Tom Parsons

List of Publications by Year
in descending order

131 papers	6,638 citations	76196 40 h-index	66788 78 g-index
134 all docs	134 docs citations	134 times ranked	4578 citing authors

#	Article	IF	Citations
1	Heightened Odds of Large Earthquakes Near Istanbul: An Interaction-Based Probability Calculation. Science, 2000, 288, 661-665.	6.0	453
2	Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3)--The Time-Independent Model. Bulletin of the Seismological Society of America, 2014, 104, 1122-1180.	1.1	424
3	Stress changes from the 2008 Wenchuan earthquake and increased hazard in the Sichuan basin. Nature, 2008, 454, 509-510.	13.7	376
4	Probabilistic Analysis of Tsunami Hazards*. Natural Hazards, 2006, 37, 277-314.	1.6	285
5	Recalculated probability ofMâ‰¥ 7 earthquakes beneath the Sea of Marmara, Turkey. Journal of Geophysical Research, 2004, 109, .	3.3	249
6	Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2). Bulletin of the Seismological Society of America, 2009, 99, 2053-2107.	1.1	239
7	Probabilistic tsunami hazard assessment at Seaside, Oregon, for nearâ€•and farâ€field seismic sources. Journal of Geophysical Research, 2009, 114, .	3.3	211
8	Stress sensitivity of fault seismicity: A comparison between limited-offset oblique and major strike-slip faults. Journal of Geophysical Research, 1999, 104, 20183-20202.	3.3	192
9	Longâ€Term Timeâ€Dependent Probabilities for the Third Uniform California Earthquake Rupture Forecast (UCERF3). Bulletin of the Seismological Society of America, 2015, 105, 511-543.	1.1	184
10	Probabilistic Tsunami Hazard Analysis: Multiple Sources and Global Applications. Reviews of Geophysics, 2017, 55, 1158-1198.	9.0	170
11	Seismic evidence for widespread serpentinized forearc upper mantle along the Cascadia margin. Geology, 2003, 31, 267.	2.0	157
12	Global ubiquity of dynamic earthquake triggering. Nature Geoscience, 2008, 1, 375-379.	5.4	157
13	Global Omori law decay of triggered earthquakes: Large aftershocks outside the classical aftershock zone. Journal of Geophysical Research, 2002, 107, ESE 9-1-ESE 9-20.	3.3	142
14	Tectonic implications of postâ€"30 Ma Pacific and North American relative plate motions. Bulletin of the Geological Society of America, 1995, 107, 937-0959.	1.6	138
15	Does magmatism influence low-angle normal faulting?. Geology, 1993, 21, 247.	2.0	134
16	Mantle plume influence on the Neogene uplift and extension of the U.S. western Cordillera?. Geology, 1994, 22, 83.	2.0	111
17	The Role of Magma Overpressure in Suppressing Earthquakes and Topography: Worldwide Examples. Science, 1991, 253, 1399-1402.	6.0	104
18	Upper crustal structure in Puget Lowland, Washington: Results from the 1998 Seismic Hazards Investigation in Puget Sound. Journal of Geophysical Research, 2001, 106, 13541-13564.	3.3	103

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19	New seismic images of the Cascadia subduction zone from cruise SO108 â€” ORWELL. Tectonophysics, 1998, 293, 69-84.	0.9	100
20	Host rock rheology controls on the emplacement of tabular intrusions: Implications for underplating of extending crust. Tectonics, 1992, 11, 1348-1356.	1.3	87
21	Significance of stress transfer in time-dependent earthquake probability calculations. Journal of Geophysical Research, 2005, 110, .	3.3	86
22	Static-stress impact of the 1992 Landers earthquake sequence on nucleation and slip at the site of the 1999 M=7.1 Hector Mine earthquake, southern California. Geophysical Research Letters, 2000, 27, 1949-1952.	1.5	85
23	Threeâ€dimensional model of Hellenic Arc deformation and origin of the Cretan uplift. Journal of Geophysical Research, 2009, 114, .	3.3	78
24	A Synoptic View of the Third Uniform California Earthquake Rupture Forecast (UCERF3). Seismological Research Letters, 2017, 88, 1259-1267.	0.8	78
25	A new view into the Cascadia subduction zone and volcanic arc: Implications for earthquake hazards along the Washington margin. Geology, 1998, 26, 199.	2.0	73
26	A hypothesis for delayed dynamic earthquake triggering. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	73
27	Static stress change from the 8 October, 2005 M = 7.6 Kashmir earthquake. Geophysical Research Letters, 2006, 33, .	1.5	69
28	Monte Carlo method for determining earthquake recurrence parameters from short paleoseismic catalogs: Example calculations for California. Journal of Geophysical Research, 2008, 113, .	3.3	65
29	Absence of remotely triggered large earthquakes beyond the mainshock region. Nature Geoscience, 2011, 4, 312-316.	5.4	63
30	Post-1906 stress recovery of the San Andreas fault system calculated from three-dimensional finite element analysis. Journal of Geophysical Research, 2002, 107, ESE 3-1.	3.3	58
31	Tsunami Probability in the Caribbean Region. Pure and Applied Geophysics, 2008, 165, 2089-2116.	0.8	56
32	More than one way to stretch: a tectonic model for extension along the plume track of the Yellowstone hotspot and adjacent Basin and Range Province. Tectonics, 1998, 17, 221-234.	1.3	54
33	Is There a Basis for Preferring Characteristic Earthquakes over a Gutenberg-Richter Distribution in Probabilistic Earthquake Forecasting?. Bulletin of the Seismological Society of America, 2009, 99, 2012-2019.	1.1	54
34	Three-dimensional seismic velocity structure of the San Francisco Bay area. Journal of Geophysical Research, 2000, 105, 13859-13874.	3.3	50
35	The Making of the NEAM Tsunami Hazard Model 2018 (NEAMTHM18). Frontiers in Earth Science, 2021, 8, .	0.8	50
36	Crustal structure of the Colorado Plateau, Arizona: Application of new long-offset seismic data analysis techniques. Journal of Geophysical Research, 1996, 101, 11173-11194.	3.3	49

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37	Three-dimensional velocity structure of Siletzia and other accreted terranes in the Cascadia forearc of Washington. Journal of Geophysical Research, 1999, 104, 18015-18039.	3.3	48
38	Subsurface Geometry and Evolution of the Seattle Fault Zone and the Seattle Basin, Washington. Bulletin of the Seismological Society of America, 2002, 92, 1737-1753.	1.1	47
39	The global aftershock zone. Tectonophysics, 2014, 618, 1-34.	0.9	47
40	<i>M</i>â€‰â‰¥â€‰7 earthquake rupture forecast and timeâ€dependent probability for the sea of Marmara region, Turkey. Journal of Geophysical Research: Solid Earth, 2016, 121, 2679-2707.	1.4	46
41	Assessment of source probabilities for potential tsunamis affecting the U.S. Atlantic coast. Marine Geology, 2009, 264, 98-108.	0.9	44
42	Source and progression of a submarine landslide and tsunami: The 1964 Great Alaska earthquake at Valdez. Journal of Geophysical Research: Solid Earth, 2014, 119, 8502-8516.	1.4	42
43	Crustal and upper mantle velocity structure of the Salton Trough, southeast California. Tectonics, 1996, 15, 456-471.	1.3	40
44	Undersampling power-law size distributions: effect on the assessment of extreme natural hazards. Natural Hazards, 2014, 72, 565-595.	1.6	40
45	On nearâ€source earthquake triggering. Journal of Geophysical Research, 2009, 114, .	3.3	37
46	Comparison of characteristic and Gutenberg-Richter models for time-dependent MÂâ‰¥ 7.9 earthquake probability in the Nankai-Tokai subduction zone, Japan. Geophysical Journal International, 2012, 190, 1673-1688.	1.0	35
47	Tectonic stressing in California modeled from GPS observations. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	34
48	Three-dimensional upper crustal velocity structure beneath San Francisco Peninsula, California. Journal of Geophysical Research, 1997, 102, 5473-5490.	3.3	33
49	Distribution of tsunami interevent times. Geophysical Research Letters, 2008, 35, .	1.5	33
50	The active southwest margin of the Colorado Plateau: Uplift of mantle origin. Bulletin of the Geological Society of America, 1995, 107, 139.	1.6	32
51	A new probabilistic seismic hazard assessment for greater Tokyo. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1965-1988.	1.6	32
52	Seismic survey probes urban earthquake hazards in Pacific Northwest. Eos, 1999, 80, 13.	0.1	31
53	A global search for stress shadows. Journal of Geophysical Research, 2008, 113, .	3.3	31
54	Earthquake recurrence on the south Hayward fault is most consistent with a time dependent, renewal process. Geophysical Research Letters, 2008, 35, .	1.5	31

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55	Assessing historical rate changes in global tsunami occurrence. Geophysical Journal International, 2011, 187, 497-509.	1.0	31
56	Insights into the kinematic Cenozoic evolution of the Basin and Range-Colorado Plateau transition from coincident seismic refraction and reflection data. Bulletin of the Geological Society of America, 1994, 106, 747-759.	1.6	29
57	Dipping San Andreas and Hayward faults revealed beneath San Francisco Bay, California. Geology, 1999, 27, 839.	2.0	29
58	Seismic constraints on the nature of lower crustal reflectors beneath the extending Southern Transition Zone of the Colorado Plateau, Arizona. Journal of Geophysical Research, 1992, 97, 12391-12407.	3.3	28
59	Structure and Mechanics of the Hayward-Rodgers Creek Fault Step-Over, San Francisco Bay, California. Bulletin of the Seismological Society of America, 2003, 93, 2187-2200.	1.1	28
60	Evaluation of static stress change forecasting with prospective and blind tests. Geophysical Journal International, 2012, 188, 1425-1440.	1.0	28
61	Nucleation speed limit on remote fluid-induced earthquakes. Science Advances, 2017, 3, e1700660.	4.7	28
62	Persistent earthquake clusters and gaps from slip on irregular faults. Nature Geoscience, 2008, 1, 59-63.	5.4	27
63	Comparative evaluation of physicsâ€based and statistical forecasts in Northern California. Journal of Geophysical Research: Solid Earth, 2013, 118, 6219-6240.	1.4	27
64	Were Global M>=8.3 Earthquake Time Intervals Random between 1900 and 2011?. Bulletin of the Seismological Society of America, 2012, 102, 1583-1592.	1.1	26
65	Stress, Distance, Magnitude, and Clustering Influences on the Success or Failure of an Aftershock Forecast: The 2013 M 6.6 Lushan Earthquake and Other Examples. Seismological Research Letters, 2014, 85, 44-51.	0.8	26
66	A Simple Algorithm for Sequentially Incorporating Gravity Observations in Seismic Traveltime Tomography. International Geology Review, 2001, 43, 1073-1086.	1.1	25
67	The Predictive Skills of Elastic Coulomb Rate-and-State Aftershock Forecasts during the 2019 Ridgecrest, California, Earthquake Sequence. Bulletin of the Seismological Society of America, 2020, 110, 1736-1751.	1.1	25
68	Triggering of tsunamigenic aftershocks from large strike-slip earthquakes: Analysis of the November 2000 New Ireland earthquake sequence. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	23
69	Characteristic Earthquake Magnitude Frequency Distributions on Faults Calculated From Consensus Data in California. Journal of Geophysical Research: Solid Earth, 2018, 123, 10,761.	1.4	23
70	Chapter 7 The basin and range province. Developments in Geotectonics, 2006, 25, 277-XV.	0.3	20
71	A physics-based earthquake simulator and its application to seismic hazard assessment in Calabria (Southern Italy) region. Acta Geophysica, 2017, 65, 243-257.	1.0	20
72	Vertical deformation associated with normal fault systems evolved over coseismic, postseismic, and multiseismic periods. Journal of Geophysical Research: Solid Earth, 2016, 121, 2153-2173.	1.4	19

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73	Testing Earthquake Links in Mexico From 1978 to the 2017 MÂ= Â8.1 Chiapas and MÂ= Â7.1 Puebla Shocks. Geophysical Research Letters, 2018, 45, 708-714.	1.5	19
74	Geologic processes of accretion in the Cascadiasubduction zone west of Washington State. Journal of Geodynamics, 1999, 27, 277-288.	0.7	17
75	A New Technique to Calculate Earthquake Stress Transfer and to Probe the Physics of Aftershocks. Bulletin of the Seismological Society of America, 2020, 110, 863-873.	1.1	17
76	The Weight of Cities: Urbanization Effects on Earth's Subsurface. AGU Advances, 2021, 2, e2020AV000277.	2.3	17
77	Stressâ€based aftershock forecasts made within 24â€‰h postmain shock: Expected north San Francisco Bay area seismicity changes after the 2014 <i>M</i>â€‰=â€‰6.0 West Napa earthquake. Geophysical Research Letters, 2014, 41, 8792-8799.	1.5	16
78	Unraveling the apparent magnitude threshold of remote earthquake triggering using full wavefield surface wave simulation. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	15
79	Estimation of submarine mass failure probability from a sequence of deposits with age dates. , 2013, 9, 287-298.		15
80	Missing link between the Hayward and Rodgers Creek faults. Science Advances, 2016, 2, e1601441.	4.7	15
81	Vertical tectonic deformation associated with the San Andreas fault zone offshore of San Francisco, California. Tectonophysics, 2008, 457, 209-223.	0.9	14
82	Possible Earthquake Rupture Connections on Mapped California Faults Ranked by Calculated Coulomb Linking Stresses. Bulletin of the Seismological Society of America, 2012, 102, 2667-2676.	1.1	14
83	Velocities of southern Basin and Range xenoliths: Insights on the nature of lower crustal reflectivity and composition. Geology, 1995, 23, 129.	2.0	13
84	The 2010â€“2014.3 global earthquake rate increase. Geophysical Research Letters, 2014, 41, 4479-4485.	1.5	13
85	Estimating the Empirical Probability of Submarine Landslide Occurrence. , 2010, , 377-386.		13
86	Can footwall unloading explain late Cenozoic uplift of the Sierra Nevada crest?. International Geology Review, 2009, 51, 986-993.	1.1	12
87	New Imaging of Submarine Landslides from the 1964 Earthquake Near Whittier, Alaska, and a Comparison to Failures in Other Alaskan Fjords. Advances in Natural and Technological Hazards Research, 2014, , 361-370.	1.1	12
88	Forecast experiment: Do temporal and spatialbvalue variations along the Calaveras fault portendMâ‰¥ 4.0 earthquakes?. Journal of Geophysical Research, 2007, 112, .	3.3	11
89	From coseismic offsets to fault-block mountains. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9820-9825.	3.3	11
90	Lasting earthquake legacy. Nature, 2009, 462, 42-43.	13.7	10

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91	The 2007 <i>M</i>5.4 Alum Rock, California, earthquake: Implications for future earthquakes on the central and southern Calaveras Fault. Journal of Geophysical Research, 2010, 115, .	3.3	10
92	Reconstruction of Far-Field Tsunami Amplitude Distributions from Earthquake Sources. Pure and Applied Geophysics, 2016, 173, 3703-3717.	0.8	10
93	On the Use of Receiver Operating Characteristic Tests for Evaluating Spatial Earthquake Forecasts. Geophysical Research Letters, 2020, 47, e2020GL088570.	1.5	10
94	Nearly frictionless faulting by unclamping in long-term interaction models. Geology, 2002, 30, 1063.	2.0	9
95	Earthquake and volcano clustering via stress transfer at Yucca Mountain, Nevada. Geology, 2006, 34, 785.	2.0	9
96	The stress shadow problem in physics-based aftershock forecasting: Does incorporation of secondary stress changes help?. Geophysical Research Letters, 2014, 41, 3810-3817.	1.5	9
97	Determining on-fault earthquake magnitude distributions from integer programming. Computers and Geosciences, 2018, 111, 244-259.	2.0	9
98	Scientific teams analyze earthquake hazards of the Cascadia Subduction Zone. Eos, 1997, 78, 153.	0.1	8
99	Diffuse Pacificâ˘'North American plate boundary: 1000 km of dextral shear inferred from modeling geodetic data. Geology, 2011, 39, 943-946.	2.0	8
100	Paleoseismic interevent times interpreted for an unsegmented earthquake rupture forecast. Geophysical Research Letters, 2012, 39, .	1.5	8
101	Seismic Attenuation Monitoring of a Critically Stressed San Andreas Fault. Geophysical Research Letters, 2020, 47, e2020GL089201.	1.5	8
102	The Role of Seismic and Slow Slip Events in Triggering the 2018 M 7.1 Anchorage Earthquake in the Southcentral Alaska Subduction Zone. Geophysical Research Letters, 2020, 47, e2019GL086640.	1.5	8
103	High-resolution P- and S-wave deep crustal imaging across the edge of the Colorado Plateau, USA : Increased reflectivity caused by initiating extension. Geodynamic Series, 1991, , 21-29.	0.1	7
104	Mâ‰¥ 7.0 earthquake recurrence on the San Andreas fault from a stress renewal model. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	7
105	Prospective Earthquake Forecasts at the Himalayan Front after the 25 April 2015<i>M</i>Â7.8 Gorkha Mainshock. Seismological Research Letters, 2016, 87, 816-825.	0.8	7
106	Structure and mechanics of the San Andreas-San Gregorio fault junction, San Francisco, California. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	6
107	Earthquake rupture process recreated from a natural fault surface. Journal of Geophysical Research: Solid Earth, 2015, 120, 7852-7862.	1.4	6
108	A combinatorial approach to determine earthquake magnitude distributions on a variable slip-rate fault. Geophysical Journal International, 2019, 219, 734-752.	1.0	6

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109	Tsunami Probability in the Caribbean Region. , 2008, , 2089-2116.		5
110	Does magmatism influence low-angle normal faulting?: Comment and Reply. Geology, 1993, 21, 956.	2.0	4
111	Why the Sacramento Delta area differs from other parts of the great valley: Numerical modeling of thermal structure and thermal subsidence of forearc basins. Izvestiya, Physics of the Solid Earth, 2007, 43, 75-90.	0.2	4
112	Distribution of Earthquakes on a Branching Fault System Using Integer Programming and Greedyâ€Sequential Methods. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC008964.	1.0	4
113	Correction to â€œForecast experiment: Do temporal and spatial b value variations along the Calaveras fault portend M â‰¥ 4.0 earthquakes?â€ Journal of Geophysical Research, 2007, 112, .	3.3	3
114	No correlation between Anderson Reservoir stage level and underlying Calaveras fault seismicity despite calculated differential stress increases. Lithosphere, 2011, 3, 261-264.	0.6	3
115	Stress Transfer by the 2008 Mw 6.4 Achaia Earthquake to the Western Corinth Gulf and Its Relation with the 2010 Efpalio Sequence, Central Greece. Bulletin of the Seismological Society of America, 2014, 104, 1723-1734.	1.1	3
116	Comments on â€˜Why is Probabilistic Seismic Hazard Analysis (PSHA) still used?â€™ by F. Mulargia, P.B. Stark and R.J. Geller. Physics of the Earth and Planetary Interiors, 2018, 274, 214-215.	0.7	3
117	Tsunamis: Bayesian Probabilistic Analysis. , 2017, , 1-25.		2
118	Having a Blast in Kenya. Science, 2009, 325, 1623-1623.	6.0	1
119	Confronting Racism to Advance Our Science. AGU Advances, 2021, 2, e2020AV000296.	2.3	1
120	Tsunamis: Bayesian Probabilistic Analysis. , 2022, , 91-115.		1
121	The active southwest margin of the Colorado Plateau: Uplift of mantle origin: Discussion and reply. Bulletin of the Geological Society of America, 1999, 111, 154-154.	1.6	0
122	Correction to â€œA hypothesis for delayed dynamic earthquake triggeringâ€ Geophysical Research Letters, 2005, 32, .	1.5	0
123	Editorial: Exploring new frontiers withJGRâ€"Solid Earth. Journal of Geophysical Research, 2009, 114, .	3.3	0
124	Reply to "Comment on 'Is There a Basis for Preferring Characteristic Earthquakes over a Gutenberg-Richter Distribution in Probabilistic Earthquake Forecasting?' by Tom Parsons and Eric L. Geist" by Jens-Uwe Klugel. Bulletin of the Seismological Society of America, 2010, 100, 898-899.	1.1	0
125	Thank You to Our 2019 Reviewers. AGU Advances, 2020, 1, e2020AV000181.	2.3	0
126	Submarine Landslide Kinematics Derived From Highâ€Resolution Imaging in Port Valdez, Alaska. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018007.	1.4	0

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127	AGU Advances Goes Online. AGU Advances, 2020, 1, e2019AV000105.	2.3	0
128	Thank You to Our 2020 Peer Reviewers. AGU Advances, 2021, 2, e2021AV000426.	2.3	0
129	Reconstruction of Far-Field Tsunami Amplitude Distributions from Earthquake Sources. Pageoph Topical Volumes, 2016, , 3703-3717.	0.2	0
130	Tsunamis: Bayesian Probabilistic Analysis. , 2019, , 1-25.		0
131	Thank You to Our 2021 Peer Reviewers. AGU Advances, 2022, 3, .	2.3	0