Michael S Thorne

List of Publications by Year
in descending order

26 papers	1,016 citations	516710 16 h-index	552781 26 g-index
27 all docs	27 docs citations	27 times ranked	761 citing authors

#	Article	IF	Citations
1	A Post-Perovskite Lens and D'' Heat Flux Beneath the Central Pacific. Science, 2006, 314, 1272-1276.	12.6	242
2	Inferences on ultralow-velocity zone structure from a global analysis ofSPdKSwaves. Journal of Geophysical Research, 2004, 109, .	3.3	133
3	Geographic correlation between hot spots and deep mantle lateral shear-wave velocity gradients. Physics of the Earth and Planetary Interiors, 2004, 146, 47-63.	1.9	131
4	Mega ultra low velocity zone and mantle flow. Earth and Planetary Science Letters, 2013, 364, 59-67.	4.4	90
5	GlobalSH-wave propagation using a parallel axisymmetric spherical finite-difference scheme: application to whole mantle scattering. Geophysical Journal International, 2008, 173, 815-826.	2.4	39
6	Seismic imaging of the laterally varying Dâ€³ region beneath the Cocos Plate. Geophysical Journal International, 2007, 170, 635-648.	2.4	36
7	A compositional origin to ultralowâ€velocity zones. Geophysical Research Letters, 2015, 42, 1039-1045.	4.0	36
8	Broadband array observations of the 300â€‰km seismic discontinuity. Geophysical Research Letters, 2013, 40, 841-846.	4.0	35
9	Ambient resonance of Mesa Arch, Canyonlands National Park, Utah. Geophysical Research Letters, 2015, 42, 6696-6702.	4.0	27
10	Anthropogenic sources stimulate resonance of a natural rock bridge. Geophysical Research Letters, 2016, 43, 9669-9676.	4.0	23
11	On the absence of an ultralowâ€velocity zone in the North Pacific. Journal of Geophysical Research, 2010, 115, .	3.3	22
12	Use of Seismic Resonance Measurements to Determine the Elastic Modulus of Freestanding Rock Masses. Rock Mechanics and Rock Engineering, 2018, 51, 3937-3944.	5.4	22
13	SPdKS analysis of ultralowâ€velocity zones beneath the western Pacific. Geophysical Research Letters, 2013, 40, 4574-4578.	4.0	21
14	New Candidate Ultralow-Velocity Zone Locations from Highly Anomalous SPdKS Waveforms. Minerals (Basel, Switzerland), 2020, 10, 211.	2.0	18
15	Evaluation of 1â€Ð and 3â€Ð seismic models of the Pacific lower mantle with S, SKS, and SKKS traveltimes and amplitudes. Journal of Geophysical Research: Solid Earth, 2013, 118, 985-995.	3.4	17
16	Estimate of the Rigidity of Eclogite in the Lower Mantle From Waveform Modeling of Broadband Sâ€toâ€P Wave Conversions. Geophysical Research Letters, 2017, 44, 11,778.	4.0	17
17	Internal structure of ultralow-velocity zones consistent with origin from a basal magma ocean. Nature Geoscience, 2022, 15, 79-84.	12.9	17
18	Modeling the ratios of SKKS and SKS amplitudes with ultraâ€low velocity zones at the coreâ€mantle boundary. Geophysical Research Letters, 2009, 36, .	4.0	15

#	Article	IF	Citations
19	Dâ€³ discontinuity structure beneath the North Atlantic from Scd observations. Geophysical Research Letters, 2015, 42, 3793-3801.	4.0	15
20	Seismic array constraints on the Dâ€³ discontinuity beneath Central America. Journal of Geophysical Research: Solid Earth, 2016, 121, 152-169.	3.4	15
21	The Most Parsimonious Ultralowâ€Velocity Zone Distribution From Highly Anomalous SPdKS Waveforms. Geochemistry, Geophysics, Geosystems, 2021, 22, .	2.5	15
22	Melting at the Edge of a Slab in the Deepest Mantle. Geophysical Research Letters, 2019, 46, 8000-8008.	4.0	13
23	Differential t* measurements via instantaneous frequency matching: observations of lower mantle shear attenuation heterogeneity beneath western Central America. Geophysical Journal International, 2012, 189, 513-523.	2.4	7
24	A Compositional Component to the Samoa Ultralowâ€Velocity Zone Revealed Through 2â€•and 3â€Ð Waveform Modeling of SKS and SKKS Differential Travelâ€Times and Amplitudes. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021897.	3.4	5
25	Viterbi sparse spike detection. Geophysics, 2013, 78, V157-V169.	2.6	3
26	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