Lapo Boschi

List of Publications by Year
in descending order

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99 papers	4,134 citations	136950 32 h-index	123424 61 g-index
105 all docs	105 docs citations	105 times ranked	3070 citing authors

#	Article	IF	Citations
1	Surfaceâ€Wave Tomography of the Centralâ€Western Mediterranean: New Insights Into the Liguroâ€ProvenÃ§al and Tyrrhenian Basins. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	10
2	Surface-wave tomography using SeisLib: a Python package for multiscale seismic imaging. Geophysical Journal International, 2022, 231, 1011-1030.	2.4	7
3	Images of the East African Rift System by Global Adaptiveâ€Resolution Surfaceâ€Wave Tomography. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	1
4	A Seismological Study of the Sos Enattos Areaâ€"the Sardinia Candidate Site for the Einstein Telescope. Seismological Research Letters, 2021, 92, 352-364.	1.9	17
5	Surfaceâ€Wave Attenuation From Seismic Ambient Noise: Numerical Validation and Application. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	9
6	Rayleigh-wave attenuation across the conterminous United States in the microseism frequency band. Scientific Reports, 2021, 11, 10149.	3.3	6
7	Multiscale, radially anisotropic shear wave imaging of the mantle underneath the contiguous United States through joint inversion of USArray and global data sets. Geophysical Journal International, 2021, 226, 1730-1746.	2.4	12
8	Seismic Ambient Noise Imaging of a Quasi-Amagmatic Ultra-Slow Spreading Ridge. Remote Sensing, 2021, 13, 2811.	4.0	1
9	Azimuthal anisotropy from eikonal tomography: example from ambient-noise measurements in the AlpArray network. Geophysical Journal International, 2021, 229, 151-170.	2.4	12
10	Contribution of bone-reverberated waves to sound localization of dolphins: A numerical model. Acta Acustica, 2021, 5, 3.	1.0	2
11	Arrival-angle effects on two-receiver measurements of phase velocity. Geophysical Journal International, 2020, 220, 1838-1844.	2.4	11
12	3-D shear wave velocity model of the lithosphere below the Sardiniaâ€"Corsica continental block based on Rayleigh-wave phase velocities. Geophysical Journal International, 2020, 220, 2119-2130.	2.4	10
13	Local earthquakes detection: A benchmark dataset of 3-component seismograms built on a global scale. Artificial Intelligence in Geosciences, 2020, 1, 1-10.	1.9	20
14	The 2020 coronavirus lockdown and seismic monitoring of anthropic activities in Northern Italy. Scientific Reports, 2020, 10, 9404.	3.3	57
15	3D crustal structure of the Eastern Alpine region from ambient noise tomography. Results in Geophysical Sciences, 2020, 1-4, 100006.	0.9	8
16	Crustal and uppermost mantle shear wave velocity structure beneath the Middle East from surface wave tomography. Geophysical Journal International, 2020, 221, 1349-1365.	2.4	55
17	Slab break-offs in the Alpine subduction zone. International Journal of Earth Sciences, 2020, 109, 587-603.	1.8	45
18	Inferring Crustal Temperatures Beneath Italy From Joint Inversion of Receiver Functions and Surface Waves. Journal of Geophysical Research: Solid Earth, 2019, 124, 8771-8785.	3.4	10

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19	On seismic ambient noise cross-correlation and surface-wave attenuation. Geophysical Journal International, 2019, 219, 1568-1589.	2.4	9
20	Surface Wave Tomography of the Alps Using Ambientâ€Noise and Earthquake Phase Velocity Measurements. Journal of Geophysical Research: Solid Earth, 2018, 123, 1770-1792.	3.4	85
21	Super-Resolution in Near-Field Acoustic Time Reversal Using Reverberated Elastic Waves in Skull-Shaped Antenna. Acta Acustica United With Acustica, 2018, 104, 963-969.	0.8	0
22	Bone-conducted sound in a dolphin's mandible: Experimental investigation of elastic waves mediating information on sound source position. Journal of the Acoustical Society of America, 2018, 144, 2213-2224.	1.1	5
23	A simple method for earthquake location by surface-wave time reversal. Geophysical Journal International, 2018, 215, 1-21.	2.4	6
24	Auditory display of seismic data: On the use of experts' categorizations and verbal descriptions as heuristics for geoscience. Journal of the Acoustical Society of America, 2017, 141, 2143-2162.	1.1	9
25	Coda reconstruction from cross-correlation of a diffuse field on thin elastic plates. Physical Review E, 2017, 96, 032137.	2.1	3
26	On the Perception of Audified Seismograms. Seismological Research Letters, 2017, 88, 1279-1289.	1.9	4
27	Sâˆ’toâˆ’P heterogeneity ratio in the lower mantle and thermoâ€chemical implications. Geochemistry, Geophysics, Geosystems, 2016, 17, 2522-2538.	2.5	17
28	Magmatism at continental passive margins inferred from Ambientâ€Noise Phaseâ€velocity in the Gulf of Aden. Terra Nova, 2016, 28, 19-26.	2.1	11
29	Two-receiver measurements of phase velocity: cross-validation of ambient-noise and earthquake-based observations. Geophysical Journal International, 2016, 207, 1493-1512.	2.4	57
30	Categorization of seismic sources by auditory display: A blind test. International Journal of Human Computer Studies, 2016, 85, 57-67.	5.6	10
31	Italian and <scp>A</scp>lpine threeâ€dimensional crustal structure imaged by ambientâ€noise surfaceâ€wave dispersion. Geochemistry, Geophysics, Geosystems, 2015, 16, 4405-4421.	2.5	52
32	Magmatism on rift flanks: Insights from ambient noise phase velocity in Afar region. Geophysical Research Letters, 2015, 42, 2179-2188.	4.0	21
33	Stationaryâ€phase integrals in the cross correlation of ambient noise. Reviews of Geophysics, 2015, 53, 411-451.	23.0	53
34	Hydration of marginal basins and compositional variations within the continental lithospheric mantle inferred from a new global model of shear and compressional velocity. Journal of Geophysical Research: Solid Earth, 2015, 120, 7789-7813.	3.4	45
35	Thermal structure, radial anisotropy, and dynamics of oceanic boundary layers. Geophysical Research Letters, 2015, 42, 9740-9749.	4.0	32
36	Upper mantle structure of the southern Arabian margin: Insights from teleseismic tomography. , 2015, 11, 1262-1278.		11

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37	On the estimation of attenuation from the ambient seismic field: inferences from distributions of isotropic point scatterers. Geophysical Journal International, 2015, 203, 1054-1071.	2.4	12
38	Tomography of core-mantle boundary and lowermost mantle coupled by geodynamics: joint models of shear and compressional velocity. Annals of Geophysics, 2015, 57, .	1.0	2
39	Can the Earthâ€™s harmonic spectrum be derived directly from the stochastic inversion of global travel-time data?. Annals of Geophysics, 2015, 57, .	1.0	0
40	Green's function retrieval through cross-correlations in a two-dimensional complex reverberating medium. Journal of the Acoustical Society of America, 2014, 135, 1034-1043.	1.1	21
41	Seismic waveform inversion for coreâ€“mantle boundary topography. Geophysical Journal International, 2014, 198, 55-71.	2.4	20
42	Mantle dynamics in the Mediterranean. Reviews of Geophysics, 2014, 52, 283-332.	23.0	394
43	Effect of ray and speed perturbations on ionospheric tomography by overâ€theâ€horizon radar: A new method. Journal of Geophysical Research: Space Physics, 2014, 119, 7841-7857.	2.4	6
44	On estimating attenuation from the amplitude of the spectrally whitened ambient seismic field. Geophysical Journal International, 2014, 197, 1770-1788.	2.4	28
45	Crustal and upper mantle structure beneath southâ€western margin of the Arabian Peninsula from teleseismic tomography. Geochemistry, Geophysics, Geosystems, 2014, 15, 2850-2864.	2.5	20
46	Savani: A variable resolution wholeâ€mantle model of anisotropic shear velocity variations based on multiple data sets. Journal of Geophysical Research: Solid Earth, 2014, 119, 3006-3034.	3.4	194
47	The influence of nonuniform ambient noise on crustal tomography in Europe. Geochemistry, Geophysics, Geosystems, 2013, 14, 1471-1492.	2.5	23
48	On measuring surface wave phase velocity from stationâ€“station cross-correlation of ambient signal. Geophysical Journal International, 2013, 192, 346-358.	2.4	55
49	Seismic attenuation from recordings of ambient noise. Geophysics, 2013, 78, Q1-Q14.	2.6	42
50	Constraints on coreâ€mantle boundary topography from normal mode splitting. Geochemistry, Geophysics, Geosystems, 2013, 14, 1333-1342.	2.5	17
51	Geophysical applicability of atomic clocks: direct continental geoid mapping. Geophysical Journal International, 2012, 191, 78-82.	2.4	54
52	Seismic waveform sensitivity to global boundary topography. Geophysical Journal International, 2012, 191, 832-848.	2.4	15
53	Forward and adjoint simulations of seismic wave propagation on emerging large-scale GPU architectures. , 2012, , .		26
54	High-resolution Rayleigh-wave velocity maps of central Europe from a dense ambient-noise data set. Geophysical Journal International, 2012, 188, 1173-1187.	2.4	48

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55	Tomography of core-mantle boundary and lowermost mantle coupled by geodynamics. Geophysical Journal International, 2012, 189, 730-746.	2.4	33
56	Mapping the Earth's thermochemical and anisotropic structure using global surface wave data. Journal of Geophysical Research, 2011, 116, .	3.3	33
57	Low seismic resolution cannot explain S/P decorrelation in the lower mantle. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	28
58	Vertical coherence in mantle heterogeneity from global seismic data. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	7
59	Radial anisotropy in the European mantle: Tomographic studies explored in terms of mantle flow. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	9
60	Adaptively parametrized surface wave tomography: methodology and a new model of the European upper mantle. Geophysical Journal International, 2011, 186, 1431-1453.	2.4	26
61	Seismic, petrological and geodynamical constraints on thermal and compositional structure of the upper mantle: global thermochemical models. Geophysical Journal International, 2011, 187, 1301-1318.	2.4	50
62	Towards a method for attenuation inversion from reservoirâ€scale ambient noise OBS recordings. , 2011, , .		1
63	Mantle structure and dynamic topography in the Mediterranean Basin. Geophysical Research Letters, 2010, 37, .	4.0	75
64	GyPSuM: A joint tomographic model of mantle density and seismic wave speeds. Journal of Geophysical Research, 2010, 115, .	3.3	388
65	The fate of the slabs interacting with a density/viscosity hill in the mid-mantle. Physics of the Earth and Planetary Interiors, 2010, 180, 271-282.	1.9	40
66	The European Upper Mantle as Seen by Surface Waves. Surveys in Geophysics, 2009, 30, 463-501.	4.6	45
67	Reliability of mantle tomography models assessed by spectral element simulation. Geophysical Journal International, 2009, 177, 125-144.	2.4	21
68	Tomographic resolution of ray and finite-frequency methods: a membrane-wave investigation. Geophysical Journal International, 2009, 177, 624-638.	2.4	24
69	Tomography of the Alpine region from observations of seismic ambient noise. Geophysical Journal International, 2009, 178, 338-350.	2.4	157
70	Inferring radial models of mantle viscosity from gravity (GRACE) data and an evolutionary algorithm. Physics of the Earth and Planetary Interiors, 2009, 176, 19-32.	1.9	27
71	On mantle chemical and thermal heterogeneities and anisotropy as mapped by inversion of global surface wave data. Journal of Geophysical Research, 2009, 114, .	3.3	45
72	New Software Framework to Share Research Tools. Eos, 2009, 90, 104-104.	0.1	14

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73	The European Upper Mantle as Seen by Surface Waves. , 2009, , 195-233.		0
74	Europeâ€Mediterranean tomography: High correlation between new seismic data and independent geophysical observables. Geophysical Research Letters, 2008, 35, .	4.0	14
75	On the statistical significance of correlations between synthetic mantle plumes and tomographic models. Physics of the Earth and Planetary Interiors, 2008, 167, 230-238.	1.9	31
76	A new finiteâ€frequency shearâ€velocity model of the Europeanâ€Mediterranean region. Geophysical Research Letters, 2008, 35, .	4.0	18
77	Petascale computing and resolution in global seismic tomography. Physics of the Earth and Planetary Interiors, 2007, 163, 245-250.	1.9	14
78	Mantle plumes: Dynamic models and seismic images. Geochemistry, Geophysics, Geosystems, 2007, 8, .	2.5	92
79	Length scales, patterns and origin of azimuthal seismic anisotropy in the upper mantle as mapped by Rayleigh waves. Geophysical Journal International, 2007, 171, 451-462.	2.4	25
80	Surface wave tomography: global membrane waves and adjoint methods. Geophysical Journal International, 2007, 171, 1098-1117.	2.4	30
81	On the relevance of Born theory in global seismic tomography. Geophysical Research Letters, 2006, 33, .	4.0	57
82	Surface wave ray tracing and azimuthal anisotropy: a generalized spherical harmonic approach. Geophysical Journal International, 2006, 164, 569-578.	2.4	13
83	Global multiresolution models of surface wave propagation: comparing equivalently regularized Born and ray theoretical solutions. Geophysical Journal International, 2006, 167, 238-252.	2.4	32
84	Using the Post-Widder formula to compute the Earth's viscoelastic Love numbers. Geophysical Journal International, 2006, 166, 309-321.	2.4	39
85	The resolution of whole Earth seismic tomographic models. Geophysical Journal International, 2005, 161, 143-153.	2.4	26
86	Multiple resolution surface wave tomography: the Mediterranean basin. Geophysical Journal International, 2004, 157, 293-304.	2.4	54
87	Modeling Earth's post-glacial rebound. Eos, 2004, 85, 62.	0.1	34
88	Outer core density heterogeneity and the discrepancy between PKP and PcP travel time observations. Geophysical Research Letters, 2003, 30, .	4.0	31
89	Measures of resolution in global body wave tomography. Geophysical Research Letters, 2003, 30, .	4.0	41
90	New images of the Earth's upper mantle from measurements of surface wave phase velocity anomalies. Journal of Geophysical Research, 2002, 107, ESE 1-1-ESE 1-14.	3.3	107

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91	A comparison of tomographic and geodynamic mantle models. Geochemistry, Geophysics, Geosystems, 2002, 3, n/a-n/a.	2.5	418
92	Estimating lateral structure in the Earth's outer core. Geophysical Research Letters, 2001, 28, 1659-1662.	4.0	9
93	The effect of global seismicity on the polar motion of a viscoelastic Earth. Journal of Geophysical Research, 2001, 106, 6761-6767.	3.3	9
94	Whole Earth tomography from delay times ofP,PcP, andPKPphases: Lateral heterogeneities in the outer core or radial anisotropy in the mantle?. Journal of Geophysical Research, 2000, 105, 13675-13696.	3.3	110
95	Global postseismic deformation: Deep earthquakes. Journal of Geophysical Research, 2000, 105, 631-652.	3.3	18
96	On Maxwell singularities in postglacial rebound. Geophysical Journal International, 1999, 136, 492-498.	2.4	17
97	High- and low-resolution images of the Earth's mantle: Implications of different approaches to tomographic modeling. Journal of Geophysical Research, 1999, 104, 25567-25594.	3.3	155
98	Time-dependent residual deformations associated with the June 9, 1994 Bolivia Earthquake. Geophysical Research Letters, 1997, 24, 2849-2852.	4.0	8
99	Combining audio and visual displays to highlight temporal and spatial seismic patterns. Journal on Multimodal User Interfaces, 0, , 1.	2.9	2