

# Victor C Tsai

## List of Publications by Year in descending order

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Version: 2024-02-01

99  
papers

4,398  
citations

94433

37  
h-index

114465

63  
g-index

102  
all docs

102  
docs citations

102  
times ranked

3758  
citing authors

#	ARTICLE	IF	CITATIONS
1	A unified model for transient subglacial water pressure and basal sliding. <i>Journal of Glaciology</i> , 2022, 68, 390-400.	2.2	8
2	Parsimonious Velocity Inversion Applied to the Los Angeles Basin, CA. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	3.4	4
3	Seismic Mapping of Subglacial Hydrology Reveals Previously Undetected Pressurization Event. <i>Journal of Geophysical Research F: Earth Surface</i> , 2022, 127, .	2.8	1
4	A nonlinear model for resolving the temperature bias of branched glycerol dialkyl glycerol tetraether (brGDGT) temperature proxies. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 327, 158-169.	3.9	5
5	Rayleigh-wave ellipticity in weakly heterogeneous layered media. <i>Geophysical Journal International</i> , 2021, 228, 1313-1323.	2.4	0
6	Impact Versus Frictional Earthquake Models for High-Frequency Radiation in Complex Fault Zones. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022313.	3.4	11
7	A Linear Inversion Approach to Measuring the Composition and Directionality of the Seismic Noise Field. <i>Remote Sensing</i> , 2021, 13, 3097.	4.0	2
8	Earthquake Source Complexity Controls the Frequency Dependence of Near-Source Radiation Patterns. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095022.	4.0	14
9	Modelling <i>P</i> -waves in seismic noise correlations: advancing fault monitoring using train traffic sources. <i>Geophysical Journal International</i> , 2021, 228, 1556-1567.	2.4	9
10	Fault Interactions Enhance High-Frequency Earthquake Radiation. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095271.	4.0	15
11	Introduction to the Special Issue on Mars Seismology. <i>Bulletin of the Seismological Society of America</i> , 2021, 111, 2883-2888.	2.3	1
12	Perturbational and nonperturbational inversion of Love-wave velocities. <i>Geophysics</i> , 2020, 85, F19-F26.	2.6	9
13	Geometric and level set tomography using ensemble Kalman inversion. <i>Geophysical Journal International</i> , 2020, 220, 967-980.	2.4	19
14	A Physical Model for Volcanic Eruption Tremor. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018980.	3.4	6
15	Measuring Basal Force Fluctuations of Debris Flows Using Seismic Recordings and Empirical Green's Functions. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2020JF005590.	2.8	24
16	Evidence for Fluid Migration During the 2016 Meinong, Taiwan, Aftershock Sequence. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB019994.	3.4	8
17	Elastic Impact Consequences for High-Frequency Earthquake Ground Motion. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086302.	4.0	21
18	Did Oldham Discover the Core After All? Handling Imprecise Historical Data with Hierarchical Bayesian Model Selection Methods. <i>Seismological Research Letters</i> , 2020, 91, 1377-1383.	1.9	9

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19	Extension of the Basin Rayleigh-Wave Amplification Theory to Include Basin-Edge Effects. Bulletin of the Seismological Society of America, 2020, 110, 1305-1322.	2.3	16
20	Time-Dependent Stresses From Fluid Extraction and Diffusion With Applications to Induced Seismicity. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	3
21	Bulk Structure of the Crust and Upper Mantle beneath Alaska from an Approximate Rayleigh-Wave Dispersion Formula. Seismological Research Letters, 2020, 91, 3064-3075.	1.9	7
22	Validation of a fast semi-analytic method for surface-wave propagation in layered media. Geophysical Journal International, 2019, 219, 1405-1420.	2.4	2
23	A physical model of the high-frequency seismic signal generated by debris flows. Earth Surface Processes and Landforms, 2019, 44, 2529-2543.	2.5	51
24	Coherence-Based Approaches for Estimating the Composition of the Seismic Wavefield. Journal of Geophysical Research: Solid Earth, 2019, 124, 2941-2956.	3.4	9
25	Theoretical Foundations of Noise Interferometry. , 2019, , 109-143.		5
26	Frequency-Dependent <i>P</i> Wave Polarization and Its Subwavelength Near-Surface Depth Sensitivity. Geophysical Research Letters, 2019, 46, 14377-14384.	4.0	15
27	Direct Observations of Surface-Wave Eigenfunctions at the Homestake 3D Array. Bulletin of the Seismological Society of America, 2019, 109, 1194-1202.	2.3	5
28	Particle transport mechanics and induced seismic noise in steep flume experiments with accelerometer-embedded tracers. Earth Surface Processes and Landforms, 2019, 44, 219-241.	2.5	44
29	Expected Seismicity and the Seismic Noise Environment of Europa. Journal of Geophysical Research E: Planets, 2018, 123, 163-179.	3.6	38
30	Vital Signs: Seismology of Icy Ocean Worlds. Astrobiology, 2018, 18, 37-53.	3.0	31
31	A 3D Broadband Seismometer Array Experiment at the Homestake Mine. Seismological Research Letters, 2018, 89, 2420-2429.	1.9	14
32	A Simple Model for Deglacial Meltwater Pulses. Geophysical Research Letters, 2018, 45, 11,742.	4.0	1
33	The Seismic Signature of Debris Flows: Flow Mechanics and Early Warning at Montecito, California. Geophysical Research Letters, 2018, 45, 5528-5535.	4.0	69
34	A simple physics-based improvement to the positive degree day model. Journal of Glaciology, 2018, 64, 661-668.	2.2	4
35	Observations and Modeling of Long-Period Ground-Motion Amplification Across Northeast China. Geophysical Research Letters, 2018, 45, 5968-5976.	4.0	4
36	Seismic array constraints on reach-scale bedload transport. Geology, 2017, 45, 299-302.	4.4	36

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37	Perturbational and nonperturbational inversion of Rayleigh-wave velocities. <i>Geophysics</i> , 2017, 82, F15-F28.	2.6	56
38	Earthquake ground motion amplification for surface waves. <i>Geophysical Research Letters</i> , 2017, 44, 121-127.	4.0	59
39	Was the Mw 7.5 1952 Kern County, California, earthquake induced (or triggered)?. <i>Journal of Seismology</i> , 2017, 21, 1613-1621.	1.3	7
40	Toward automated directivity estimates in earthquake moment tensor inversion. <i>Geophysical Journal International</i> , 2017, 211, 1062-1076.	2.4	8
41	Explaining extreme ground motion in Osaka basin during the 2011 Tohoku earthquake. <i>Geophysical Research Letters</i> , 2017, 44, 7239-7244.	4.0	14
42	Amplification and Attenuation Across USArray Using Ambient Noise Wavefront Tracking. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 10,086.	3.4	27
43	Seismologically Observed Spatiotemporal Drainage Activity at Moulins. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 9095-9108.	3.4	11
44	Tidal modulation of ice shelf buttressing stresses. <i>Annals of Glaciology</i> , 2017, 58, 12-20.	1.4	25
45	Rayleigh-Wave H/V via Noise Cross Correlation in Southern California. <i>Bulletin of the Seismological Society of America</i> , 2017, 107, 2021-2027.	2.3	15
46	Offshore Southern California lithospheric velocity structure from noise cross-correlation functions. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 3415-3427.	3.4	24
47	Evidence for non-self-similarity of microearthquakes recorded at a Taiwan borehole seismometer array. <i>Geophysical Journal International</i> , 2016, 206, 757-773.	2.4	22
48	Subseasonal changes observed in subglacial channel pressure, size, and sediment transport. <i>Geophysical Research Letters</i> , 2016, 43, 3786-3794.	4.0	68
49	Marine ice-sheet profiles and stability under Coulomb basal conditions. <i>Journal of Glaciology</i> , 2015, 61, 205-215.	2.2	117
50	High-resolution probing of inner core structure with seismic interferometry. <i>Geophysical Research Letters</i> , 2015, 42, 10,622.	4.0	27
51	Site amplification, attenuation, and scattering from noise correlation amplitudes across a dense array in Long Beach, CA. <i>Geophysical Research Letters</i> , 2015, 42, 1360-1367.	4.0	51
52	A model for subglacial flooding through a preexisting hydrological network during the rapid drainage of supraglacial lakes. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 580-603.	2.8	7
53	Time Scale for Rapid Draining of a Surficial Lake Into the Greenland Ice Sheet. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2015, 82, .	2.2	4
54	Predicting short-period, wind-wave-generated seismic noise in coastal regions. <i>Earth and Planetary Science Letters</i> , 2015, 426, 280-292.	4.4	24

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55	Nonperturbational surface-wave inversion: A Dix-type relation for surface waves. <i>Geophysics</i> , 2015, 80, EN167-EN177.	2.6	35
56	An improved model for tidally modulated grounding-line migration. <i>Journal of Glaciology</i> , 2015, 61, 216-222.	2.2	26
57	Modeling of subglacial hydrological development following rapid supraglacial lake drainage. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 1127-1147.	2.8	60
58	The Yellowstone magmatic system from the mantle plume to the upper crust. <i>Science</i> , 2015, 348, 773-776.	12.6	220
59	Seismologically determined bedload flux during the typhoon season. <i>Scientific Reports</i> , 2015, 5, 8261.	3.3	26
60	Modeling the elastic transmission of tidal stresses to great distances inland in channelized ice streams. <i>Cryosphere</i> , 2014, 8, 2007-2029.	3.9	27
61	Green's Functions for Surface Waves in a Generic Velocity Structure. <i>Bulletin of the Seismological Society of America</i> , 2014, 104, 2573-2578.	2.3	21
62	3-D crustal structure of the western United States: application of Rayleigh-wave ellipticity extracted from noise cross-correlations. <i>Geophysical Journal International</i> , 2014, 198, 656-670.	2.4	98
63	Rupture complexity of the 1994 Bolivia and 2013 Sea of Okhotsk deep earthquakes. <i>Earth and Planetary Science Letters</i> , 2014, 385, 89-96.	4.4	96
64	Ambient noise correlation on the Amery Ice Shelf, East Antarctica. <i>Geophysical Journal International</i> , 2014, 196, 1796-1802.	2.4	35
65	Cooling magma model for deep volcanic long-period earthquakes. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 8442-8456.	3.4	42
66	A physical model for seismic noise generation by turbulent flow in rivers. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014, 119, 2209-2238.	2.8	110
67	Seismic interferometry with antipodal station pairs. <i>Geophysical Research Letters</i> , 2013, 40, 4609-4613.	4.0	51
68	Extracting seismic core phases with array interferometry. <i>Geophysical Research Letters</i> , 2013, 40, 1049-1053.	4.0	99
69	Using centroid time-delays to characterize source durations and identify earthquakes with unique characteristics. <i>Earth and Planetary Science Letters</i> , 2013, 374, 92-100.	4.4	78
70	Spurious velocity changes caused by temporal variations in ambient noise frequency content. <i>Geophysical Journal International</i> , 2013, 194, 1574-1581.	2.4	97
71	Locating a scatterer in the active volcanic area of Southern Peru from ambient noise cross-correlation. <i>Geophysical Journal International</i> , 2013, 192, 1332-1341.	2.4	22
72	Multiple fluvial processes detected by riverside seismic and infrasound monitoring of a controlled flood in the Grand Canyon. <i>Geophysical Research Letters</i> , 2013, 40, 4858-4863.	4.0	90

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73	Estimating the effect of Earth elasticity and variable water density on tsunami speeds. <i>Geophysical Research Letters</i> , 2013, 40, 492-496.	4.0	81
74	Modeling Turbulent Hydraulic Fracture Near a Free Surface. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2012, 79, .	2.2	27
75	Earthquake in a Maze: Compressional Rupture Branching During the 2012 $M_w$ 8.6 Sumatra Earthquake. <i>Science</i> , 2012, 337, 724-726.	12.6	228
76	The 2012 Sumatra great earthquake sequence. <i>Earth and Planetary Science Letters</i> , 2012, 351-352, 247-257.	4.4	99
77	A physical model for seismic noise generation from sediment transport in rivers. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	141
78	Joint inversion of Rayleigh wave phase velocity and ellipticity using USArray: Constraining velocity and density structure in the upper crust. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	95
79	The local amplification of surface waves: A new observable to constrain elastic velocities, density, and anelastic attenuation. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	52
80	Anomalously steep dips of earthquakes in the 2011 Tohoku-Oki source region and possible explanations. <i>Earth and Planetary Science Letters</i> , 2012, 353-354, 121-133.	4.4	39
81	A model for seasonal changes in GPS positions and seismic wave speeds due to thermoelastic and hydrologic variations. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	105
82	Constraints on the long-period moment-dip tradeoff for the Tohoku earthquake. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	23
83	Are secular correlations between sunspots, geomagnetic activity, and global temperature significant?. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	14
84	Quantifying the influence of sea ice on ocean microseism using observations from the Bering Sea, Alaska. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	31
85	Understanding the amplitudes of noise correlation measurements. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	95
86	An explicit relationship between time-domain noise correlation and spatial autocorrelation (SPAC) results. <i>Geophysical Journal International</i> , 2010, , no-no.	2.4	40
87	The relationship between noise correlation and the Green's function in the presence of degeneracy and the absence of equipartition. <i>Geophysical Journal International</i> , 2010, 182, 1509-1514.	2.4	44
88	Averaging and sampling for magnetic-observatory hourly data. <i>Annales Geophysicae</i> , 2010, 28, 2079-2096.	1.6	4
89	A model for turbulent hydraulic fracture and application to crack propagation at glacier beds. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	126
90	On establishing the accuracy of noise tomography travel-time measurements in a realistic medium. <i>Geophysical Journal International</i> , 2009, 178, 1555-1564.	2.4	165

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91	Iceâ€front variation and tidewater behavior on Helheim and Kangerdlugssuaq Glaciers, Greenland. Journal of Geophysical Research, 2008, 113, .	3.3	147
92	Possible mechanisms for glacial earthquakes. Journal of Geophysical Research, 2008, 113, .	3.3	54
93	Star patterns on lake ice. Physical Review E, 2007, 75, 066105.	2.1	5
94	Theoretical constraints on true polar wander. Journal of Geophysical Research, 2007, 112, .	3.3	75
95	Analysis of glacial earthquakes. Journal of Geophysical Research, 2007, 112, .	3.3	73
96	Seasonality and Increasing Frequency of Greenland Glacial Earthquakes. Science, 2006, 311, 1756-1758.	12.6	144
97	Multiple CMT source analysis of the 2004 Sumatra earthquake. Geophysical Research Letters, 2005, 32, .	4.0	156
98	The morning glory wave of southern California. Journal of Geophysical Research, 2004, 109, .	3.3	11
99	The Relationship Between Cross Correlations and Greenâ€™s Functions in Ambient Noise Interferometry with Bayesian Constraints. Geophysical Journal International, 0, , .	2.4	2