Rachel Abercrombie

List of Publications by Year
in descending order

95 papers	5,310 citations	87723 38 h-index	85405 71 g-index
104 all docs	104 docs citations	104 times ranked	2690 citing authors

#	Article	IF	Citations
1	Earthquake source scaling relationships from â^'1 to 5MLusing seismograms recorded at 2.5-km depth. Journal of Geophysical Research, 1995, 100, 24015-24036.	3.3	691
2	Can observations of earthquake scaling constrain slip weakening?. Geophysical Journal International, 2005, 162, 406-424.	1.0	349
3	A Common Origin for Aftershocks, Foreshocks, and Multiplets. Bulletin of the Seismological Society of America, 2004, 94, 88-98.	1.1	233
4	Depth dependence of earthquake frequency-magnitude distributions in California: Implications for rupture initiation. Journal of Geophysical Research, 1997, 102, 15081-15090.	3.3	221
5	Earthquake slip on oceanic transform faults. Nature, 2001, 410, 74-77.	13.7	190
6	Triggering of the 1999MW7.1 Hector Mine earthquake by aftershocks of the 1992MW7.3 Landers earthquake. Journal of Geophysical Research, 2002, 107, ESE 6-1-ESE 6-13.	3.3	189
7	Source parameters of small earthquakes recorded at 2.5 km depth, Cajon Pass, southern California: Implications for earthquake scaling. Geophysical Research Letters, 1993, 20, 1511-1514.	1.5	181
8	The 1994 Java tsunami earthquake: Slip over a subducting seamount. Journal of Geophysical Research, 2001, 106, 6595-6607.	3.3	161
9	Occurrence patterns of foreshocks to large earthquakes in the western United States. Nature, 1996, 381, 303-307.	13.7	143
10	Investigating uncertainties in empirical Green's function analysis of earthquake source parameters. Journal of Geophysical Research: Solid Earth, 2015, 120, 4263-4277.	1.4	130
11	Source scaling relationships of microearthquakes at Parkfield, CA, determined using the SAFOD Pilot Hole Seismic Array. Geophysical Monograph Series, 2006, , 81-90.	0.1	118
12	The June 2000Mw7.9 earthquakes south of Sumatra: Deformation in the India-Australia Plate. Journal of Geophysical Research, 2003, 108, ESE 6-1-ESE 6-16.	3.3	98
13	The habitat of fault-generated pseudotachylyte: Presence vs. absence of friction-melt. Geophysical Monograph Series, 2006, , 153-166.	0.1	96
14	Stress drops and radiated seismic energies of microearthquakes in a South African gold mine. Journal of Geophysical Research, 2007, 112, .	3.3	94
15	Spatial migration of earthquakes within seismic clusters in Southern California: Evidence for fluid diffusion. Journal of Geophysical Research, 2012, 117, .	3.3	94
16	Stress drops of repeating earthquakes on the San Andreas Fault at Parkfield. Geophysical Research Letters, 2014, 41, 8784-8791.	1.5	93
17	The 2002 M5 Au Sable Forks, NY, earthquake sequence: Source scaling relationships and energy budget. Journal of Geophysical Research, 2010, 115, .	3.3	88
18	Stress drops and radiated energies of aftershocks of the 1994 Northridge, California, earthquake. Journal of Geophysical Research, 2003, 108, .	3.3	85

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19	Secondary Aftershocks and Their Importance for Aftershock Forecasting. Bulletin of the Seismological Society of America, 2003, 93, 1433-1448.	1.1	76
20	The magnitude-frequency distribution of earthquakes recorded with deep seismometers at Cajon Pass, southern California. Tectonophysics, 1996, 261, 1-7.	0.9	71
21	Comparing EGF Methods for Estimating Corner Frequency and Stress Drop From <i>P</i> Wave Spectra. Journal of Geophysical Research: Solid Earth, 2019, 124, 3966-3986.	1.4	69
22	Variability of earthquake stress drop in a subduction setting, the Hikurangi Margin, New Zealand. Geophysical Journal International, 2017, 208, 306-320.	1.0	67
23	The 14 November 2001 Kokoxili (Kunlunshan), Tibet, Earthquake: Rupture Transfer through a Large Extensional Step-Over. Bulletin of the Seismological Society of America, 2004, 94, 1173-1194.	1.1	65
24	Source parameters and rupture velocity of small<i>M</i>â‰ 2.1 reservoir induced earthquakes. Geophysical Journal International, 2009, 179, 1013-1023.	1.0	64
25	Complex spatiotemporal evolution of the 2008 <i>M_w</i> 4.9 Mogul earthquake swarm (Reno, Nevada): Interplay of fluid and faulting. Journal of Geophysical Research: Solid Earth, 2016, 121, 8196-8216.	1.4	64
26	Resolution and uncertainties in estimates of earthquake stress drop and energy release. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200131.	1.6	56
27	Comparison of direct and coda wave stress drop measurements for the Wells, Nevada, earthquake sequence. Journal of Geophysical Research: Solid Earth, 2013, 118, 1458-1470.	1.4	52
28	Spatiotemporal Variation of Stress Drop During the 2008 Mogul, Nevada, Earthquake Swarm. Journal of Geophysical Research: Solid Earth, 2017, 122, 8163-8180.	1.4	52
29	A reassessment of the rupture characteristics of oceanic transform earthquakes. Journal of Geophysical Research, 2003, 108, .	3.3	51
30	Frequency dependent crustal scattering and absorption at 5-160 Hz from coda decay observed at 2.5 km Depth. Geophysical Research Letters, 1994, 21, 971-974.	1.5	50
31	Earthquake rupture below the brittle-ductile transition in continental lithospheric mantle. Science Advances, 2017, 3, e1602642.	4.7	50
32	Earthquake Directivity, Orientation, and Stress Drop Within the Subducting Plate at the Hikurangi Margin, New Zealand. Journal of Geophysical Research: Solid Earth, 2017, 122, 10,176.	1.4	47
33	What do faults feel? Observational constraints on the stresses acting on seismogenic faults. Geophysical Monograph Series, 2006, , 313-327.	0.1	46
34	Back-propagating supershear rupture in the 2016 Mw 7.1 Romanche transform fault earthquake. Nature Geoscience, 2020, 13, 647-653.	5.4	46
35	Rupture characteristics of the 2003Mw7.6 mid-Indian Ocean earthquake: Implications for seismic properties of young oceanic lithosphere. Journal of Geophysical Research, 2006, 111, .	3.3	43
36	A Summary of Attenuation Measurements from Borehole Recordings of Earthquakes: The 10 Hz Transition Problem. Pure and Applied Geophysics, 1998, 153, 475.	0.8	40

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37	Seismic attenuation above 10 Hz in southern California from coda waves recorded in the Cajon Pass borehole. Journal of Geophysical Research, 1998, 103, 24257-24270.	3.3	40
38	The enigma of the Arthur's Pass, New Zealand, earthquake: 1. Reconciling a variety of data for an unusual earthquake sequence. Journal of Geophysical Research, 2000, 105, 16119-16137.	3.3	39
39	Evidence of Aseismic and Fluidâ€Driven Processes in a Small Complex Seismic Swarm Near Virginia City, Nevada. Geophysical Research Letters, 2020, 47, e2019GL085477.	1.5	39
40	An overview of the global variability in radiated energy and apparent stress. Geophysical Monograph Series, 2006, , 43-57.	0.1	38
41	Evidence for a constantb-value above magnitude 0 in the southern San Andreas, San Jacinto and San Miguel Fault Zones, and at the Long Valley Caldera, California. Geophysical Research Letters, 1994, 21, 1647-1650.	1.5	36
42	On scaling of fracture energy and stress drop in dynamic rupture models: Consequences for near-source ground-motions. Geophysical Monograph Series, 2006, , 283-293.	0.1	35
43	Testing a model of earthquake nucleation. Bulletin of the Seismological Society of America, 1995, 85, 1873-1878.	1.1	35
44	Seismotectonics of a diffuse plate boundary: Observations off the Sumatraâ€Andaman trench. Journal of Geophysical Research: Solid Earth, 2016, 121, 3462-3478.	1.4	34
45	On the mechanical work absorbed on faults during earthquake ruptures. Geophysical Monograph Series, 2006, , 237-254.	0.1	32
46	The nucleation and rupture process of the 1981 Gulf of Corinth earthquakes from deconvolved broad-band data. Geophysical Journal International, 1995, 120, 393-405.	1.0	31
47	Crustal attenuation and site effects at Parkfield, California. Journal of Geophysical Research, 2000, 105, 6277-6286.	3.3	30
48	The missing sinks: Slip localization in faults, damage zones, and the seismic energy budget. Geophysical Monograph Series, 2006, , 217-222.	0.1	30
49	The 2015 <i>M_w</i> 7.1 earthquake on the Charlieâ€Gibbs transform fault: Repeating earthquakes and multimodal slip on a slow oceanic transform. Geophysical Research Letters, 2016, 43, 6119-6128.	1.5	30
50	The scaling of seismic energy with moment: Simple models compared with observations. Geophysical Monograph Series, 2006, , 25-41.	0.1	29
51	Source Complexity of the 2015 Mw 4.0 Guthrie, Oklahoma Earthquake. Geophysical Research Letters, 2019, 46, 4674-4684.	1.5	28
52	The role of fluids in triggering earthquakes: observations from reservoir induced seismicity in Brazil. Geophysical Journal International, 2010, , .	1.0	26
53	Seismicity at the Northern Hikurangi Margin, New Zealand, and Investigation of the Potential Spatial and Temporal Relationships With a Shallow Slow Slip Event. Journal of Geophysical Research: Solid Earth, 2019, 124, 4751-4766.	1.4	25
54	Repeating earthquakes record fault weakening and healing in areas of megathrust postseismic slip. Science Advances, 2020, 6, eaaz9317.	4.7	25

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55	Does Earthquake Stress Drop Increase With Depth in the Crust?. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022314.	1.4	25
56	Earthquake locations using single-station deep borehole recordings: Implications for microseismicity on the San Andreas fault in southern California. Journal of Geophysical Research, 1995, 100, 24003-24014.	3.3	24
57	Uncertainties in earthquake source spectrum estimation using empirical Green functions. Geophysical Monograph Series, 2006, , 69-74.	0.1	23
58	Well Proximity Governing Stress Drop Variation and Seismic Attenuation Associated With Hydraulic Fracturing Induced Earthquakes. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020103.	1.4	23
59	Improved approach for stress drop estimation and its application to an induced earthquake sequence in Oklahoma. Geophysical Journal International, 2020, 223, 233-253.	1.0	23
60	Cross Validation of Stress Drop Estimates and Interpretations for the 2011 Prague, OK, Earthquake Sequence Using Multiple Methods. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020888.	1.4	23
61	Effects of methods of attenuation correction on source parameter determination. Geophysical Monograph Series, 2006, , 91-97.	0.1	22
62	The<i>M_W</i>6.2 Cass, New Zealand, earthquake of 24 November 1995: Reverse faulting in a strikeâ€slip region. New Zealand Journal of Geology, and Geophysics, 2000, 43, 255-269.	1.0	21
63	Inferring earthquake source properties from laboratory observations and the scope of lab contributions to source physics. Geophysical Monograph Series, 2006, , 99-119.	0.1	20
64	The strength of the San Andreas Fault: A critical analysis. Geophysical Monograph Series, 2006, , 301-311.	0.1	20
65	Repeating Earthquakes With Remarkably Repeatable Ruptures on the San Andreas Fault at Parkfield. Geophysical Research Letters, 2020, 47, e2020GL089820.	1.5	18
66	A Summary of Attenuation Measurements from Borehole Recordings of Earthquakes: The 10 Hz Transition Problem. , 1998, , 475-487.		18
67	Regional bias in estimates of earthquake <i>MS</i> due to surface-wave path effects. Bulletin of the Seismological Society of America, 1994, 84, 377-382.	1.1	18
68	Fractal fracture scattering origin of S-wave coda: Spectral evidence from recordings at 2.5 km. Geophysical Research Letters, 1994, 21, 1683-1686.	1.5	15
69	Earthquake Interaction, Fault Structure, and Source Properties of a Small Sequence in 2017 near Truckee, California. Bulletin of the Seismological Society of America, 2018, 108, 2580-2593.	1.1	14
70	Seismic Rupture on an Oceanic-Continental Plate Boundary: Strike-Slip Earthquakes along the Queen Charlotte-Fairweather Fault. Bulletin of the Seismological Society of America, 2015, 105, 1129-1142.	1.1	12
71	Adapting the Matchedâ€Filter Search to a Wideâ€Aperture Network: An Aftershock Sequence and an Earthquake Swarm in Connecticut. Bulletin of the Seismological Society of America, 2018, 108, 524-532.	1.1	11
72	Determination of fault planes in a complex aftershock sequence using two-dimensional slip inversion. Geophysical Journal International, 2001, 146, 134-142.	1.0	10

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73	Regional Wave Propagation in New England and New York. Bulletin of the Seismological Society of America, 2010, 100, 2196-2218.	1.1	9
74	Improved Stress Drop Estimates for M 1.5 to 4 Earthquakes in Southern California From 1996 to 2019. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	8
75	Shear-wave anisotropy and the stress field from borehole recordings at 2.5 km depth at Cajon Pass. Geophysical Journal International, 1997, 129, 439-449.	1.0	7
76	Calibrating Spectral Decomposition of Local Earthquakes Using Borehole Seismic Recordsâ€"Results for the 1992 Big Bear Aftershocks in Southern California. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020561.	1.4	6
77	Near Trench 3D Seismic Attenuation Offshore Northern Hikurangi Subduction Margin, North Island, New Zealand. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020810.	1.4	6
78	The start of something big?. Nature, 2005, 438, 171-173.	13.7	5
79	A brief review of techniques used to estimate radiated seismic energy. Geophysical Monograph Series, 2006, , 15-24.	0.1	5
80	Small and large earthquakes can have similar starts. Nature, 2019, 573, 42-43.	13.7	5
81	Reliable and economical high-temperature deep-borehole seismic recording. Bulletin of the Seismological Society of America, 1996, 86, 204-211.	1.1	5
82	Quantifying the Sensitivity of Microearthquake Slip Inversions to Station Distribution Using a Dense Nodal Array. Bulletin of the Seismological Society of America, 2022, 112, 1252-1270.	1.1	5
83	Strong motion modelling of the 1993 Tikokino earthquake, southern Hawke's Bay, New Zealand. New Zealand Journal of Geology, and Geophysics, 1998, 41, 259-270.	1.0	4
84	Quantitative characterization of permeability reduction associated with compactive cataclastic flow. Geophysical Monograph Series, 2006, , 143-151.	0.1	4
85	The 2016 Nine Mile Ranch Earthquakes: Hazard and Tectonic Implications of Orthogonal Conjugate Faulting in the Walker Lane. Bulletin of the Seismological Society of America, 2022, 112, 1727-1741.	1.1	4
86	Radiated energy and the physics of earthquake faulting. Eos, 2005, 86, 447.	0.1	3
87	Crustal Strength Variations Inferred From Earthquake Stress Drop at Axial Seamount Surrounding the 2015 Eruption. Geophysical Research Letters, 2020, 47, e2020GL088447.	1.5	3
88	Energetics of chemical alteration in fault zones and its relationship to the seismic cycle. Geophysical Monograph Series, 2006, , 181-191.	0.1	2
89	Plain Language Summary Required for Submission to Journal of Geophysical Research: Solid Earth. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022351.	1.4	2
90	Spatiotemporal Variability of Earthquake Source Parameters at Parkfield, California, and Their Relationship With the 2004 M6 Earthquake. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	2

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91	A Seismic Hazards Overview of the Urban Regions of Nevada: Recent Advancements and Research Directions. Seismological Research Letters, 0, , .	0.8	1
92	Impact of friction and scale-dependent initial stress on radiated energy-moment scaling. Geophysical Monograph Series, 2006, , 271-281.	0.1	0
93	Thank You to Our 2019 Reviewers. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019781.	1.4	0
94	Thank You to Our 2020 Peer Reviewers. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021896.	1.4	0
95	Thank You to Our 2021 Peer Reviewers. Journal of Geophysical Research: Solid Earth, 0, , .	1.4	0