern Tibet. Geochemistry, Geophysics, Geosystems, 0, , .	1.0	4
253	Geodynamic, geodetic, and seismic constraints favour deflated and dense-cored LLVPs. Earth and Planetary Science Letters, 2023, 602, 117964.	1.8	7
256	Imperfections in natural diamond: the key to understanding diamond genesis and the mantle. Rivista Del Nuovo Cimento, 2023, 46, 381-471.	2.0	1