Eric Debayle

List of Publications by Year
in descending order

52 papers	3,390 citations	117453 34 h-index	189595 50 g-index
55 all docs	55 docs citations	55 times ranked	2200 citing authors

#	Article	IF	Citations
1	Global azimuthal seismic anisotropy and the unique plate-motion deformation of Australia. Nature, 2005, 433, 509-512.	13.7	252
2	Upper mantle structure of eastern Asia from multimode surface waveform tomography. Journal of Geophysical Research, 2006, 111, .	3.3	188
3	The Australian continental upper mantle: Structure and deformation inferred from surface waves. Journal of Geophysical Research, 2000, 105, 25423-25450.	3.3	181
4	Seismic evidence for a global low-velocity layer within the Earthâ€™s upper mantle. Nature Geoscience, 2010, 3, 718-721.	5.4	176
5	Seismic evidence for a deeply rooted low-velocity anomaly in the upper mantle beneath the northeastern Afro/Arabian continent. Earth and Planetary Science Letters, 2001, 193, 423-436.	1.8	158
6	Anisotropy in the Australasian upper mantle from Love and Rayleigh waveform inversion. Earth and Planetary Science Letters, 2000, 184, 339-351.	1.8	146
7	Seismic observations of large-scale deformation at the bottom of fast-moving plates. Earth and Planetary Science Letters, 2013, 376, 165-177.	1.8	121
8	The African upper mantle and its relationship to tectonics and surface geology. Geophysical Journal International, 2008, 175, 1108-1126.	1.0	100
9	An automatically updated Sâ€wave model of the upper mantle and the depth extent of azimuthal anisotropy. Geophysical Research Letters, 2016, 43, 674-682.	1.5	96
10	Rayleigh wave tomography in the North Atlantic: high resolution images of the Iceland, Azores and Eifel mantle plumes. Lithos, 2005, 79, 453-474.	0.6	92
11	Multimode surface waveform tomography of the Pacific Ocean: a closer look at the lithospheric cooling signature. Geophysical Journal International, 2006, 166, 1384-1397.	1.0	90
12	Propagation of a melting anomaly along the ultraslow Southwest Indian Ridge between 46Â°E and 52Â°20â€²E: interaction with the Crozet hotspot?. Geophysical Journal International, 2009, 179, 687-699.	1.0	90
13	Anisotropy in the Indian Ocean upper mantle from Rayleigh- and Love-waveform inversion. Geophysical Journal International, 1998, 133, 529-540.	1.0	88
14	A global shear velocity model of the upper mantle from fundamental and higher Rayleigh mode measurements. Journal of Geophysical Research, 2012, 117, .	3.3	88
15	Inversion of massive surface wave data sets: Model construction and resolution assessment. Journal of Geophysical Research, 2004, 109, .	3.3	85
16	The state of the upper mantle beneath southern Africa. Tectonophysics, 2006, 416, 101-112.	0.9	82
17	SV-wave azimuthal anisotropy in the Australian upper mantle: preliminary results from automated Rayleigh waveform inversion. Geophysical Journal International, 1999, 137, 747-754.	1.0	80
18	Azimuthal anisotropy of the Pacific region. Earth and Planetary Science Letters, 2006, 250, 53-71.	1.8	80

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19	The Zagros core: Deformation of the continental lithospheric mantle. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	79
20	The mantle transition zone as seen by global Pds phases: No clear evidence for a thin transition zone beneath hotspots. Journal of Geophysical Research, 2008, 113, .	3.3	73
21	Upper mantle heterogeneities in the Indian Ocean from waveform inversion. Geophysical Research Letters, 1997, 24, 245-248.	1.5	69
22	Seismic evidence for a moderately thick lithosphere beneath the Siberian Platform. Geophysical Research Letters, 2003, 30, .	1.5	68
23	Seismic evidence for deep low-velocity anomalies in the transition zone beneath West Antarctica. Earth and Planetary Science Letters, 2003, 216, 645-661.	1.8	65
24	Upper mantle structure of the South American continent and neighboring oceans from surface wave tomography. Tectonophysics, 2005, 406, 115-139.	0.9	65
25	Upper mantleS-wave speed heterogeneity and anisotropy beneath the North Atlantic from regional surface wave tomography: the Iceland and Azores plumes. Geophysical Journal International, 2004, 159, 1057-1076.	1.0	63
26	Seismic evidence for partial melt below tectonic plates. Nature, 2020, 586, 555-559.	13.7	62
27	Can finite-frequency effects be accounted for in ray theory surface wave tomography?. Geophysical Research Letters, 2004, 31, .	1.5	58
28	Confirmation of a change in the global shear velocity pattern at around 1000â€‰km depth. Geophysical Journal International, 2017, 211, 1628-1639.	1.0	56
29	Upper mantle structure of shear-waves velocities and stratification of anisotropy in the Afar Hotspot region. Tectonophysics, 2008, 462, 164-177.	0.9	51
30	Depthâ€variant azimuthal anisotropy in Tibet revealed by surface wave tomography. Geophysical Research Letters, 2015, 42, 4326-4334.	1.5	46
31	A global horizontal shear velocity model of the upper mantle from multimode Love wave measurements. Geophysical Journal International, 2016, 207, 542-561.	1.0	46
32	Mantle upwellings and convective instabilities revealed by seismic tomography and helium isotope geochemistry beneath eastern Africa. Geophysical Research Letters, 2007, 34, .	1.5	44
33	A 3D shear-wave velocity model of the upper mantle beneath China and the surrounding areas. Tectonophysics, 2014, 633, 193-210.	0.9	40
34	Seismoacoustic coupling induced by the breakup of the 15 February 2013 Chelyabinsk meteor. Geophysical Research Letters, 2013, 40, 3522-3526.	1.5	36
35	Strong lateral variations of lithospheric mantle beneath cratons â€“ Example from the Baltic Shield. Earth and Planetary Science Letters, 2013, 383, 164-172.	1.8	32
36	Multi-mode conversion imaging of the subducted Gorda and Juan de Fuca plates below the North American continent. Earth and Planetary Science Letters, 2016, 440, 135-146.	1.8	28

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37	Frequency-dependent effects on global S-wave traveltimes: wavefront-healing, scattering and attenuation. Geophysical Journal International, 2010, 182, 1025-1042.	1.0	27
38	Seismic evidence for a change in the largeâ€scale tomographic pattern across the Dâ€²â€² layer. Geophysical Research Letters, 2016, 43, 7928-7936.	1.5	23
39	Deep crustal fracture zones control fluid escape and the seismic cycle in the Cascadia subduction zone. Earth and Planetary Science Letters, 2017, 460, 1-11.	1.8	21
40	Geodynamic context of the Taiwan orogen. Geophysical Monograph Series, 2004, , 127-158.	0.1	20
41	Attenuation tomography of the upper mantle. Geophysical Research Letters, 2017, 44, 7715-7724.	1.5	18
42	An objective rationale for the choice of regularisation parameter with application to global multiple-frequency <i>S</i>-wave tomography. Solid Earth, 2013, 4, 357-371.	1.2	17
43	Evidence for radial anisotropy in the lower crust of the Apennines from Bayesian ambient noise tomography in Europe. Geophysical Journal International, 2021, 226, 941-967.	1.0	14
44	Interactions of scales of convection in the Earth's mantle. Tectonophysics, 2018, 746, 669-677.	0.9	13
45	Rayleigh wave phase velocity and error maps up to the fifth overtone. Geophysical Research Letters, 2015, 42, 3266-3272.	1.5	12
46	Quantifying seismic anisotropy induced by small-scale chemical heterogeneities. Geophysical Journal International, 2017, 211, 1585-1600.	1.0	12
47	Surface-wave studies of the Australian region. , 2003, , .		10
48	Seismic evidence for broad attenuation anomalies in the asthenosphere beneath the Pacific Ocean. Geophysical Journal International, 2017, 209, 1677-1698.	1.0	9
49	RÃ‰SIF-SI: A Distributed Information System for French Seismological Data. Seismological Research Letters, 2021, 92, 1832-1853.	0.8	9
50	Global reference seismological data sets: multimode surface wave dispersion. Geophysical Journal International, 2021, 228, 1808-1849.	1.0	9
51	Quantifying Intrinsic and Extrinsic Contributions to Radial Anisotropy in Tomographic Models. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022322.	1.4	2
52	When plumes tickle continents. Nature Geoscience, 2018, 11, 150-151.	5.4	0