

# Sebastian Rost

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7285097/publications.pdf>

Version: 2024-02-01

58  
papers

2,438  
citations

257450

24  
h-index

197818

49  
g-index

64  
all docs

64  
docs citations

64  
times ranked

1776  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Most Parsimonious Ultralow-velocity Zone Distribution From Highly Anomalous SPdKS Waveforms. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, .	2.5	15
2	Automatic slowness vector measurements of seismic arrivals with uncertainty estimates using bootstrap sampling, array methods and unsupervised learning. <i>Geophysical Journal International</i> , 2021, 226, 1847-1857.	2.4	6
3	Structure of the northwestern North Anatolian Fault Zone imaged via teleseismic scattering tomography. <i>Geophysical Journal International</i> , 2021, 227, 922-940.	2.4	5
4	Small-scale lithospheric heterogeneity characterization using Bayesian inference and energy flux models. <i>Geophysical Journal International</i> , 2021, 227, 1682-1699.	2.4	0
5	Historical Interstation Pattern Referencing (HIPR): An Application to PcP Waves Recorded in the Antarctic for ULVZ Imaging. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022741.	3.4	3
6	Lateral Velocity Gradients in the African Lower Mantle Inferred From Slowness Space Observations of Multipathing. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009025.	2.5	8
7	A joint inversion of receiver function and Rayleigh wave phase velocity dispersion data to estimate crustal structure in West Antarctica. <i>Geophysical Journal International</i> , 2020, 223, 1644-1657.	2.4	11
8	Investigating ultra-low velocity zones in the southern hemisphere using an Antarctic dataset. <i>Earth and Planetary Science Letters</i> , 2020, 536, 116142.	4.4	11
9	Near-surface structure of the North Anatolian Fault zone from Rayleigh and Love wave tomography using ambient seismic noise. <i>Solid Earth</i> , 2019, 10, 363-378.	2.8	26
10	Regional stratification at the top of Earth's core due to core-mantle boundary heat flux variations. <i>Nature Geoscience</i> , 2019, 12, 575-580.	12.9	48
11	Stress Drops on the Blanco Oceanic Transform Fault from Interstation Phase Coherence. <i>Bulletin of the Seismological Society of America</i> , 2019, 109, 929-943.	2.3	1
12	Interaction of the Cyprus/Tethys slab with the mantle transition zone beneath Anatolia. <i>Geophysical Journal International</i> , 2019, 216, 1665-1674.	2.4	6
13	Automated seismic waveform location using Multichannel Coherency Migration (MCM) II. Application to induced and volcano-tectonic seismicity. <i>Geophysical Journal International</i> , 2019, 216, 1608-1632.	2.4	7
14	Automated seismic waveform location using multichannel coherency migration (MCM) I: theory. <i>Geophysical Journal International</i> , 2019, 216, 1842-1866.	2.4	21
15	Dynamical links between small- and large-scale mantle heterogeneity: Seismological evidence. <i>Earth and Planetary Science Letters</i> , 2018, 482, 135-146.	4.4	24
16	Seismic evidence for Earth's crusty deep mantle. <i>Earth and Planetary Science Letters</i> , 2017, 470, 54-63.	4.4	31
17	Fine-scale structure of the mid-mantle characterised by global stacks of PP precursors. <i>Earth and Planetary Science Letters</i> , 2017, 472, 164-173.	4.4	15
18	Ultralow-velocity zone geometries resolved by multidimensional waveform modelling. <i>Geophysical Journal International</i> , 2016, 206, 659-674.	2.4	12

#	ARTICLE	IF	CITATIONS
19	Crustal imaging across the North Anatolian Fault Zone from the autocorrelation of ambient seismic noise. <i>Geophysical Research Letters</i> , 2016, 43, 2502-2509.	4.0	56
20	A compositional origin to ultralow-velocity zones. <i>Geophysical Research Letters</i> , 2015, 42, 1039-1045.	4.0	36
21	Crustal thickness variations and isostatic disequilibrium across the North Anatolian Fault, western Turkey. <i>Geophysical Research Letters</i> , 2015, 42, 751-757.	4.0	23
22	Seismic Detections of Small-Scale Heterogeneities in the Deep Earth. , 2015, , 367-390.		11
23	New constraints on micro-seismicity and stress state in the western part of the North Anatolian Fault Zone: Observations from a dense seismic array. <i>Tectonophysics</i> , 2015, 656, 190-201.	2.2	26
24	Crustal-scale shear zones and heterogeneous structure beneath the North Anatolian Fault Zone, Turkey, revealed by a high-density seismometer array. <i>Earth and Planetary Science Letters</i> , 2015, 430, 129-139.	4.4	35
25	Mantle transition zone structure beneath India and Western China from migration of PP and SS precursors. <i>Geophysical Journal International</i> , 2014, 197, 396-413.	2.4	21
26	The P-wave boundary of the Large-Low Shear Velocity Province beneath the Pacific. <i>Earth and Planetary Science Letters</i> , 2014, 403, 380-392.	4.4	36
27	Scattering beneath Western Pacific subduction zones: evidence for oceanic crust in the mid-mantle. <i>Geophysical Journal International</i> , 2014, 197, 1627-1641.	2.4	28
28	Core-mantle boundary landscapes. <i>Nature Geoscience</i> , 2013, 6, 89-90.	12.9	7
29	SPdKS analysis of ultralow-velocity zones beneath the western Pacific. <i>Geophysical Research Letters</i> , 2013, 40, 4574-4578.	4.0	21
30	Detection of a tall ridge at the core-mantle boundary from scattered PKP energy. <i>Geophysical Journal International</i> , 2013, 195, 558-574.	2.4	32
31	Scattered P'P' Waves Observed at Short Distances. <i>Bulletin of the Seismological Society of America</i> , 2011, 101, 2843-2854.	2.3	11
32	Melting of the Earth's inner core. <i>Nature</i> , 2011, 473, 361-363.	27.8	125
33	On the absence of an ultralow-velocity zone in the North Pacific. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	22
34	Thin and intermittent ultralow-velocity zones. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	32
35	Identifying regions of strong scattering at the core-mantle boundary from analysis of PKKP precursor energy. <i>Earth and Planetary Science Letters</i> , 2010, 297, 616-626.	4.4	25
36	Tracking deep mantle reservoirs with ultra-low velocity zones. <i>Earth and Planetary Science Letters</i> , 2010, 299, 1-9.	4.4	187

#	ARTICLE	IF	CITATIONS
37	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.	1.9	16
38	Improving Seismic Resolution Through Array Processing Techniques. <i>Surveys in Geophysics</i> , 2009, 30, 271-299.	4.6	96
39	Improving Seismic Resolution Through Array Processing Techniques. , 2009, , 3-31.		1
40	Seismic array detection of subducted oceanic crust in the lower mantle. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	48
41	New insights into the P- and S-wave velocity structure of the D <sup>3</sup> discontinuity beneath the Cocos plate. <i>Geophysical Journal International</i> , 2007, 169, 631-645.	2.4	40
42	Fine-Scale Ultra-Low Velocity Zone Layering at the Core-Mantle Boundary and Superplumes. , 2007, , 139-158.		10
43	Detection of an ultralow velocity zone at the core-mantle boundary using diffracted PKKPab waves. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	26
44	Fine-scale ultralow-velocity zone structure from high-frequency seismic array data. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	62
45	Imaging Global Seismic Phase Arrivals by Stacking Array Processed Short-Period Data. <i>Seismological Research Letters</i> , 2006, 77, 697-707.	1.9	14
46	Seismological constraints on a possible plume root at the core-mantle boundary. <i>Nature</i> , 2005, 435, 666-669.	27.8	156
47	A study of the uppermost inner core from PKKP and P <sup>2</sup> P <sup>2</sup> differential traveltimes. <i>Geophysical Journal International</i> , 2004, 156, 565-574.	2.4	11
48	Array seismology advances research into Earth's interior. <i>Eos</i> , 2004, 85, 301.	0.1	11
49	Small-scale changes of core-mantle boundary reflectivity studied using core reflected PcP. <i>Physics of the Earth and Planetary Interiors</i> , 2004, 145, 19-36.	1.9	21
50	Small-scale ultralow-velocity zone structure imaged by ScP. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	73
51	Detection of a D <sup>3</sup> discontinuity in the south Atlantic using PKKP. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	6
52	Seismic detection of sublithospheric plume head residue beneath the Pitcairn hot-spot chain. <i>Earth and Planetary Science Letters</i> , 2003, 209, 71-83.	4.4	6
53	The upper mantle transition zone discontinuities in the Pacific as determined by short-period array data. <i>Earth and Planetary Science Letters</i> , 2002, 204, 347-361.	4.4	32
54	Array seismology: Methods and applications. <i>Reviews of Geophysics</i> , 2002, 40, 2-1.	23.0	717

#	ARTICLE	IF	CITATIONS
55	A reflector at 200 km depth beneath the northwest Pacific. <i>Geophysical Journal International</i> , 2001, 147, 12-28.	2.4	38
56	Seismic Detection of Rigid Zones at the Top of the Core. <i>Science</i> , 2001, 294, 1911-1914.	12.6	69
57	Seismic constraints on Earth's small-scale structure. <i>Astronomy and Geophysics</i> , 0, 51, 2.26-2.32.	0.2	0
58	Kinetic effects on the 660km-phase transition in mantle upstreams and seismological implications. <i>Geophysical Journal International</i> , 0, , .	2.4	0