Tarje Nissen-Meyer

List of Publications by Year
in descending order

49 papers	2,123 citations	331670 21 h-index	233421 45 g-index
54 all docs	54 docs citations	54 times ranked	1835 citing authors

#	Article	IF	Citations
1	Forward and adjoint simulations of seismic wave propagation on fully unstructured hexahedral meshes. Geophysical Journal International, 2011, 186, 721-739.	2.4	258
2	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	12.9	207
3	AxiSEM: broadband 3-D seismic wavefields in axisymmetric media. Solid Earth, 2014, 5, 425-445.	2.8	205
4	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
5	Instaseis: instant global seismograms based on a broadband waveform database. Solid Earth, 2015, 6, 701-717.	2.8	111
6	Global mantle structure from multifrequency tomography using P, PP and P-diffracted waves. Geophysical Journal International, 2020, 220, 96-141.	2.4	104
7	Dynamic earthquake rupture modelled with an unstructured 3-D spectral element method applied to the 2011 M9 Tohoku earthquake. Geophysical Journal International, 2014, 198, 1222-1240.	2.4	89
8	Elastic imaging and time-lapse migration based on adjoint methods. Geophysics, 2009, 74, WCA167-WCA177.	2.6	83
9	A two-dimensional spectral-element method for computing spherical-earth seismograms - I. Moment-tensor source. Geophysical Journal International, 2007, 168, 1067-1092.	2.4	73
10	Deep learning for fast simulation of seismic waves in complex media. Solid Earth, 2020, 11, 1527-1549.	2.8	63
11	A 2-D spectral-element method for computing spherical-earth seismograms-II. Waves in solid-fluid media. Geophysical Journal International, 2008, 174, 873-888.	2.4	56
12	Spherical-earth FrÃ©chet sensitivity kernels. Geophysical Journal International, 2007, 168, 1051-1066.	2.4	53
13	AxiSEM3D: broad-band seismic wavefields in 3-D global earth models with undulating discontinuities. Geophysical Journal International, 2019, 217, 2125-2146.	2.4	50
14	Wave propagation in 3D spherical sections: effects of subduction zones. Physics of the Earth and Planetary Interiors, 2002, 132, 219-234.	1.9	45
15	Efficient global wave propagation adapted to 3-D structural complexity: a pseudospectral/spectral-element approach. Geophysical Journal International, 2016, 207, 1700-1721.	2.4	39
16	Onâ€Demand Custom Broadband Synthetic Seismograms. Seismological Research Letters, 2017, 88, 1127-1140.	1.9	39
17	Seismic modeling and imaging based upon spectral-element and adjoint methods. The Leading Edge, 2009, 28, 568-574.	0.7	35
18	Seismic Wave Propagation in Icy Ocean Worlds. Journal of Geophysical Research E: Planets, 2018, 123, 206-232.	3.6	35

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19	Classifying elephant behaviour through seismic vibrations. Current Biology, 2018, 28, R547-R548.	3.9	33
20	Optimized viscoelastic wave propagation for weakly dissipative media. Geophysical Journal International, 2014, 199, 1078-1093.	2.4	32
21	Triplicated P-wave measurements for waveform tomography of the mantle transition zone. Solid Earth, 2012, 3, 339-354.	2.8	29
22	Forward and adjoint simulations of seismic wave propagation on emerging large-scale GPU architectures. , 2012, , .		26
23	The influence of nonuniform ambient noise on crustal tomography in Europe. Geochemistry, Geophysics, Geosystems, 2013, 14, 1471-1492.	2.5	23
24	Seismic wave propagation in fully anisotropic axisymmetric media. Geophysical Journal International, 2014, 199, 880-893.	2.4	21
25	Seismic waveform inversion for coreâ€“mantle boundary topography. Geophysical Journal International, 2014, 198, 55-71.	2.4	20
26	New Candidate Ultralow-Velocity Zone Locations from Highly Anomalous SPdKS Waveforms. Minerals (Basel, Switzerland), 2020, 10, 211.	2.0	18
27	Seismic waveform sensitivity to global boundary topography. Geophysical Journal International, 2012, 191, 832-848.	2.4	15
28	A Lattice Boltzmann Method for Elastic Wave Propagation in a Poisson Solid. Bulletin of the Seismological Society of America, 2012, 102, 1224-1234.	2.3	15
29	Full wave sensitivity of SK(K)S phases to arbitrary anisotropy in the upper and lower mantle. Geophysical Journal International, 2020, 222, 412-435.	2.4	15
30	3-D scattering of elastic waves by small-scale heterogeneities in the Earthâ€™s mantle. Geophysical Journal International, 2020, 223, 502-525.	2.4	13
31	Sensitivity of SK(K)S and ScS phases to heterogeneous anisotropy in the lowermost mantle from global wavefield simulations. Geophysical Journal International, 2021, 228, 366-386.	2.4	13
32	Analysis of PKP scattering using mantle mixing simulations and axisymmetric 3D waveforms. Physics of the Earth and Planetary Interiors, 2018, 276, 226-233.	1.9	11
33	Seismic constraints from a Mars impact experiment using InSight and Perseverance. Nature Astronomy, 2022, 6, 59-64.	10.1	9
34	Constraining deep mantle anisotropy with shear wave splitting measurements: challenges and new measurement strategies. Geophysical Journal International, 2022, 230, 507-527.	2.4	9
35	Seismic localization of elephant rumbles as a monitoring approach. Journal of the Royal Society Interface, 2021, 18, 20210264.	3.4	8
36	High-frequency global wavefields for local 3-D structures by wavefield injection and extrapolation. Geophysical Journal International, 2021, 225, 1782-1798.	2.4	8

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37	Seismic savanna: machine learning for classifying wildlife and behaviours using groundâ€based vibration field recordings. Remote Sensing in Ecology and Conservation, 2022, 8, 236-250.	4.3	8
38	Multifrequency inversion of global ambient seismic sources. Geophysical Journal International, 2021, 225, 1616-1623.	2.4	7
39	Quiet Anthropocene, quiet Earth. Science, 2020, 369, 1299-1300.	12.6	6
40	Oceanic high-frequency global seismic wave propagation with realistic bathymetry. Geophysical Journal International, 2020, 222, 1178-1194.	2.4	6
41	Introducing noisi: a Python tool for ambient noise cross-correlation modeling and noise source inversion. Solid Earth, 2020, 11, 1597-1615.	2.8	6
42	Listening for the Landing: Seismic Detections of Perseverance's Arrival at Mars With InSight. Earth and Space Science, 2021, 8, e2020EA001585.	2.6	5
43	A Compositional Component to the Samoa Ultralowâ€Velocity Zone Revealed Through 2â€•and 3â€D Waveform Modeling of SKS and SKKS Differential Travelâ€Times and Amplitudes. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021897.	3.4	5
44	Enhancing core-diffracted arrivals by supervirtual interferometry. Geophysical Journal International, 2014, 196, 1177-1188.	2.4	4
45	A complexity-driven framework for waveform tomography with discrete adjoints. Geophysical Journal International, 2020, 223, 1247-1264.	2.4	3
46	Questions to Heaven. Astronomy and Geophysics, 2021, 62, 6.22-6.25.	0.2	2
47	Quantification of Small-Scale Heterogeneity at the Coreâ€“Mantle Boundary Using Sample Entropy of SKS and SPdKS Synthetic Waveforms. Minerals (Basel, Switzerland), 2022, 12, 813.	2.0	2
48	A 3D complexity-adaptive approach to explore sparsity in elastic wave propagation. Geophysics, 2021, 86, T321-T335.	2.6	1
49	3D Elastic Full Waveform Inversion of Teleseismic Data for High-resolution Ospheric Imaging. , 2015, , .		0