

# Fred F Pollitz

## List of Publications by Year in descending order

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101  
papers

5,272  
citations

81900

39  
h-index

88630

70  
g-index

101  
all docs

101  
docs citations

101  
times ranked

3241  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gravitational viscoelastic postseismic relaxation on a layered spherical Earth. <i>Journal of Geophysical Research</i> , 1997, 102, 17921-17941.	3.3	264
2	Mantle Flow Beneath a Continental Strike-Slip Fault: Postseismic Deformation After the 1999 Hector Mine Earthquake. <i>Science</i> , 2001, 293, 1814-1818.	12.6	253
3	Mobility of continental mantle: Evidence from postseismic geodetic observations following the 1992 Landers earthquake. <i>Journal of Geophysical Research</i> , 2000, 105, 8035-8054.	3.3	211
4	Coseismic Deformation From Earthquake Faulting On A Layered Spherical Earth. <i>Geophysical Journal International</i> , 1996, 125, 1-14.	2.4	200
5	The Size and Duration of the Sumatra-Andaman Earthquake from Far-Field Static Offsets. <i>Science</i> , 2005, 308, 1769-1772.	12.6	198
6	Transient rheology of the uppermost mantle beneath the Mojave Desert, California. <i>Earth and Planetary Science Letters</i> , 2003, 215, 89-104.	4.4	192
7	Post-seismic relaxation following the great 2004 Sumatra-Andaman earthquake on a compressible self-gravitating Earth. <i>Geophysical Journal International</i> , 2006, 167, 397-420.	2.4	179
8	Viscosity of Oceanic Asthenosphere Inferred from Remote Triggering of Earthquakes. <i>Science</i> , 1998, 280, 1245-1249.	12.6	168
9	Lithosphere-asthenosphere interaction beneath the western United States from the joint inversion of body-wave traveltimes and surface-wave phase velocities. <i>Geophysical Journal International</i> , 2011, 185, 1003-1021.	2.4	160
10	The 11 April 2012 east Indian Ocean earthquake triggered large aftershocks worldwide. <i>Nature</i> , 2012, 490, 250-253.	27.8	157
11	Joint estimation of afterslip rate and postseismic relaxation following the 1989 Loma Prieta earthquake. <i>Journal of Geophysical Research</i> , 1998, 103, 26975-26992.	3.3	118
12	Motion of the Scotia Sea plates. <i>Geophysical Journal International</i> , 2003, 155, 789-804.	2.4	114
13	Pliocene change in Pacific-plate motion. <i>Nature</i> , 1986, 320, 738-741.	27.8	111
14	Effect of 3-D viscoelastic structure on post-seismic relaxation from the 2004 $M = 9.2$ Sumatra earthquake. <i>Geophysical Journal International</i> , 2008, 173, 189-204.	2.4	109
15	Stress Triggering of the 1999 Hector Mine Earthquake by Transient Deformation Following the 1992 Landers Earthquake. <i>Bulletin of the Seismological Society of America</i> , 2002, 92, 1487-1496.	2.3	104
16	Coseismic and post-seismic signatures of the Sumatra 2004 December and 2005 March earthquakes in GRACE satellite gravity. <i>Geophysical Journal International</i> , 2007, 171, 177-190.	2.4	103
17	Lower crustal relaxation beneath the Tibetan Plateau and Qaidam Basin following the 2001 Kokoxili earthquake. <i>Geophysical Journal International</i> , 2011, 187, 613-630.	2.4	96
18	The Earthquake-Source Inversion Validation (SIV) Project. <i>Seismological Research Letters</i> , 2016, 87, 690-708.	1.9	96

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19	Geodetic slip model of the 2011 M9.0 Tohoku earthquake. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	94
20	Seismic imaging east of the Rocky Mountains with USArray. <i>Earth and Planetary Science Letters</i> , 2014, 402, 16-25.	4.4	93
21	Transient rheology of the upper mantle beneath central Alaska inferred from the crustal velocity field following the 2002 Denali earthquake. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	79
22	Temporal evolution of continental lithospheric strength in actively deforming regions. <i>GSA Today</i> , 2008, 18, 4.	2.0	79
23	Sinking Mafic Body in a Reactivated Lower Crust: A Mechanism for Stress Concentration at the New Madrid Seismic Zone. <i>Bulletin of the Seismological Society of America</i> , 2001, 91, 1882-1897.	2.3	75
24	Constraints on the viscosity of the continental crust and mantle from GPS measurements and postseismic deformation models in western Mongolia. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	75
25	Implications of postseismic gravity change following the great 2004 Sumatra-Andaman earthquake from the regional harmonic analysis of GRACE intersatellite tracking data. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	75
26	The Mw 6.0 24 August 2014 South Napa Earthquake. <i>Seismological Research Letters</i> , 2015, 86, 309-326.	1.9	70
27	Implications of the 26 December 2004 Sumatra-Andaman Earthquake on Tsunami Forecast and Assessment Models for Great Subduction-Zone Earthquakes. <i>Bulletin of the Seismological Society of America</i> , 2007, 97, S249-S270.	2.3	63
28	Coseismic slip distribution of the February 27, 2010 Mw 8.8 Maule, Chile earthquake. <i>Geophysical Research Letters</i> , 2011, 38, .	4.0	59
29	Stress changes along the Sunda trench following the 26 December 2004 Sumatra-Andaman and 28 March 2005 Nias earthquakes. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	55
30	Rayleigh-wave phase-velocity maps and three-dimensional shear velocity structure of the western US from local non-plane surface wave tomography. <i>Geophysical Journal International</i> , 2010, 180, 1153-1169.	2.4	55
31	How do "ghost transients" from past earthquakes affect GPS slip rate estimates on southern California faults?. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 828-838.	2.5	55
32	Two-stage model of African absolute motion during the last 30 million years. <i>Tectonophysics</i> , 1991, 194, 91-106.	2.2	52
33	Generic Earthquake Simulator. <i>Seismological Research Letters</i> , 2012, 83, 959-963.	1.9	51
34	Seismic structure of the Central US crust and shallow upper mantle: Uniqueness of the Reelfoot Rift. <i>Earth and Planetary Science Letters</i> , 2014, 402, 157-166.	4.4	51
35	Correction to "Coseismic slip distribution of the February 27, 2010 Mw 8.8 Maule, Chile earthquake", <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	49
36	Post-seismic relaxation theory on a laterally heterogeneous viscoelastic model. <i>Geophysical Journal International</i> , 2003, 155, 57-78.	2.4	46

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37	Broadscale postseismic gravity change following the 2011 Tohoku earthquake and implication for deformation by viscoelastic relaxation and afterslip. <i>Geophysical Research Letters</i> , 2014, 41, 5797-5805.	4.0	43
38	Postearthquake relaxation evidence for laterally variable viscoelastic structure and water content in the Southern California mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 2672-2696.	3.4	43
39	A Comparison among Observations and Earthquake Simulator Results for the allcal2 California Fault Model. <i>Seismological Research Letters</i> , 2012, 83, 994-1006.	1.9	42
40	Viscoelastic shear zone model of a strike-slip earthquake cycle. <i>Journal of Geophysical Research</i> , 2001, 106, 26541-26560.	3.3	41
41	Seismic velocity structure of the crust and shallow mantle of the Central and Eastern United States by seismic surface wave imaging. <i>Geophysical Research Letters</i> , 2016, 43, 118-126.	4.0	40
42	Dislocation models of interseismic deformation in the western United States. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	38
43	Postseismic deformation following the June 2000 earthquake sequence in the south Iceland seismic zone. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	36
44	Episodic North America and Pacific Plate motions. <i>Tectonics</i> , 1988, 7, 711-726.	2.8	35
45	Direct test of static stress versus dynamic stress triggering of aftershocks. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	34
46	A physical model for strain accumulation in the San Francisco Bay region: Stress evolution since 1838. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	33
47	Coseismic compression/dilatation and viscoelastic uplift/subsidence following the 2012 Indian Ocean earthquakes quantified from satellite gravity observations. <i>Geophysical Research Letters</i> , 2015, 42, 3764-3772.	4.0	33
48	On the resolution of shallow mantle viscosity structure using postearthquake relaxation data: Application to the 1999 Hector Mine, California, earthquake. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	32
49	Stress imparted by the great 2004 Sumatra earthquake shut down transforms and activated rifts up to 400 km away in the Andaman Sea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15152-15156.	7.1	32
50	Postseismic gravity change after the 2006–2007 great earthquake doublet and constraints on the asthenosphere structure in the central Kuril Islands. <i>Geophysical Research Letters</i> , 2016, 43, 3169-3177.	4.0	31
51	Sea Level Rise in the Samoan Islands Escalated by Viscoelastic Relaxation After the 2009 Samoa–Tonga Earthquake. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 4142-4156.	3.4	31
52	Illumination of rheological mantle heterogeneity by the M7.2 2010 El Mayor–Cucapah earthquake. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	2.5	30
53	Persistent slip rate discrepancies in the eastern California (USA) shear zone. <i>Geology</i> , 2016, 44, 691-694.	4.4	29
54	Post-earthquake relaxation using a spectral element method: 2.5-D case. <i>Geophysical Journal International</i> , 2014, 198, 308-326.	2.4	28

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55	Fossil strain from the 1811-1812 New Madrid Earthquakes. <i>Geophysical Research Letters</i> , 1994, 21, 2303-2306.	4.0	26
56	Regional velocity structure in northern California from inversion of scattered seismic surface waves. <i>Journal of Geophysical Research</i> , 1999, 104, 15043-15072.	3.3	25
57	Annual modulation of non-volcanic tremor in northern Cascadia. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 2445-2459.	3.4	25
58	Observations and interpretation of fundamental mode Rayleigh wavefields recorded by the Transportable Array (USArray). <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	23
59	Viscoelastic-cycle model of interseismic deformation in the northwestern United States. <i>Geophysical Journal International</i> , 2010, , .	2.4	23
60	Kinematics of Fault Slip Associated with the 4 <sup>th</sup> -6 July 2019 Ridgecrest, California, Earthquake Sequence. <i>Bulletin of the Seismological Society of America</i> , 2020, 110, 1688-1700.	2.3	23
61	Fault Model of the 1891 Nobi Earthquake from Historic Triangulation and Leveling.. <i>Journal of Physics of the Earth</i> , 1994, 42, 1-43.	1.4	23
62	The relationship between the instantaneous velocity field and the rate of moment release in the lithosphere. <i>Geophysical Journal International</i> , 2003, 153, 595-608.	2.4	22
63	The 1923 Kanto earthquake reevaluated using a newly augmented geodetic data set. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	22
64	ViscoSim Earthquake Simulator. <i>Seismological Research Letters</i> , 2012, 83, 979-982.	1.9	22
65	Gravity anomaly from faulting on a layered spherical earth with application to central Japan. <i>Physics of the Earth and Planetary Interiors</i> , 1997, 99, 259-271.	1.9	21
66	Viscoelastic lower crust and mantle relaxation following the 14 <sup>th</sup> -16 April 2016 Kumamoto, Japan, earthquake sequence. <i>Geophysical Research Letters</i> , 2017, 44, 8795-8803.	4.0	21
67	Lithosphere and shallow asthenosphere rheology from observations of post-earthquake relaxation. <i>Physics of the Earth and Planetary Interiors</i> , 2019, 293, 106271.	1.9	21
68	Shallow microearthquakes near Chongqing, China triggered by the Rayleigh waves of the 2015 M7.8 Gorkha, Nepal earthquake. <i>Earth and Planetary Science Letters</i> , 2017, 479, 231-240.	4.4	20
69	Rare dynamic triggering of remote <i>M</i></i>5.5 earthquakes from global catalog analysis. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 1748-1761.	3.4	19
70	Coseismic slip distribution of the 1923 Kanto earthquake, Japan. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	18
71	The Profound Reach of the 11 April 2012 M 8.6 Indian Ocean Earthquake: Short-Term Global Triggering Followed by a Longer-Term Global Shadow. <i>Bulletin of the Seismological Society of America</i> , 2014, 104, 972-984.	2.3	18
72	Surface wave scattering from sharp lateral discontinuities. <i>Journal of Geophysical Research</i> , 1994, 99, 21891-21909.	3.3	17

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73	GPS measurements across the Northern Caribbean Plate Boundary Zone: Impact of postseismic relaxation following historic earthquakes. <i>Geophysical Research Letters</i> , 1998, 25, 2233-2236.	4.0	17
74	A physical model for strain accumulation in the San Francisco Bay Region. <i>Geophysical Journal International</i> , 2004, 160, 303-318.	2.4	17
75	Probabilistic seismic hazard in the San Francisco Bay area based on a simplified viscoelastic cycle model of fault interactions. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	16
76	Inference of postseismic deformation mechanisms of the 1923 Kanto earthquake. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	15
77	Geodetic Slip Model of the 3 September 2016 $M_w 5.8$ Pawnee, Oklahoma, Earthquake: Evidence for Fault Zone Collapse. <i>Seismological Research Letters</i> , 2017, 88, 983-993.	1.9	15
78	Implications of the earthquake cycle for inferring fault locking on the Cascadia megathrust. <i>Geophysical Journal International</i> , 0, , ggx009.	2.4	14
79	Shear partitioning near the central Japan triple junction: the 1923 great Kanto earthquake revisited-II. <i>Geophysical Journal International</i> , 1996, 126, 882-892.	2.4	12
80	Scattering of spherical elastic waves from a small-volume spherical inclusion. <i>Geophysical Journal International</i> , 1998, 134, 390-408.	2.4	12
81	A Viscoelastic Earthquake Simulator with Application to the San Francisco Bay Region. <i>Bulletin of the Seismological Society of America</i> , 2009, 99, 1760-1785.	2.3	12
82	Rapid Geodetic Observations of Spatiotemporally Varying Postseismic Deformation Following the Ridgecrest Earthquake Sequence: The U.S. Geological Survey Response. <i>Seismological Research Letters</i> , 2020, 91, 2108-2123.	1.9	12
83	Observations of free oscillation amplitude anomalies. <i>Geophysical Research Letters</i> , 1987, 14, 895-898.	4.0	11
84	GEOPHYSICS: A New Class of Earthquake Observations. <i>Science</i> , 2006, 313, 619-620.	12.6	10
85	Mechanical deformation model of the western United States instantaneous strain-rate field. <i>Geophysical Journal International</i> , 2006, 167, 421-444.	2.4	9
86	Remarks on the travelling wave decomposition. <i>Geophysical Journal International</i> , 2001, 144, 233-246.	2.4	8
87	Lithospheric rheology constrained from twenty-five years of postseismic deformation following the 1989 M 6.9 Loma Prieta earthquake. <i>Earth and Planetary Science Letters</i> , 2016, 435, 147-158.	4.4	8
88	Connecting crustal seismicity and earthquake-driven stress evolution in Southern California. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 6473-6490.	3.4	7
89	Coseismic Slip and Early Afterslip of the M6.0 24 August 2014 South Napa, California, Earthquake. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 11728-11747.	3.4	7
90	Seismic and Geodetic Analysis of Rupture Characteristics of the 2020 Mw 6.5 Monte Cristo Range, Nevada, Earthquake. <i>Bulletin of the Seismological Society of America</i> , 0, , .	2.3	7

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91	Waveform tomography of crustal structure in the south San Francisco Bay region. Journal of Geophysical Research, 2005, 110, .	3.3	6
92	Kinematic Slip Model of the 2021 M <sup>6.0</sup> Antelope Valley, California, Earthquake. The Seismic Record, 2022, 2, 20-28.	3.1	5
93	Regional Seismic Wavefield Computation on a 3-D Heterogeneous Earth Model by Means of Coupled Traveling Wave Synthesis. Pure and Applied Geophysics, 2002, 159, 2085-2112.	1.9	4
94	Coseismic Fault Slip and Afterslip Associated with the 18 March 2020 M <sup>5.7</sup> Magna, Utah, Earthquake. Seismological Research Letters, 2021, 92, 741-754.	1.9	4
95	Toward a Time-Dependent Probabilistic Seismic Hazard Analysis for Alaska. Geophysical Monograph Series, 0, , 399-416.	0.1	3
96	Induced Seismicity Reduces Seismic Hazard?. Geophysical Research Letters, 2019, 46, 4170-4173.	4.0	3
97	Postseismic Relaxation Following the 2019 Ridgecrest, California, Earthquake Sequence. Bulletin of the Seismological Society of America, 2022, 112, 734-749.	2.3	3
98	Surface Imaging Functions for Elastic Reverse Time Migration. Journal of Geophysical Research: Solid Earth, 2019, 124, 2873-2895.	3.4	2
99	Coseismic and post-seismic gravity disturbance induced by seismic sources using a 2.5-D spectral element method. Geophysical Journal International, 2020, 222, 827-844.	2.4	2
100	High-frequency Born synthetic seismograms based on coupled normal modes. Geophysical Journal International, 2011, 187, 1420-1442.	2.4	1
101	Exploring GPS Observations of Postseismic Deformation Following the 2012 M W 7.8 Haida Gwaii and 2013 M W 7.5 Craig, Alaska Earthquakes: Implications for Viscoelastic Earth Structure. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021891.	3.4	1