Barbara A Romanowicz

List of Publications by Year
in descending order

242	14,503	16411 64	24915 109
papers	citations	h-index	g-index

259	259	259	5235
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Broad plumes rooted at the base of the Earth's mantle beneath major hotspots. Nature, 2015, 525, 95-99.	13.7	630
2	The three-dimensional shear velocity structure of the mantle from the inversion of body, surface and higher-mode waveforms. Geophysical Journal International, 2000, 143, 709-728.	1.0	442
3	Lithospheric layering in the North American craton. Nature, 2010, 466, 1063-1068.	13.7	417
4	Global anisotropy and the thickness of continents. Nature, 2003, 422, 707-711.	13.7	397
5	Global mantle shear velocity model developed using nonlinear asymptotic coupling theory. Journal of Geophysical Research, 1996, 101, 22245-22272.	3.3	359
6	A three-dimensional radially anisotropic model of shear velocity in the whole mantle. Geophysical Journal International, 2006, 167, 361-379.	1.0	343
7	Whole-mantle radially anisotropic shear velocity structure from spectral-element waveform tomography. Geophysical Journal International, 2014, 199, 1303-1327.	1.0	333
8	Cluster analysis of global lower mantle tomography: A new class of structure and implications for chemical heterogeneity. Earth and Planetary Science Letters, 2012, 357-358, 68-77.	1.8	270
9	Excitation of Earth's continuous free oscillations by atmosphereâ€“oceanâ€“seafloor coupling. Nature, 2004, 431, 552-556.	13.7	264
10	North American lithospheric discontinuity structure imaged by Ps and Sp receiver functions. Journal of Geophysical Research, 2010, 115, .	3.3	233
11	Time Scales and Heterogeneous Structure in Geodynamic Earth Models. Science, 1998, 280, 91-95.	6.0	212
12	Superplumes from the Core-Mantle Boundary to the Lithosphere: Implications for Heat Flux. Science, 2002, 296, 513-516.	6.0	202
13	Toward real-time estimation of regional moment tensors. Bulletin of the Seismological Society of America, 1996, 86, 1255-1269.	1.1	190
14	Inferences on Flow at the Base of Earth's Mantle Based on Seismic Anisotropy. Science, 2004, 303, 351-353.	6.0	188
15	Waveform Tomography Reveals Channeled Flow at the Base of the Oceanic Asthenosphere. Science, 2013, 342, 227-230.	6.0	184
16	Mantle Anchor Structure: An argument for bottom up tectonics. Earth and Planetary Science Letters, 2010, 299, 69-79.	1.8	177
17	A global tomographic model of shear attenuation in the upper mantle. Journal of Geophysical Research, 1995, 100, 12375-12394.	3.3	172
18	Viscosity of Oceanic Asthenosphere Inferred from Remote Triggering of Earthquakes. Science, 1998, 280, 1245-1249.	6.0	168

#	Article	IF	Citations
19	Comparison of global waveform inversions with and without considering cross-branch modal coupling. Geophysical Journal International, 1995, 121, 695-709.	1.0	167
20	GLOBALMANTLETOMOGRAPHY: Progress Status in the Past 10 Years. Annual Review of Earth and Planetary Sciences, 2003, 31, 303-328.	4.6	167
21	Strikeâ€slip earthquakes on quasiâ€vertical transcurrent faults: Inferences for general scaling relations. Geophysical Research Letters, 1992, 19, 481-484.	1.5	162
22	Inferring upper-mantle structure by full waveform tomography with the spectral element method. Geophysical Journal International, 2011, 185, 799-831.	1.0	158
23	The depth distribution of azimuthal anisotropy in the continental upper mantle. Nature, 2007, 447, 198-201.	13.7	142
24	3-D shear wave radially and azimuthally anisotropic velocity model of the North American upper mantle. Geophysical Journal International, 2011, 184, 1237-1260.	1.0	136
25	A â€œnoâ€‘idâ€•zone in the central Changâ€Thang platform of Tibet: Evidence from pure path phase velocity measurements of long period Rayleigh waves. Journal of Geophysical Research, 1986, 91, 6547-6564.	3.3	132
26	Importance of crustal corrections in the development of a new global model of radial anisotropy. Journal of Geophysical Research, 2010, 115, .	3.3	130
27	Qtomography of the upper mantle using three-component long-period waveforms. Geophysical Journal International, 2004, 157, 813-830.	1.0	124
28	3D effects of sharp boundaries at the borders of the African and Pacific Superplumes: Observation and modeling. Earth and Planetary Science Letters, 2005, 233, 137-153.	1.8	116
29	Hemispherical transition of seismic attenuation at the top of the earth's inner core. Earth and Planetary Science Letters, 2004, 228, 243-253.	1.8	113
30	GEOSCOPE: A French initiative in longâ€period threeâ€component global seismic networks. Eos, 1984, 65, 753-753.	0.1	111
31	Multiplet-multiplet coupling due to lateral heterogeneity: asymptotic effects on the amplitude and frequency of the Earth's normal modes. Geophysical Journal International, 1987, 90, 75-100.	1.0	111
32	On the variation of b-values with earthquake size. Physics of the Earth and Planetary Interiors, 1994, 87, 55-76.	0.7	111
33	Seismic Tomography of the Earth's Mantle. Annual Review of Earth and Planetary Sciences, 1991, 19, 77-99.	4.6	110
34	The Cape Mendocino, California, Earthquakes of April 1992: Subduction at the Triple Junction. Science, 1993, 261, 433-438.	6.0	110
35	A study of the relation between ocean storms and the Earth's hum. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	1.0	109
36	Can we resolve 3D density heterogeneity in the lower mantle?. Geophysical Research Letters, 2001, 28, 1107-1110.	1.5	108

#	Article	IF	Citations
37	An unsually large LLVZ at the base of the mantle near Hawaii. Earth and Planetary Science Letters, 2012, 355-356, 213-222.	1.8	108
38	Slip of the 2004 Sumatra-Andaman Earthquake from Joint Inversion of Long-Period Global Seismic Waveforms and GPS Static Offsets. Bulletin of the Seismological Society of America, 2007, 97, S115-S127.	1.1	104
39	Inversion of receiver functions without deconvolutionâ€"application to the Indian craton. Geophysical Journal International, 2014, 196, 1025-1033.	1.0	104
40	Constraints on the structure of the Tibet Plateau from pure path phase velocities of Love and Rayleigh waves. Journal of Geophysical Research, 1982, 87, 6865-6883.	3.3	93
41	Crust and upper mantle tomography in Tibet using surface waves. Geophysical Research Letters, 1992, 19, 881-884.	1.5	93
42	Seismic anisotropy in the Dâ€³ layer. Geophysical Research Letters, 1995, 22, 1657-1660.	1.5	93
43	The upper mantle degree 2: Constraints and inferences from global mantle wave attenuation measurements. Journal of Geophysical Research, 1990, 95, 11051-11071.	3.3	91
44	Anisotropy in inner core attenuation: A new type of data to constrain the nature of the solid core. Geophysical Research Letters, 1996, 23, 1-4.	1.5	86
45	Lithospheric expression of geological units in central and eastern North America from full waveform tomography. Earth and Planetary Science Letters, 2014, 402, 176-186.	1.8	86
46	Inversion of teleseismic S particle motion for azimuthal anisotropy in the upper mantle: a feasibility study. Geophysical Journal International, 1991, 106, 421-431.	1.0	85
47	On the resolution of density anomalies in the Earth's mantle using spectral fitting of normal-mode data. Geophysical Journal International, 2002, 150, 162-179.	1.0	84
48	How Did Early Earth Become Our Modern World?. Annual Review of Earth and Planetary Sciences, 2014, 42, 151-178.	4.6	82
49	Monitoring of strain release in central and northern California using broadband data. Geophysical Research Letters, 1993, 20, 1643-1646.	1.5	81
50	Anisotropy in the Inner Core: Could It Be Due To Low-Order Convection?. Science, 1996, 274, 963-966.	6.0	80
51	Anisotropy in the center of the inner core. Geophysical Research Letters, 1994, 21, 1671-1674.	1.5	78
52	Anisotropic structures at the base of the Earth's mantle. Nature, 1998, 393, 564-567.	13.7	78
53	Three-Dimensional Structure at the Base of the Mantle Beneath the Central Pacific. , 1998, 282, 718-720.		78
54	Seismic evidence for partial melting at the root of major hot spot plumes. Science, 2017, 357, 393-397.	6.0	78

#	Article	IF	Citations
55	Mantle plumes and their role in Earth processes. Nature Reviews Earth & Environment, 2021, 2, 382-401.	12.2	78
56	Constraints on Dâ€³ structure using PKP(AB-DF), PKP(BC-DF) and PcP-P traveltime data from broad-band records. Geophysical Journal International, 2002, 149, 599-616.	1.0	77
57	Observational evidence for diffracted SV in the shadow of the Earth's core. Geophysical Research Letters, 1989, 16, 519-522.	1.5	74
58	Insights into the nature of the transition zone from physically constrained inversion of long-period seismic data. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9139-9144.	3.3	74
59	Spatiotemporal Patterns in the Energy Release of Great Earthquakes. Science, 1993, 260, 1923-1926.	6.0	73
60	On scaling relations for large earthquakes. Bulletin of the Seismological Society of America, 1993, 83, 1294-1297.	1.1	73
61	The Thickness of Tectonic Plates. Science, 2009, 324, 474-476.	6.0	72
62	Anisotropy in the deep Earth. Physics of the Earth and Planetary Interiors, 2017, 269, 58-90.	0.7	70
63	Modelling of coupled normal modes of the Earth: the spectral method. Geophysical Journal International, 1990, 102, 365-395.	1.0	68
64	Inner core anisotropy inferred by direct inversion of normal mode spectra. Geophysical Journal International, 1999, 139, 599-622.	1.0	68
65	Seismic structure of the upper mantle beneath the United States by three-dimensional inversion of body wave arrival times. Geophysical Journal International, 1979, 57, 479-506.	1.0	67
66	Tectonic regionalization without a priori information: A cluster analysis of upper mantle tomography. Earth and Planetary Science Letters, 2011, 308, 151-160.	1.8	67
67	Measurement and implications of frequency dependence of attenuation. Earth and Planetary Science Letters, 2009, 282, 285-293.	1.8	66
68	The Spitak (Armenia) earthquake of 7 December 1988: field observations, seismology and tectonics. Nature, 1989, 339, 675-679.	13.7	65
69	3-D upper mantle shear velocity and attenuation from fundamental mode free oscillation data. Geophysical Journal International, 1990, 101, 61-80.	1.0	65
70	The effect of Dâ€³ on PKP(ABâ¯DF) travel time residuals and possible implications for inner core structure. Earth and Planetary Science Letters, 2000, 175, 133-143.	1.8	65
71	Three-dimensional radial anisotropic structure of the North American upper mantle from inversion of surface waveform data. Geophysical Journal International, 2007, 171, 206-222.	1.0	65
72	Rapid Finite-source Analysis and Near-fault Strong Ground Motions: Application to the 2003 Mw 6.5 San Simeon and 2004 Mw 6.0 Parkfield Earthquakes. Seismological Research Letters, 2005, 76, 40-48.	0.8	64

#	Article	IF	Citations
73	Short wavelength topography on the inner-core boundary. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 31-35.	3.3	64
74	Anomalous splitting of free oscillations: A reevaluation of possible interpretations. Journal of Geophysical Research, 2000, 105, 21559-21578.	3.3	63
75	Layered structure in the upper mantle across North America from joint inversion of long and short period seismic data. Earth and Planetary Science Letters, 2016, 449, 164-175.	1.8	63
76	Joint inversion for threeâ€dimensional S velocity mantle structure along the Tethyan margin. Journal of Geophysical Research, 2010, 115, .	3.3	60
77	PKP(BC-DF) Travel time residuals and short scale heterogeneity in the deep Earth. Geophysical Research Letters, 1999, 26, 3169-3172.	1.5	59
78	Towards global earth tomography using the spectral element method: a technique based on source stacking. Geophysical Journal International, 2005, 162, 541-554.	1.0	59
79	The French Pilot Experiment OFM-SISMOBS: first scientific results on noise level and event detection. Physics of the Earth and Planetary Interiors, 1994, 84, 321-336.	0.7	58
80	An Observation of PKJKP: Inferences on Inner Core Shear Properties. Science, 2005, 308, 1453-1455.	6.0	58
81	Using seismic waves to image Earth's internal structure. Nature, 2008, 451, 266-268.	13.7	56
82	P`P` Precursors Under Africa: Evidence for Mid-Mantle Reflectors. Science, 1995, 270, 74-77.	6.0	55
83	Observations of changing anisotropy across the southern margin of the African LLSVP. Geophysical Journal International, 2013, 195, 1184-1195.	1.0	55
84	Deformation in the lowermost mantle: From polycrystal plasticity to seismic anisotropy. Earth and Planetary Science Letters, 2011, 306, 33-45.	1.8	54
85	Rupture processes of large deep-focus earthquakes from inversion of moment rate functions. Journal of Geophysical Research, 1999, 104, 863-894.	3.3	52
86	The one-bit noise correlation: a theory based on the concepts of coherent and incoherent noise. Geophysical Journal International, 2011, 184, 1397-1414.	1.0	52
87	Moment tensor inversion of long period Rayleigh waves: A new approach. Journal of Geophysical Research, 1982, 87, 5395-5407.	3.3	51
88	First-order asymptotics for the eigenfrequencies of the Earth and application to the retrieval of large-scale lateral variations of structure. Geophysical Journal International, 1986, 87, 209-239.	1.0	51
89	Non-linear crustal corrections in high-resolution regional waveform seismic tomography. Geophysical Journal International, 2007, 170, 460-467.	1.0	51
90	A new formalism for the effect of lateral heterogeneity on normal modes and surface waves--I: isotropic perturbations, perturbations of interfaces and gravitational perturbations. Geophysical Journal International, 1988, 92, 207-221.	1.0	49

#	Article	IF	Citations
91	On the origin of complexity in PKP travel time data. Geodynamic Series, 2003, , 31-44.	0.1	49
92	Constraints on density and shear velocity contrasts at the inner core boundary. Geophysical Journal International, 2004, 157, 1146-1151.	1.0	49
93	Multidisciplinary Constraints on the Abundance of Diamond and Eclogite in the Cratonic Lithosphere. Geochemistry, Geophysics, Geosystems, 2018, 19, 2062-2086.	1.0	49
94	An experiment in the retrieval of depth and source mechanism of large earthquakes using very long-period Rayleigh wave data. Bulletin of the Seismological Society of America, 1984, 74, 417-437.	1.1	49
95	The upper mantle degree two pattern: Constraints from geoscope fundamental spheroidal mode eigenfrequency and attenuation measurements. Geophysical Research Letters, 1987, 14, 1219-1222.	1.5	46
96	Accessing northern California earthquake data via Internet. Eos, 1994, 75, 257.	0.1	46
97	On moment-length scaling of large strike slip earthquakes and the strength of faults. Geophysical Research Letters, 2002, 29, 45-1.	1.5	46
98	On the numerical implementation of time-reversal mirrors for tomographic imaging. Geophysical Journal International, 2014, 196, 1580-1599.	1.0	46
99	A study of large-scale lateral variations of P velocity in the upper mantle beneath western Europe. Geophysical Journal International, 1980, 63, 217-232.	1.0	45
100	Imaging 3-D spherical convection models: What can seismic tomography tell us about mantle dynamics?. Geophysical Research Letters, 1997, 24, 1299-1302.	1.5	45
101	Seismological constraints on attenuation in the Earth: A review. Geophysical Monograph Series, 2000, , 161-179.	0.1	45
102	Inferring the thermochemical structure of the upper mantle from seismic data. Geophysical Journal International, 2009, 179, 1169-1185.	1.0	45
103	The 23 May 1989 MacQuarie Ridge Earthquake: A very broad band analysis. Geophysical Research Letters, 1990, 17, 993-996.	1.5	44
104	Attenuation Tomography of the Earth's Mantle: A Review of Current Status. Pure and Applied Geophysics, 1998, 153, 257-272.	0.8	44
105	The GEOSCOPE program: Present status and perspectives. Bulletin of the Seismological Society of America, 1991, 81, 243-264.	1.1	44
106	Anisotropy in the inner core: relation between P-velocity and attenuation. Physics of the Earth and Planetary Interiors, 1997, 101, 33-47.	0.7	43
107	A new formalism for the effect of lateral heterogeneity on normal modes and surface waves-II. General anisotropic perturbation. Geophysical Journal International, 1988, 93, 91-99.	1.0	41
108	Anelastic tomography: a new perspective on upper mantle thermal structure. Earth and Planetary Science Letters, 1994, 128, 113-121.	1.8	40

#	Article	IF	Citations
109	On the measurement of anelastic attenuation using amplitudes of low-frequency surface waves. Physics of the Earth and Planetary Interiors, 1994, 84, 179-191.	0.7	39
110	MOISE: A pilot experiment towards long term sea-floor geophysical observatories. Earth, Planets and Space, 1998, 50, 927-937.	0.9	39
111	The COSY Project: verification of global seismic modeling algorithms. Physics of the Earth and Planetary Interiors, 2000, 119, 3-23.	0.7	38
112	Seismic waveform modeling and surface wave tomography in a three-dimensional Earth: asymptotic and non-asymptotic approaches. Physics of the Earth and Planetary Interiors, 2000, 119, 37-56.	0.7	37
113	Coupling spectral elements and modes in a spherical Earth: an extension to the â€˜sandwichâ€™ case. Geophysical Journal International, 2003, 154, 44-57.	1.0	37
114	Observations of infragravity waves at the Monterey ocean bottom broadband station (MOBB). Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	36
115	Deflating the LLSVPs: Bundles of Mantle Thermochemical Plumes Rather Than Thick Stagnant â€œPilesâ€• Tectonics, 2020, 39, e2020TC006265.	1.3	36
116	Toward a federation of broadband seismic networks. Eos, 1986, 67, 541-542.	0.1	35
117	Imaging anisotropic layering with Bayesian inversion of multiple data types. Geophysical Journal International, 2016, 206, 605-629.	1.0	35
118	Locating scatterers in the mantle using array analysis of PKP precursors from an earthquake doublet. Earth and Planetary Science Letters, 2007, 255, 22-31.	1.8	34
119	Depth dependent azimuthal anisotropy in the western US upper mantle. Earth and Planetary Science Letters, 2010, 300, 385-394.	1.8	34
120	Synthetic seismic anisotropy models within a slab impinging on the coreâ€“mantle boundary. Geophysical Journal International, 2014, 199, 164-177.	1.0	34
121	Primitive Helium Is Sourced From Seismically Slow Regions in the Lowermost Mantle. Geochemistry, Geophysics, Geosystems, 2019, 20, 4130-4145.	1.0	34
122	11 Inversion of surface waves: A review. International Geophysics, 2002, 81, 149-173.	0.6	33
123	Seismic waveform modelling in a 3-D Earth using the Born approximation: potential shortcomings and a remedy. Geophysical Journal International, 2009, 177, 161-178.	1.0	33
124	Box tomography: localized imaging of remote targets buried in an unknown medium, a step forward for understanding key structures in the deep Earth. Geophysical Journal International, 2017, 211, 141-163.	1.0	32
125	Box Tomography: first application to the imaging of upper-mantle shear velocity and radial anisotropy structure beneath the North American continent. Geophysical Journal International, 2018, 213, 1849-1875.	1.0	32
126	The seismic OPTIMISM experiment. Planetary and Space Science, 1998, 46, 739-747.	0.9	31

#	Article	IF	Citations
127	Short scale heterogeneity in the lowermost mantle: insights from PcP-P and ScS-S data. Earth and Planetary Science Letters, 2002, 201, 57-68.	1.8	31
128	Deep Earth Structure â€“ Q of the Earth from Crust to Core. , 2007, , 731-774.		31
129	Real-time seismology at UC Berkeley: The Rapid Earthquake Data Integration project. Bulletin of the Seismological Society of America, 1996, 86, 936-945.	1.1	31
130	Long-period seismology on Europa: 2. Predicted seismic response. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	30
131	Seismic anisotropy in the Earth's innermost inner core: Testing structural models against mineral physics predictions. Geophysical Research Letters, 2016, 43, 93-100.	1.5	30
132	On an improved method to obtain the moment tensor and depth of earthquakes from the amplitude spectrum of Rayleigh waves. Bulletin of the Seismological Society of America, 1983, 73, 1513-1526.	1.1	30
133	Test of the innermost inner core models using broadband PKIKP travel time residuals. Geophysical Research Letters, 2007, 34, .	1.5	29
134	On the computation of long period seismograms in a 3-D earth using normal mode based approximations. Geophysical Journal International, 2008, 175, 520-536.	1.0	29
135	Regional geodynamic implications of the Mayâ€“July 1990 earthquake sequence in southern Sudan. Tectonophysics, 1992, 209, 87-103.	0.9	27
136	Degrees 2, 4, 6 inferred from seismic tomography. Geophysical Research Letters, 1993, 20, 631-634.	1.5	27
137	A first step toward an oceanic geophysical observatory. Eos, 1994, 75, 150.	0.1	27
138	Finite fault source study of the Great 1994 Deep Bolivia Earthquake. Geophysical Research Letters, 1996, 23, 1589-1592.	1.5	26
139	Fast computation of synthetic seismograms within a medium containing remote localized perturbations: a numerical solution to the scattering problem. Geophysical Journal International, 2017, 208, 674-692.	1.0	26
140	Depth resolution of earthquakes in central Asia by moment tensor inversion of longâ€period Rayleigh waves: Effects of phase velocity variations across Eurasia and their calibration. Journal of Geophysical Research, 1981, 86, 5963-5984.	3.3	25
141	Radial profiles of seismic attenuation in the upper mantle based on physical models. Geophysical Journal International, 2008, 175, 116-134.	1.0	25
142	A simple method for improving crustal corrections in waveform tomography. Geophysical Journal International, 2010, , no-no.	1.0	25
143	Test of tomographic models of Dâ€³ using differential travel time data. Geophysical Research Letters, 1998, 25, 5-8.	1.5	24
144	The effects of the theoretical formalism and data selection on mantle models derived from waveform tomography. Geophysical Journal International, 1999, 138, 366-380.	1.0	24

#	Article	IF	Citations
145	Feasibility of Real-Time Broadband Waveform Inversion for Simultaneous Moment Tensor and Centroid Location Determination. Bulletin of the Seismological Society of America, 2002, 92, 739-750.	1.1	24
146	Observations of infragravity waves at the oceanâ€bottom broadband seismic stations Endeavour (KEBB) and Explorer (KXBB). Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	24
147	Inferring global upper-mantle shear attenuation structure by waveform tomography using the spectral element method. Geophysical Journal International, 2018, 213, 1536-1558.	1.0	24
148	Interpreting Radial Anisotropy in Global and Regional Tomographic Models. , 2015, , 105-144.		24
149	Reconsideration of the relations between S and P Station anomalies in North America. Geophysical Research Letters, 1980, 7, 417-420.	1.5	23
150	Long-period seismology on Europa: 1. Physically consistent interior models. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	23
151	Very long-period data from the geoscope network: Preliminary results on great circle averages of fundamental and higher Rayleigh and Love modes. Bulletin of the Seismological Society of America, 1984, 74, 2221-2243.	1.1	23
152	Extraterrestrial neutrinos and Earth structure. Earth and Planetary Science Letters, 1995, 133, 95-103.	1.8	22
153	The GEOSCOPE Program: Progress and Challenges during the Past 30 Years. Seismological Research Letters, 2010, 81, 427-452.	0.8	22
154	Dynamic history of the inner core constrained by seismic anisotropy. Nature Geoscience, 2021, 14, 531-535.	5.4	22
155	Tomographic study of upper mantle atttenuation in the Pacific Ocean. Geophysical Research Letters, 1993, 20, 663-666.	1.5	21
156	The MOBB experiment: A prototype permanent off-shore ocean bottom broadband station. Eos, 2003, 84, 325.	0.1	21
157	On the relative temperatures of Earthâ€™s volcanic hotspots and mid-ocean ridges. Science, 2022, 375, 57-61.	6.0	21
158	MOISE: A Prototype Multiparameter Ocean-Bottom Station. Bulletin of the Seismological Society of America, 2001, 91, 885-892.	1.1	20
159	Identifying and removing noise from the Monterey ocean bottom broadband seismic station (MOBB) data. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	1.0	20
160	Lateral heterogeneity scales in regional and global upper mantle shear velocity models. Geophysical Journal International, 2015, 200, 1078-1095.	1.0	20
161	Importance of on scale observations of first arriving Rayleigh wave trains for source studies: Example of the Chilean Event of March 3, 1985, Observed on the Geoscope and Ida Networks. Geophysical Research Letters, 1986, 13, 1015-1018.	1.5	19
162	On the Implications of A Priori Constraints in Transdimensional Bayesian Inversion for Continental Lithospheric Layering. Journal of Geophysical Research: Solid Earth, 2017, 122, 10,118.	1.4	19

#	Article	IF	Citations
163	Large historical earthquakes and seismic risk in Northwest Syria. Nature, 1980, 285, 217-220.	13.7	18
164	The Loma Prieta Earthquake of October 18, 1989: Results of teleseismic mantle and body wave inversion. Geophysical Research Letters, 1990, 17, 1191-1194.	1.5	18
165	The Pacific Plume as seen by S, ScS, and SKS. Geophysical Research Letters, 2001, 28, 1859-1862.	1.5	18
166	Constraints on shear wave attenuation in the Earth's inner core from an observation of PKJKP. Geophysical Research Letters, 2009, 36, .	1.5	18
167	Towards improving ambient noise tomography using simultaneously curvelet denoising filters and SEM simulations of seismic ambient noise. Comptes Rendus - Geoscience, 2011, 343, 591-599.	0.4	18
168	High resolution upper mantle discontinuity images across the Pacific Ocean from SS precursors using local slant stack filters. Geophysical Journal International, 2015, 202, 175-189.	1.0	18
169	Global seismic attenuation imaging using full-waveform inversion: a comparative assessment of different choices of misfit functionals. Geophysical Journal International, 2018, 212, 807-826.	1.0	18
170	On the orientation of the fast and slow directions of anisotropy in the deep inner core. Physics of the Earth and Planetary Interiors, 2019, 286, 101-110.	0.7	18
171	Threeâ€dimensional structure of the upper mantle beneath the Atlantic Ocean inferred from longâ€period Rayleigh waves: 1. Group and phase velocity distributions. Journal of Geophysical Research, 1989, 94, 7449-7468.	3.3	16
172	Geophysical Dynamics at the Center of the Earth. Physics Today, 1997, 50, 22-27.	0.3	16
173	The Mw 5.1 San Juan Bautista, California Earthquake of 12 August 1998. Seismological Research Letters, 1999, 70, 10-18.	0.8	16
174	GEOPHYSICS: The Future of Permanent Seismic Networks. Science, 2001, 293, 2000-2001.	6.0	16
175	On the interpretation of SKS splitting measurements in the presence of several layers of anisotropy. Geophysical Journal International, 2012, 188, 1129-1140.	1.0	16
176	Upper mantle slab under Alaska: contribution to anomalous core-phase observations on south-Sandwich to Alaska paths. Physics of the Earth and Planetary Interiors, 2020, 299, 106427.	0.7	16
177	Broadband Seismic Station Installation Guidelines. Seismological Research Letters, 1998, 69, 15-26.	0.8	15
178	Infragravity Wave Radiation Across the Shelf Break. Journal of Geophysical Research: Oceans, 2018, 123, 4483-4490.	1.0	15
179	Acquiring Real Time Data from the Broadband Ocean Bottom Seismic Observatory at Monterey Bay (MOBB). Seismological Research Letters, 2009, 80, 197-202.	0.8	14
180	Grand Challenges for Seismology. Eos, 2009, 90, 361-362.	0.1	14

#	Article	IF	Citations
181	Threeâ€dimensional structure of the upper mantle beneath the Atlantic Ocean inferred from longâ€period Rayleigh waves: 2. Inversion. Journal of Geophysical Research, 1990, 95, 6787-6798.	3.3	13
182	New constraints on the structure of the inner core from Pâ€™Pâ€™. Geophysical Research Letters, 2000, 27, 2781-2784.	1.5	13
183	3D structure of the Earth's lower mantle. Comptes Rendus - Geoscience, 2003, 335, 23-35.	0.4	13
184	Global scale observations of scattered energy near the inner-core boundary: Seismic constraints on the base of the outer-core. Physics of the Earth and Planetary Interiors, 2015, 245, 103-116.	0.7	13
185	A Plan for a Long-Term, Automated, Broadband Seismic Monitoring Network on the Global Seafloor. Seismological Research Letters, 2020, 91, 1343-1355.	0.8	13
186	Multiâ€Mode Waveform Tomography of the Indian Ocean Upper and Midâ€Mantle Around the RÃ©union Hotspot. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021490.	1.4	13
187	The Romanian earthquake of August 30, 1986: A study based on GEOSCOPE very long-period and broadband data. Pure and Applied Geophysics, 1990, 133, 367-379.	0.8	12
188	Time-reversal method and cross-correlation techniques by normal mode theory: a three-point problem. Geophysical Journal International, 2012, 191, 637-652.	1.0	12
189	Insights from ScSâ€“S measurements on deep mantle attenuation. Earth and Planetary Science Letters, 2013, 374, 101-110.	1.8	12
190	The buoyancy of Earth's deep mantle. Nature, 2017, 551, 308-309.	13.7	12
191	New normal mode constraints on bulk inner core velocities and density. Physics of the Earth and Planetary Interiors, 2019, 295, 106310.	0.7	11
192	Ocean Seismic Observatories. Oceanography, 2006, 19, 144-149.	0.5	11
193	77 The rapid earthquake data integration project. International Geophysics, 2003, 81, 1261-1273.	0.6	10
194	Finite frequency effects on globalSdiffracted traveltimes. Geophysical Journal International, 2009, 179, 1645-1657.	1.0	10
195	Asymmetric deformation across the San Francisco Bay Area faults from GPS observations in Northern California. Physics of the Earth and Planetary Interiors, 2011, 184, 143-153.	0.7	10
196	Do double â€˜<italic>SS</italic> precursorsâ€™ mean double discontinuities?. Geophysical Journal International, 0, , .	1.0	10
197	Non-stationary spherical random media and their effect on long-period mantle waves. Geophysical Journal International, 2015, 203, 1605-1625.	1.0	10
198	Seismic experiment paves way for long-term seafloor observatories. Eos, 1998, 79, 301-301.	0.1	9

#	Article	IF	Citations
199	Lateral variations in SH velocity structure of the transition zone beneath Korea and adjacent regions. Journal of Geophysical Research, 2012, 117, .	3.3	9
200	Non-linear 3-D Born shear waveform tomography in Southeast Asia. Geophysical Journal International, 2012, 190, 463-475.	1.0	9
201	Extraction of weakPcPphases using the slant-stacklet transform â€“ II: constraints on lateral variations of structure near the coreâ€“mantle boundary. Geophysical Journal International, 2015, 203, 1227-1245.	1.0	9
202	Global reference seismological data sets: multimode surface wave dispersion. Geophysical Journal International, 2021, 228, 1808-1849.	1.0	9
203	Large scale three dimensional P velocity structure beneath the western U.S. and the lost Farallon Plate. Geophysical Research Letters, 1980, 7, 345-348.	1.5	8
204	On the inversion of Sd particle motion for seismic anisotropy in D'. Geophysical Research Letters, 1998, 25, 679-682.	1.5	8
205	Attenuation Tomography of the Earthâ€™s Mantle: A Review of Current Status. , 1998, , 257-272.		8
206	Pure path attenuation measurements of long-period Rayleigh waves across the Tibet Plateau. Physics of the Earth and Planetary Interiors, 1984, 36, 116-123.	0.7	7
207	Effect of a global plume distribution on Earth normal modes. Geophysical Research Letters, 1990, 17, 1493-1496.	1.5	7
208	On the Systematic Long-Period Noise Reduction on Ocean Floor Broadband Seismic Sensors Collocated with Differential Pressure Gauges. Bulletin of the Seismological Society of America, 2014, 104, 247-259.	1.1	7
209	Seismic evidence for a steeply dipping reflectorâ€”stagnant slab in the mantle transition zone. Geophysical Journal International, 2015, 200, 1237-1253.	1.0	7
210	Extraction of weak PcP phases using the slant-stacklet transform â€” I: method and examples. Geophysical Journal International, 2015, 201, 207-223.	1.0	7
211	The mass and moment of inertia of the Earth. Physics of the Earth and Planetary Interiors, 1977, 15, P1-P4.	0.7	6
212	Effect of sharp lateral heterogeneity on the Earth's normal modes. Geophysical Research Letters, 1989, 16, 397-400.	1.5	6
213	Macquarie earthquake of May 23, 1989. Eos, 1989, 70, 700.	0.1	6
214	Parallel Hessian Assembly for Seismic Waveform Inversion Using Global Updates. , 2015, , .		6
215	Observation of core sensitive phases: Constraints on the velocity and attenuation profile in the vicinity of the inner-core boundary. Physics of the Earth and Planetary Interiors, 2018, 275, 19-31.	0.7	6
216	Seismic anisotropy, dominant slip systems and phase transitions in the lowermost mantle. Geophysical Journal International, 2021, 227, 1665-1681.	1.0	6

#	Article	IF	Citations
217	Reply to comment on â€œOn scaling relations for large earthquakes by Romanowicz and Rundleâ€•from the perspective of a recent non-linear diffusion equation linking short-time deformation to long-time tectonics. Bulletin of the Seismological Society of America, 1994, 84, 1684-1684.	1.1	6
218	An analysis of coreâ€“mantle boundary Stoneley mode sensitivity and sources of uncertainty. Geophysical Journal International, 2021, 228, 1962-1974.	1.0	6
219	Best Practice in Earthquake Location Using Broadband Three-component Seismic Waveform Data. , 2001, 158, 259-276.		5
220	Determination of focal depth by two waveformbased methods: A case study for the 2008 Panzhihua earthquake. Earthquake Science, 2011, 24, 321-328.	0.4	4
221	Anomalously low amplitude of S waves produced by the 3D structures in the lower mantle. Physics of the Earth and Planetary Interiors, 2016, 256, 26-36.	0.7	4
222	Location of Seismic â€œHumâ€•Sources Following Storms in the North Pacific Ocean. Geochemistry, Geophysics, Geosystems, 2019, 20, 1454-1467.	1.0	4
223	Constraining Jumps in Density and Elastic Properties at the 660Âkm Discontinuity Using Normal Mode Data via the Backusâ€Gilbert Method. Geophysical Research Letters, 2021, 48, e2020GL092217.	1.5	4
224	The MBARI Margin seismology experiment: A prototype seafloor observatory. Developments in Marine Technology, 2002, , 93-110.	0.5	4
225	Asymptotic approximations for normal modes and surface waves in the vicinity of the antipode: Constraints on global earth models. Journal of Geophysical Research, 1988, 93, 7885-7896.	3.3	3
226	A Comparison between tomographic and geodynamic models of the Earth's mantle. Geophysical Monograph Series, 2000, , 257-276.	0.1	3
227	Constraints on Inner Core Anisotropy Using Array Observations of Pâ€²Pâ€². Geophysical Research Letters, 2017, 44, 10,878.	1.5	3
228	Detection of small scale heterogeneities at the Inner Core Boundary. Physics of the Earth and Planetary Interiors, 2018, 281, 55-67.	0.7	3
229	A Refined Approach to Model Anisotropy in the Lowermost Mantle. IOP Conference Series: Materials Science and Engineering, 2018, 375, 012002.	0.3	3
230	Accelerating full waveform inversion via source stacking and cross-correlations. Geophysical Journal International, 2020, 220, 308-322.	1.0	3
231	Seismic Tomography of the Earth's Mantle. , 2021, , 587-609.		3
232	Effects of upper mantle structure beneath Alaska on core-sensitive seismic wave absolute and differential measurements: Implications for estimates of inner core anisotropy. Physics of the Earth and Planetary Interiors, 2021, 315, 106713.	0.7	3
233	Lateral heterogeneity in continents: moment-tensor inversion of long-period surface waves and depth resolution of crustal events; body-wave modeling and phase-velocity calibrations. Physics of the Earth and Planetary Interiors, 1982, 30, 269-271.	0.7	2
234	Geophysical ocean bottom observatories or temporary portable networks?. Developments in Marine Technology, 2002, , 59-81.	0.5	2

#	Article	IF	Citations
235	Reply to â€œComment on â€˜Measurement and implications of frequency dependence of attenuationâ€™â€•by I. Morozov. Earth and Planetary Science Letters, 2010, 293, 216-217.	1.8	1
236	The GEOSCOPE Program: Progress and Challenges during the Past 30 Years. Seismological Research Letters, 2013, 84, 250-250.	0.8	1
237	Surface Waves. Encyclopedia of Earth Sciences Series, 2021, , 1738-1750.	0.1	1
238	Surface Waves. Encyclopedia of Earth Sciences Series, 2020, , 1-13.	0.1	1
239	Hot action at the core-mantle boundary. Eos, 1994, 75, 563.	0.1	0
240	Earthquakes in subduction zones: A multidisciplinary approach. Physics of the Earth and Planetary Interiors, 2009, 175, 1-2.	0.7	0
241	Surface Waves. Encyclopedia of Earth Sciences Series, 2011, , 1406-1419.	0.1	0
242	Bruce Alan Bolt 1930â€“2005 Professor of Seismology, Emeritus. Geotechnical, Geological and Earthquake Engineering, 2009, , 103-107.	0.1	0