John E Vidale

List of Publications by Year
in descending order

144 papers	8,978 citations	34076 52 h-index	43868 91 g-index
146 all docs	146 docs citations	146 times ranked	4412 citing authors

#	Article	IF	Citations
1	Earth's inner core rotation, 1971 to 1974, illuminated by inner-core scattered waves. Earth and Planetary Science Letters, 2022, 577, 117214.	1.8	8
2	Tidal modulation of seismicity at the Coso geothermal field. Earth and Planetary Science Letters, 2022, 579, 117335.	1.8	11
3	An initial map of fine-scale heterogeneity in the Earthâ€™s inner core. Nature Geoscience, 2022, 15, 240-244.	5.4	7
4	Graduate studies with Donald V. Helmberger. Earthquake Science, 2022, 35, 17-18.	0.4	0
5	Seismological observation of Earthâ€™s oscillating inner core. Science Advances, 2022, 8, .	4.7	9
6	Benefit-Cost Analysis for Earthquake Early Warning in Washington State. Natural Hazards Review, 2020, 21, .	0.8	12
7	Basin Amplification Effects in the Puget Lowland, Washington, from Strong-Motion Recordings and 3D Simulations. Bulletin of the Seismological Society of America, 2020, 110, 534-555.	1.1	14
8	Very Slow Rotation of Earth's Inner Core From 1971 to 1974. Geophysical Research Letters, 2019, 46, 9483-9488.	1.5	16
9	<i>Erratum to</i> Broadband Synthetic Seismograms for Magnitude 9 Earthquakes on the Cascadia Megathrust Based on 3D Simulations and Stochastic Synthetics, Part 1: Methodology and Overall Results. Bulletin of the Seismological Society of America, 2019, 109, 487-487.	1.1	0
10	Sourceâ€Dependent Amplification of Earthquake Ground Motions in Deep Sedimentary Basins. Geophysical Research Letters, 2019, 46, 6443-6450.	1.5	47
11	Deep Longâ€Period Earthquakes Beneath Mount St. Helens: Their Relationship to Tidal Stress, Episodic Tremor and Slip, and Regular Earthquakes. Geophysical Research Letters, 2018, 45, 2241-2247.	1.5	15
12	Catalog of Offshore Seismicity in Cascadia: Insights Into the Regional Distribution of Microseismicity and its Relation to Subduction Processes. Journal of Geophysical Research: Solid Earth, 2018, 123, 641-652.	1.4	25
13	Gâ€FAST Earthquake Early Warning Potential for Great Earthquakes in Chile. Seismological Research Letters, 2018, 89, 542-556.	0.8	35
14	Broadband Synthetic Seismograms for Magnitude 9 Earthquakes on the Cascadia Megathrust Based on 3D Simulations and Stochastic Synthetics, Part 2: Rupture Parameters and Variability. Bulletin of the Seismological Society of America, 2018, 108, 2370-2388.	1.1	62
15	Broadband Synthetic Seismograms for Magnitude 9 Earthquakes on the Cascadia Megathrust Based on 3D Simulations and Stochastic Synthetics, Part 1: Methodology and Overall Results. Bulletin of the Seismological Society of America, 2018, 108, 2347-2369.	1.1	112
16	Developing a Warning System for Inbound Tsunamis from the Cascadia Subduction Zone. , 2018, , .		2
17	Improving the Hawaiian Seismic Network for Earthquake Early Warning. Seismological Research Letters, 2017, 88, 326-334.	0.8	1
18	<i>FOCUSING THE LENS</i> OFFSHORE CASCADIA â€“ RECENT AND EMERGING EFFORTS TO EXPLORE PLATE BOUNDARY BEHAVIOR AND UNDERSTAND OFFSHORE HAZARDS. , 2017, , .		0

#	Article	IF	Citations
19	3-D SIMULATIONS OF M9 EARTHQUAKES ON THE CASCADIA MEGATHRUST: KEY PARAMETERS AND CONSTRAINTS FROM PALEOSEISMIC EVIDENCE. , 2017, , .		0
20	Designing an offshore geophysical network in the Pacific Northwest for earthquake and tsunami early warning and hazard research. , 2016, , .		1
21	Earthquake Early Warning: ShakeAlert in the Pacific Northwest. Bulletin of the Seismological Society of America, 2016, 106, 1875-1886.	1.1	20
22	Perceptions of earthquake early warnings on the U.S. West Coast. International Journal of Disaster Risk Reduction, 2016, 20, 112-122.	1.8	45
23	Seismic evidence for a cold serpentinized mantle wedge beneath Mount St Helens. Nature Communications, 2016, 7, 13242.	5.8	42
24	Demonstration of the Cascadia Gâ€FAST Geodetic Earthquake Early Warning System for the Nisqually, Washington, Earthquake. Seismological Research Letters, 2016, 87, 930-943.	0.8	72
25	Planning for a Subduction Zone Observatory. Eos, 2016, 97, .	0.1	2
26	Changes in seismic velocity during the first 14 months of the 2004â€"2008 eruption of Mount St. Helens, Washington. Journal of Geophysical Research: Solid Earth, 2015, 120, 6226-6240.	1.4	22
27	How to Recognize a "Beast Quake" and a "Dance Quake". Seismological Research Letters, 2015, 86, 1006-1008.	0.8	4
28	Triggering of tremor and inferred slow slip by small earthquakes at the Nankai subduction zone in southwest Japan. Geophysical Research Letters, 2014, 41, 8053-8060.	1.5	24
29	A continuous record of intereruption velocity change at Mount St. Helens from coda wave interferometry. Journal of Geophysical Research: Solid Earth, 2014, 119, 2199-2214.	1.4	36
30	Deep longâ€period earthquakes west of the volcanic arc in Oregon: Evidence of serpentine dehydration in the foreâ€arc mantle wedge. Geophysical Research Letters, 2014, 41, 370-376.	1.5	19
31	A Scenario Study of Seismically Induced Landsliding in Seattle Using Broadband Synthetic Seismograms. Bulletin of the Seismological Society of America, 2013, 103, 2971-2992.	1.1	9
32	Strongly gliding harmonic tremor during the 2009 eruption of Redoubt Volcano. Journal of Volcanology and Geothermal Research, 2013, 259, 89-99.	0.8	96
33	Evidence for tidal triggering of highâ€amplitude rapid tremor reversals and tremor streaks in northern Cascadia. Geophysical Research Letters, 2013, 40, 4254-4259.	1.5	29
34	Shallow repeating seismic events under an alpine glacier at Mount Rainier, Washington, USA. Journal of Glaciology, 2013, 59, 345-356.	1.1	26
35	Transient and Long-Term Changes in Seismic Response of the Natural Resources Building, Olympia, Washington, due to Earthquake Shaking. Journal of Earthquake Engineering, 2012, 16, 607-622.	1.4	12
36	Slow slip: A new kind of earthquake. Physics Today, 2012, 65, 38-43.	0.3	92

#	Article	IF	Citations
37	Earthquake spectra and nearâ€source attenuation in the Cascadia subduction zone. Journal of Geophysical Research, 2012, 117, .	3.3	20
38	Tremor asperities in the transition zone control evolution of slow earthquakes. Journal of Geophysical Research, 2012, 117, .	3.3	60
39	Tiny intraplate earthquakes triggered by nearby episodic tremor and slip in Cascadia. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	1.0	25
40	Cascadia tremor spectra: Low corner frequencies and earthquake-like high-frequency falloff. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	1.0	24
41	Basin Shear-Wave Velocities beneath Seattle, Washington, from Noise-Correlation Rayleigh Waves. Bulletin of the Seismological Society of America, 2011, 101, 2162-2175.	1.1	22
42	Deep long-period earthquakes beneath Washington and Oregon volcanoes. Journal of Volcanology and Geothermal Research, 2011, 200, 116-128.	0.8	69
43	Italian quake: critics' logic is questionable. Nature, 2011, 478, 324-324.	13.7	1
44	Tremor bands sweep Cascadia. Geophysical Research Letters, 2010, 37, .	1.5	49
45	Rapid, continuous streaking of tremor in Cascadia. Geochemistry, Geophysics, Geosystems, 2010, 11, .	1.0	95
46	An earthquakeâ€like magnitudeâ€frequency distribution of slow slip in northern Cascadia. Geophysical Research Letters, 2010, 37, .	1.5	43
47	Cascadia Tremor Located Near Plate Interface Constrained by <i>S</i> Minus <i>P</i> Wave Times. Science, 2009, 323, 620-623.	6.0	90
48	Seismic and geodetic evidence for extensive, long-lived fault damage zones. Geology, 2009, 37, 315-318.	2.0	222
49	Tremor patches in Cascadia revealed by seismic array analysis. Geophysical Research Letters, 2009, 36, .	1.5	68
50	Seismic wave triggering of nonvolcanic tremor, episodic tremor and slip, and earthquakes on Vancouver Island. Journal of Geophysical Research, 2009, 114, .	3.3	97
51	Remote triggering of tremor along the San Andreas Fault in central California. Journal of Geophysical Research, 2009, 114, .	3.3	149
52	Complex nonvolcanic tremor near Parkfield, California, triggered by the great 2004 Sumatra earthquake. Journal of Geophysical Research, 2009, 114, .	3.3	74
53	Innerâ€core fineâ€scale structure from scattered waves recorded by LASA. Journal of Geophysical Research, 2008, 113, .	3.3	25
54	Strong tremor near Parkfield, CA, excited by the 2002 Denali Fault earthquake. Geophysical Research Letters, 2008, 35, .	1.5	61

#	Article	IF	Citations
55	"Seismic Raves" raises a question. Seismological Research Letters, 2008, 79, 769-769.	0.8	1
56	Tidal Modulation of Nonvolcanic Tremor. Science, 2008, 319, 186-189.	6.0	228
57	Widespread Triggering of Nonvolcanic Tremor in California. Science, 2008, 319, 173-173.	6.0	137
58	Broadband Sensor Nonlinearity during Moderate Shaking. Bulletin of the Seismological Society of America, 2008, 98, 1595-1601.	1.1	15
59	Seismic velocity variations on the San Andreas fault caused by the 2004 M6 Parkfield Earthquake and their implications. Earth, Planets and Space, 2007, 59, 21-31.	0.9	35
60	Comment on â€œTidal synchronicity of the 26 December 2004 Sumatran earthquake and its aftershocksâ€• by R. G. M. Crockett et al.. Geophysical Research Letters, 2007, 34, .	1.5	8
61	Seismicity rate immediately before and after main shock rupture from high-frequency waveforms in Japan. Journal of Geophysical Research, 2007, 112, .	3.3	139
62	Teleseismic <i>P</i> wave imaging of the 26 December 2004 Sumatraâ€Andaman and 28 March 2005 Sumatra earthquake ruptures using the Hiâ€net array. Journal of Geophysical Research, 2007, 112, .	3.3	111
63	[Comment on â€œNatural radioactivity, earthquakes, and the ionosphereâ€•by S.A. Pulinets] Earthquake prediction: Facts versus hypotheses. Eos, 2007, 88, 255-255.	0.1	0
64	Relationships in a slow slip. Nature, 2007, 447, 49-50.	13.7	5
65	Non-volcanic tremor driven by large transient shear stresses. Nature, 2007, 448, 579-582.	13.7	221
66	A survey of 71 earthquake bursts across southern California: Exploring the role of pore fluid pressure fluctuations and aseismic slip as drivers. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	248
67	Anomalous early aftershock decay rate of the 2004 Mw6.0 Parkfield, California, earthquake. Geophysical Research Letters, 2006, 33, .	1.5	91
68	Seismic Evidence for Rock Damage and Healing on the San Andreas Fault Associated with the 2004 M 6.0 Parkfield Earthquake. Bulletin of the Seismological Society of America, 2006, 96, S349-S363.	1.1	159
69	Crustal earthquake bursts in California and Japan: Their patterns and relation to volcanoes. Geophysical Research Letters, 2006, 33, .	1.5	58
70	Anisotropy in the Shallow Crust Observed around the San Andreas Fault Before and After the 2004 M 6.0 Parkfield Earthquake. Bulletin of the Seismological Society of America, 2006, 96, S364-S375.	1.1	59
71	Shadowed by the Glare of 1906 are Faceless Future Dangers. Seismological Research Letters, 2006, 77, 419-420.	0.8	0
72	Extent, duration and speed of the 2004 Sumatraâ€“Andaman earthquake imaged by the Hi-Net array. Nature, 2005, 435, 933-936.	13.7	574

#	Article	IF	Citations
73	Evidence for inner-core rotation from possible changes with time in PKP coda. Geophysical Research Letters, 2005, 32, .	1.5	25
74	Systematic variations in recurrence interval and moment of repeating aftershocks. Geophysical Research Letters, 2005, 32, .	1.5	59
75	Earth Tides Can Trigger Shallow Thrust Fault Earthquakes. Science, 2004, 306, 1164-1166.	6.0	298
76	Earthquakes and the Moon: Syzygy Predictions Fail the Test. Seismological Research Letters, 2004, 75, 607-612.	0.8	11
77	Low-velocity damaged structure of the San Andreas Fault at Parkfield from fault zone trapped waves. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	99
78	Reflection properties of the core-mantle boundary from global stacks ofPcPandScP. Journal of Geophysical Research, 2004, 109, .	3.3	6
79	Converting advances in seismology into earthquake science. Eos, 2004, 85, 3.	0.1	2
80	Thermal and chemical variations in subcrustal cratonic lithosphere: evidence from crustal isostasy. Lithos, 2003, 71, 185-193.	0.6	27
81	Damage to the shallow Landers fault from the nearby Hector Mine earthquake. Nature, 2003, 421, 524-526.	13.7	163
82	Survey of precursors toPâ€²Pâ€²: Fine structure of mantle discontinuities. Journal of Geophysical Research, 2003, 108, ETG 7-1-ETG 7-10.	3.3	32
83	Multiple-fault rupture of theM7.1 Hector Mine, California, earthquake from fault zone trapped waves. Journal of Geophysical Research, 2003, 108, .	3.3	20
84	Waveform analysis of the 1999 Hector Mine foreshock sequence. Geophysical Research Letters, 2003, 30, .	1.5	11
85	Near-fault anisotropy following the Hector Mine earthquake. Journal of Geophysical Research, 2003, 108, .	3.3	78
86	Postseismic Fault Healing on the Rupture Zone of the 1999 M 7.1 Hector Mine, California, Earthquake. Bulletin of the Seismological Society of America, 2003, 93, 854-869.	1.1	97
87	The 1999 Hector Mine Earthquake: The Dynamics of a Branched Fault System. Bulletin of the Seismological Society of America, 2003, 93, 2459-2476.	1.1	53
88	Study of the 1999 M 7.1 Hector Mine, California, Earthquake Fault Plane by Trapped Waves. Bulletin of the Seismological Society of America, 2002, 92, 1318-1332.	1.1	49
89	Something wicked this way comes: Clues from foreshocks and earthquake nucleation. Eos, 2001, 82, 68-68.	0.1	15
90	Absence of Short-Period ULVZ Precursors to PcP and ScP from two Regions of the CMB. Geophysical Research Letters, 2001, 28, 387-390.	1.5	36

#	Article	IF	Citations
91	Unsuccessful initial search for a midmantle chemical boundary with seismic arrays. Geophysical Research Letters, 2001, 28, 859-862.	1.5	45
92	Healing of the shallow fault zone from 1994-1998 After the 1992M7.5 Landers, California, Earthquake. Geophysical Research Letters, 2001, 28, 2999-3002.	1.5	62
93	GEOPHYSICS: Peeling Back the Layers in Earth's Mantle. Science, 2001, 294, 313-313.	6.0	5
94	Shallow Seismic Profiling of the Exhumed Punchbowl Fault Zone, Southern California. Bulletin of the Seismological Society of America, 2001, 91, 1820-1830.	1.1	10
95	Fine-scale heterogeneity in the Earth's inner core. Nature, 2000, 404, 273-275.	13.7	153
96	Slow differential rotation of the Earth's inner core indicated by temporal changes in scattering. Nature, 2000, 405, 445-448.	13.7	107
97	Depth-dependent structure of the Landers fault zone from trapped waves generated by aftershocks. Journal of Geophysical Research, 2000, 105, 6237-6254.	3.3	95
98	ScP; A probe of ultralow velocity zones at the base of the mantle. Geophysical Research Letters, 1999, 26, 377-380.	1.5	40
99	Shallow structure of the Landers Fault Zone from explosion-generated trapped waves. Journal of Geophysical Research, 1999, 104, 20257-20275.	3.3	41
100	Evidence for partial melt at the coreâ€“mantle boundary north of Tonga from the strong scattering of seismic waves. Nature, 1998, 391, 682-685.	13.7	158
101	Mantle discontinuities under southern Africa from precursors toPâ€² Pâ€²df. Geophysical Research Letters, 1998, 25, 571-574.	1.5	29
102	A delineation of the Nojima fault ruptured in theM7.2 Kobe, Japan, earthquake of 1995 using fault zone trapped waves. Journal of Geophysical Research, 1998, 103, 7247-7263.	3.3	60
103	Absence of earthquake correlation with Earth tides: An indication of high preseismic fault stress rate. Journal of Geophysical Research, 1998, 103, 24567-24572.	3.3	208
104	Duration of deep earthquakes determined by stacking of Global Seismograph Network seismograms. Journal of Geophysical Research, 1998, 103, 21059-21065.	3.3	16
105	Time functions of deep earthquakes from broadband and short-period stacks. Journal of Geophysical Research, 1998, 103, 29895-29913.	3.3	71
106	Evidence of Shallow Fault Zone Strengthening After the 1992M7.5 Landers, California, Earthquake. Science, 1998, 279, 217-219.	6.0	188
107	Complex scattering within Dâ€³ observed on the very dense Los Angeles Region Seismic Experiment Passive Array. Geophysical Research Letters, 1997, 24, 1855-1858.	1.5	17
108	Reply [to â€œA discussion on â€˜The 410-km-depth Discontinuity: A sharpness estimate from near-critical reflections' by Vidale et al.â€. Geophysical Research Letters, 1996, 23, 2575-2575.	1.5	0

#	ARTICLE	IF	CITATIONS
109	Do Big and Little Earthquakes Start Differently?. Science, 1996, 271, 953-954.	6.0	4
110	Near-field deformation seen on distant broadband seismograms. Geophysical Research Letters, 1995, 22, 1-4.	1.5	29
111	The 410-km-depth discontinuity: A sharpness estimate from near-critical reflections. Geophysical Research Letters, 1995, 22, 2557-2560.	1.5	49
112	Fault healing inferred from time dependent variations in source properties of repeating earthquakes. Geophysical Research Letters, 1995, 22, 3095-3098.	1.5	182
113	Variations in rupture process with recurrence interval in a repeated small earthquake. Nature, 1994, 368, 624-626.	13.7	198
114	A snapshot of whole mantle flow. Nature, 1994, 370, 16-17.	13.7	2
115	A mystery in the mantle. Nature, 1994, 371, 288-288.	13.7	2
116	Using regional seismic networks to study the Earth's deep interior. Eos, 1994, 75, 225.	0.1	3
117	Fine Structure of the Landers Fault Zone: Segmentation and the Rupture Process. Science, 1994, 265, 367-370.	6.0	94
118	The Temporal Distribution of Seismic Radiation During Deep Earthquake Rupture. Science, 1994, 265, 771-774.	6.0	30
119	The depth dependence of earthquake duration and implications for rupture mechanisms. Nature, 1993, 365, 45-47.	13.7	79
120	Sharpness of upper-mantle discontinuities determined from high-frequency reflections. Nature, 1993, 365, 147-150.	13.7	224
121	Seismological mapping of fine structure near the base of the Earth's mantle. Nature, 1993, 361, 529-532.	13.7	77
122	Phase Boundaries and Mantle Convection. Science, 1993, 261, 1401-1402.	6.0	4
123	Tomography without rays. Bulletin of the Seismological Society of America, 1993, 83, 509-528.	1.1	64
124	Upper-mantle seismic discontinuities and the thermal structure of subduction zones. Nature, 1992, 356, 678-683.	13.7	193
125	A sharp and flat section of the coreâ€“mantle boundary. Nature, 1992, 359, 627-629.	13.7	70
126	Directional site resonances and the influence of nearâ€surface geology on ground motion. Geophysical Research Letters, 1991, 18, 901-904.	1.5	10

#	Article	IF	Citations
127	Waveform effects of a metastable olivine tongue in subducting slabs. Geophysical Research Letters, 1991, 18, 2201-2204.	1.5	27
128	Investigation of deep slab structure using longâ€period <i>S</i> waves. Journal of Geophysical Research, 1991, 96, 16349-16367.	3.3	28
129	Directional Site Resonances Observed from the 1 October 1987 Whittier Narrows, California, Earthquake and the 4 October Aftershock. Earthquake Spectra, 1991, 7, 107-125.	1.6	25
130	Accurate finiteâ€difference calculation of WKBJ traveltimes and amplitudes. , 1991, , .		4
131	Array analysis of reflector heterogeneity. Geophysics, 1991, 56, 565-571.	1.4	0
132	Rapid calculation of seismic amplitudes. Geophysics, 1990, 55, 1504-1507.	1.4	44
133	Finiteâ€difference calculation of traveltimes in three dimensions. Geophysics, 1990, 55, 521-526.	1.4	594
134	Comment on â€œA comparison of finite-difference and fourier method calculations of synthetic seismogramsâ€• Bulletin of the Seismological Society of America, 1990, 80, 493-495.	1.1	16
135	Influence of focal mechanism on peak accelerations of strong motions of the Whittier Narrows, California, earthquake and an aftershock. Journal of Geophysical Research, 1989, 94, 9607-9613.	3.3	51
136	Wave Propagation in Subducted Lithospheric Slabs. , 1989, , 139-155.		6
137	Finiteâ€difference calculation of traveltimes in 3â€D. , 1989, , .		1
138	Seismic observation of a highâ€velocity slab 1200â€"1600 km in depth. Geophysical Research Letters, 1988, 15, 369-372.	1.5	32
139	Array analysis of reflector heterogeneity. , 1988, , .		0
140	Waveform effects of a highâ€velocity, subducted slab. Geophysical Research Letters, 1987, 14, 542-545.	1.5	77
141	Path Effects in Strong Motion Seismology. , 1987, , 267-319.		21
142	A stable freeâ€surface boundary condition for twoâ€dimensional elastic finiteâ€difference wave simulation. Geophysics, 1986, 51, 2247-2249.	1.4	51
143	The October 1980 earthquake sequence near the New Hebrides. Geophysical Research Letters, 1983, 10, 1137-1140.	1.5	24
144	Evaluating a Kinematic Method for Generating Broadband Ground Motions for Great Subduction Zone Earthquakes: Application to the 2003 <i>M</i> _w Â8.3 Tokachiâ€Oki Earthquake. Bulletin of the Seismological Society of America, 0, , .	1.1	9