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List of Publications by Year
in descending order

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114 papers	9,579 citations	47006 47 h-index	37204 96 g-index
128 all docs	128 docs citations	128 times ranked	5536 citing authors

#	Article	IF	Citations
1	Tectonic map and overall architecture of the Alpine orogen. Eclogae Geologicae Helveticae, 2004, 97, 93-117.	0.6	936
2	Initial reference models in local earthquake tomography. Journal of Geophysical Research, 1994, 99, 19635-19646.	3.3	822
3	Reconciling plate-tectonic reconstructions of Alpine Tethys with the geologicalâ€“geophysical record of spreading and subduction in the Alps. Earth-Science Reviews, 2010, 102, 121-158.	9.1	784
4	Geophysical-geological transect and tectonic evolution of the Swiss-Italian Alps. Tectonics, 1996, 15, 1036-1064.	2.8	632
5	Geotomography with local earthquake data. Reviews of Geophysics, 1988, 26, 659-698.	23.0	373
6	The arc of the western Alps in the light of geophysical data on deep crustal structure. Tectonics, 2000, 19, 62-85.	2.8	343
7	Upper mantle structure beneath the Alpine orogen from high-resolution teleseismic tomography. Journal of Geophysical Research, 2003, 108, .	3.3	335
8	Reconstructing the Alpsâ€“Carpathiansâ€“Dinarides as a key to understanding switches in subduction polarity, slab gaps and surface motion. International Journal of Earth Sciences, 2015, 104, 1-26.	1.8	244
9	A map-view restoration of the Alpine-Carpathian-Dinaridic system for the Early Miocene. Swiss Journal of Geosciences, 2008, 101, 273-294.	1.2	231
10	Accurate hypocentre determination in the seismogenic zone of the subducting Nazca Plate in northern Chile using a combined on-/offshore network. Geophysical Journal International, 1999, 138, 687-701.	2.4	159
11	3D crustal structure from local earthquake tomography around the Gulf of Arta (Ionian region, NW) Tj ETQq1 1 0.784314 rgBT /Overlock	2.2	159
12	Three-dimensional interface modelling with two-dimensional seismic data: the Alpine crust-mantle boundary. Geophysical Journal International, 1998, 135, 264-278.	2.4	143
13	The AlpArray Seismic Network: A Large-Scale European Experiment to Image the Alpine Orogen. Surveys in Geophysics, 2018, 39, 1009-1033.	4.6	138
14	Western Hellenic subduction and Cephalonia Transform: local earthquakes and plate transport and strain. Tectonophysics, 2000, 319, 301-319.	2.2	136
15	Postseismic fluid flow after the large subduction earthquake of Antofagasta, Chile. Geology, 2001, 29, 847.	4.4	130
16	Probabilistic earthquake location in complex three-dimensional velocity models: Application to Switzerland. Journal of Geophysical Research, 2003, 108, .	3.3	124
17	Shallow subduction beneath Italy: Threeâ€dimensional images of the Adriaticâ€Europeanâ€Tyrrhenian lithosphere system based on highâ€quality P wave arrival times. Journal of Geophysical Research, 2009, 114, .	3.3	124
18	Ivrea mantle wedge, arc of the Western Alps, and kinematic evolution of the Alpsâ€“Apennines orogenic system. Swiss Journal of Geosciences, 2017, 110, 581-612.	1.2	119

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19	Combining controlled-source seismology and receiver function information to derive 3-D Moho topography for Italy. Geophysical Journal International, 2013, 194, 1050-1068.	2.4	116
20	High-resolution teleseismic tomography of upper-mantle structure using ana priorithree-dimensional crustal model. Geophysical Journal International, 2002, 150, 403-414.	2.4	113
21	Subduction-zone structure and magmatic processes beneath Costa Rica constrained by local earthquake tomography and petrological modelling. Geophysical Journal International, 2003, 155, 11-32.	2.4	108
22	Deep structure of the Alpsâ€"what do we really know?. Physics of the Earth and Planetary Interiors, 1993, 79, 87-112.	1.9	101
23	Layered azimuthal anisotropy of Rayleigh wave phase velocities in the European Alpine lithosphere inferred from ambient noise. Earth and Planetary Science Letters, 2010, 297, 95-102.	4.4	99
24	Lower-crustal strength under the Dead Sea basin from local earthquake data and rheological modeling. Earth and Planetary Science Letters, 2003, 214, 129-142.	4.4	97
25	Automatic S-Wave Picker for Local Earthquake Tomography. Bulletin of the Seismological Society of America, 2009, 99, 1906-1920.	2.3	97
26	Model parametrization in seismic tomography: a choice of consequence for the solution quality. Physics of the Earth and Planetary Interiors, 2001, 123, 89-101.	1.9	95
27	Complex lithospheric structure under the central Baltic Shield from surface wave tomography. Journal of Geophysical Research, 2004, 109, .	3.3	93
28	Lithosphere structure and tectonic evolution of the Alpine arc: new evidence from high-resolution teleseismic tomography. Geological Society Memoir, 2006, 32, 129-145.	1.7	93
29	High-resolution body wave tomography beneath the SVEKALAPKO array - II. Anomalous upper mantle structure beneath the central Baltic Shield. Geophysical Journal International, 2004, 157, 200-214.	2.4	92
30	Tomographic evidence for a subducted seamount beneath the Gulf of Nicoya, Costa Rica: The cause of the 1990 Mw = 7.0 Gulf of Nicoya earthquake. Geophysical Research Letters, 2002, 29, 79-1-79-4.	4.0	90
31	Moho depth and Poisson's ratio in the Western-Central Alps from receiver functions. Geophysical Journal International, 2008, 173, 249-264.	2.4	83
32	The induced earthquake sequence related to the St. Gallen deep geothermal project (Switzerland): Fault reactivation and fluid interactions imaged by microseismicity. Journal of Geophysical Research: Solid Earth, 2017, 122, 7272-7290.	3.4	81
33	Rapid exhumation in the Western Alps driven by slab detachment and glacial erosion. Geology, 2015, 43, 379-382.	4.4	80
34	High-resolution 3-DP-wave model of the Alpine crust. Geophysical Journal International, 2009, 179, 1133-1147.	2.4	79
35	Automatic seismic phase picking and consistent observation error assessment: application to the Italian seismicity. Geophysical Journal International, 2006, 165, 121-134.	2.4	76
36	Gravity interpretation of a unified 2-D acoustic image of the central Alpine collision zone. Geophysical Journal International, 1992, 111, 213-225.	2.4	75

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37	Slab rollback orogeny in the Alps and evolution of the Swiss Molasse basin. Nature Communications, 2015, 6, 8605.	12.8	69
38	Consistent phase picking for regional tomography models: application to the greater Alpine region. Geophysical Journal International, 2009, 176, 542-554.	2.4	67
39	Sustained seismic tremors and icequakes detected in the ablation zone of the Greenland ice sheet. Journal of Glaciology, 2014, 60, 563-575.	2.2	67
40	Seismotectonics of Bhutan: Evidence for segmentation of the Eastern Himalayas and link to foreland deformation. Earth and Planetary Science Letters, 2017, 471, 54-64.	4.4	60
41	Three-dimensional Moho topography in Italy: New constraints from receiver functions and controlled source seismology. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	57
42	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
43	Investigating effects of 3-D ray tracing methods in local earthquake tomography. Physics of the Earth and Planetary Interiors, 2001, 123, 103-114.	1.9	51
44	Three-dimensional insight into Central-Alpine collision: Lower-plate or upper-plate indentation?. Geology, 2013, 41, 1219-1222.	4.4	51
45	The underthrusting Indian crust and its role in collision dynamics of the Eastern Himalaya in Bhutan: Insights from receiver function imaging. Journal of Geophysical Research: Solid Earth, 2017, 122, 1152-1178.	3.4	51
46	High-resolution body wave tomography beneath the SVEKALAPKO array: I.A priorithree-dimensional crustal model and associated traveltime effects on teleseismic wave fronts. Geophysical Journal International, 2003, 153, 75-87.	2.4	50
47	Alpine lithosphere slab rollback causing lower crustal seismicity in northern foreland. Earth and Planetary Science Letters, 2014, 397, 42-56.	4.4	49
48	Three-dimensional crustal structure beneath the TOR array and effects on teleseismic wavefronts. Tectonophysics, 1999, 314, 309-319.	2.2	48
49	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
50	Crustal structure beneath the eastern Swiss Alps derived from seismic refraction data. Tectonophysics, 1995, 242, 199-221.	2.2	47
51	Intracontinental subduction and Palaeozoic inheritance of the lithosphere suggested by a teleseismic experiment across the Chinese Tien Shan. Terra Nova, 2002, 14, 18-24.	2.1	46
52	Segmented Hellenic slab rollback driving Aegean deformation and seismicity. Geophysical Research Letters, 2016, 43, 651-658.	4.0	46
53	Large-Scale Crustal-Block-Extrusion During Late Alpine Collision. Scientific Reports, 2017, 7, 413.	3.3	46
54	Three-dimensionalP-wave velocity structure on the shallow part of the Central Costa Rican Pacific margin from local earthquake tomography using off- and onshore networks. Geophysical Journal International, 2009, 179, 827-849.	2.4	45

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55	Rollback Orogeny Model for the Evolution of the Swiss Alps. Tectonics, 2018, 37, 1097-1115.	2.8	44
56	Local earthquake tomography between rays and waves: fat ray tomography. Physics of the Earth and Planetary Interiors, 2001, 123, 127-147.	1.9	42
57	Meltwater influences on deep stickâ€slip icequakes near the base of the Greenland Ice Sheet. Journal of Geophysical Research F: Earth Surface, 2016, 121, 223-240.	2.8	39
58	Improved seismic velocity reference model from local earthquake data in Northwestern Italy. Terra Nova, 1995, 7, 528-534.	2.1	37
59	Seismic structure and activity of the north-central Lesser Antilles subduction zone from an integrated approach: Similarities with the Tohoku forearc. Tectonophysics, 2013, 603, 1-20.	2.2	37
60	Combining controlled-source seismology and local earthquake tomography to derive a 3-D crustal model of the western Alpine region. Geophysical Journal International, 2012, 191, 789-802.	2.4	36
61	Late stages of continent-continent collision: Timing, kinematic evolution, and exhumation of the Northern rim (Aar Massif) of the Alps. Earth-Science Reviews, 2020, 200, 102959.	9.1	35
62	Interpretation of tomographic images of uppermost mantle structure: Examples from the western and central alps. Journal of Geodynamics, 1996, 21, 97-111.	1.6	32
63	Alongâ€strike variations in the <scp>H</scp>imalayan orogenic wedge structure in <scp>B</scp>hutan from ambient seismic noise tomography. Geochemistry, Geophysics, Geosystems, 2017, 18, 1483-1498.	2.5	32
64	Seismic moulin tremor. Journal of Geophysical Research: Solid Earth, 2016, 121, 5838-5858.	3.4	31
65	A model of deep crustal fluid flow following theMw= 8.0 Antofagasta, Chile, earthquake. Journal of Geophysical Research, 2004, 109, .	3.3	30
66	Alpine mantle transition zone imaged by receiver functions. Earth and Planetary Science Letters, 2009, 278, 163-174.	4.4	28
67	Local and regional minimum 1D models for earthquake location and data quality assessment in complex tectonic regions: application to Switzerland. Swiss Journal of Geosciences, 2011, 104, 455-469.	1.2	28
68	Magmatic processes in the Alaska subduction zone by combined 3â€D b value imaging and targeted seismic tomography. Journal of Geophysical Research, 2009, 114, .	3.3	27
69	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
70	Velocity properties of the lithosphere in the ocean-continent transition zone in the Kamchatka region from seismic tomography data. Izvestiya, Physics of the Solid Earth, 2006, 42, 286-296.	0.9	24
71	Glacial impact on short-wavelength topography and long-lasting effects on the denudation of a deglaciated mountain range. Global and Planetary Change, 2014, 115, 59-70.	3.5	22
72	Induced seismicity during the construction of the Gotthard Base Tunnel, Switzerland: hypocenter locations and source dimensions. Journal of Seismology, 2012, 16, 195-213.	1.3	21

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73	Swiss-AlpArray temporary broadband seismic stations deployment and noise characterization. Advances in Geosciences, 0, 43, 15-29.	12.0	21
74	A new absolute arrival time data set for Europe. Geophysical Journal International, 2008, 173, 465-472.	2.4	20
75	Induced seismicity during the construction of the Gotthard Base Tunnel, Switzerland: hypocenter locations and source dimensions. Journal of Seismology, 2013, 17, 63-81.	1.3	20
76	A new Moho boundary map for the northern Fennoscandian Shield based on combined controlled-source seismic and receiver function data. GeoResJ, 2014, 1-2, 19-32.	1.4	20
77	High-precision earthquake locations in Switzerland using regional secondary arrivals in a 3-D velocity model. Geophysical Journal International, 2013, 193, 1589-1607.	2.4	19
78	Fourâ€dimensional numerical modeling of crustal growth at active continental margins. Journal of Geophysical Research: Solid Earth, 2013, 118, 4682-4698.	3.4	18
79	Cenozoic volcanism in the Bohemian Massif in the context of Pâ€and Sâ€velocity highâ€resolution teleseismic tomography of the upper mantle. Geochemistry, Geophysics, Geosystems, 2016, 17, 3326-3349.	2.5	18
80	Anisotropic lithosphere under the Fennoscandian shield from P receiver functions and SKS waveforms of the POLENET/LAPNET array. Tectonophysics, 2014, 628, 45-54.	2.2	17
81	Novel anisotropic teleseismic body-wave tomography code AniTomo to illuminate heterogeneous anisotropic upper mantle: Part I â€" Theory and inversion tuning with realistic synthetic data. Geophysical Journal International, 2018, 215, 524-545.	2.4	17
82	Tectonics and seismicity in the Northern Apennines driven by slab retreat and lithospheric delamination. Tectonophysics, 2020, 789, 228481.	2.2	16
83	A Lithospheric Cross-Section Through the Swiss Alps-I. Thermokinematic Modelling of the Neoalpine Orogeny. Geophysical Journal International, 1996, 125, 504-518.	2.4	15
84	Gravity anomalies and dynamics of the Swiss Alps. Tectonophysics, 1985, 117, 97-108.	2.2	13
85	POLENET/LAPNET teleseismic <i>P</i> wave travel time tomography model of the upper mantle beneath northern Fennoscandia. Solid Earth, 2016, 7, 425-439.	2.8	13
86	Improving Absolute Hypocenter Accuracy With 3D Pg and Sg Bodyâ€Wave Inversion Procedures and Application to Earthquakes in the Central Alps Region. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022155.	3.4	13
87	Detection of Systematic Errors in Travel-Time Data Using a Minimum 1D Model: Application to Costa Rica Seismic Tomography. Bulletin of the Seismological Society of America, 2010, 100, 629-639.	2.3	12
88	Slab Rollback Orogeny Model: A Test of Concept. Geophysical Research Letters, 2020, 47, e2020GL089917.	4.0	12
89	The first pan-Alpine surface-gravity database, a modern compilation that crosses frontiers. Earth System Science Data, 2021, 13, 2165-2209.	9.9	12
90	Compilation of a recent seismicity data base of the greater Alpine region from several seismological networks and preliminary 3D tomographic results. Annals of Geophysics, 1997, 40, .	1.0	12

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91	Azimuthal anisotropy from eikonal tomography: example from ambient-noise measurements in the AlpArray network. Geophysical Journal International, 2021, 229, 151-170.	2.4	12
92	The effects of data quality in local earthquake tomography: Application to the Alpine region. Geophysics, 2009, 74, WCB71-WCB79.	2.6	11
93	3â€Ð velocity structure in southern Haiti from local earthquake tomography. Journal of Geophysical Research: Solid Earth, 2016, 121, 8813-8832.	3.4	11
94	Compilation of a high-quality catalogue for M3.0+ seismicity in northern Iran region for the period of 2005â€“2017. Geophysical Journal International, 2018, 215, 118-132.	2.4	11
95	3D crustal structure of the northwest Alborz region (Iran) from local earthquake tomography. Swiss Journal of Geosciences, 2016, 109, 389-400.	1.2	10
96	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
97	Quantifying a Potential Bias in Probabilistic Seismic Hazard Assessment: Seismotectonic Zonation with Fractal Properties. Bulletin of the Seismological Society of America, 2011, 101, 2694-2711.	2.3	9
98	Novel anisotropic teleseismic body-wave tomography code AniTomo to illuminate heterogeneous anisotropic upper mantle: Part II â€“ Application to data of passive seismic experiment LAPNET in northern Fennoscandia. Geophysical Journal International, 2018, 215, 1388-1409.	2.4	9
99	Local earthquake tomography of the Larderello-Travale geothermal field. Geothermics, 2020, 83, 101731.	3.4	9
100	Seismic structure of the crust in the western Dominican Republic. Tectonophysics, 2019, 773, 228224.	2.2	8
101	Regional 3-D lithosphere structure of the northern half of Iran by local earthquake tomography. Geophysical Journal International, 2020, 223, 1956-1972.	2.4	8
102	3D crustal structure of the Eastern Alpine region from ambient noise tomography. Results in Geophysical Sciences, 2020, 1-4, 100006.	0.9	8
103	Reply to Comment by W. Kurz on â€œTectonic map and overall architecture of the Alpine orogenâ€• Eclogae Geologicae Helveticae, 2005, 98, 99-101.	0.6	7
104	KaKiOSâ€16: A Probabilistic, Nonlinear, Absolute Location Catalog of the 1981â€“2011 Southern California Seismicity. Bulletin of the Seismological Society of America, 2017, 107, 1994-2007.	2.3	7
105	Regional minimum 1-D P-wave velocity model for a new seismicity catalogue with precise and consistent earthquake locations in southern Iran. Journal of Seismology, 2018, 22, 1529-1547.	1.3	5
106	Investigation of the Central Adriatic lithosphere structure with the AlpArray-CASE seismic experiment. Geofizika, 2019, 35, 103-128.	0.4	5
107	A consistent and high-quality M4+Âearthquake catalogue for Turkey 2007â€“2016 from two independent catalogues. Geophysical Journal International, 2021, 225, 711-728.	2.4	4
108	Moho topography beneath the European Eastern Alps by global-phase seismic interferometry. Solid Earth, 2021, 12, 1185-1196.	2.8	4

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109	The AlpArray Research Seismicity-Catalogue. Geophysical Journal International, 2022, 231, 921-943.	2.4	4
110	Methoni Mw 6.8 rupture and aftershocks distribution from a dense array of OBS and land seismometers, offshore SW Hellenic subduction. Tectonophysics, 2020, 796, 228643.	2.2	3
111	Slab Load Controls Beneath the Alps on the Source-to-Sink Sedimentary Pathways in the Molasse Basin. Geosciences (Switzerland), 2022, 12, 226.	2.2	3
112	Hybrid Broadband Seismograms for Seismic Shaking Scenarios: An Application to the Po Plain Sedimentary Basin (Northern Italy). Pure and Applied Geophysics, 2020, 177, 2181-2198.	1.9	2
113	A geodynamic model for the lithosphere of the Swiss Alps. Physics of the Earth and Planetary Interiors, 1988, 51, 153-154.	1.9	1
114	Seismicity Rate Change as a Tool to Investigate Delayed and Remote Triggering of the 2010â€“2011 Canterbury Earthquake Sequence, New Zealand. Bulletin of the Seismological Society of America, 0, , .	2.3	0