Ake Fagereng

List of Publications by Year
in descending order

88	2,639	186209 28	223716 46
papers	citations	h-index	g-index

118	118	118	1871
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MÃ©lange rheology and seismic style. Geology, 2010, 38, 751-754.	2.0	244
2	Characterizing the seismogenic zone of a major plate boundary subduction thrust: Hikurangi Margin, New Zealand. Geochemistry, Geophysics, Geosystems, 2009, 10, .	1.0	142
3	An Explanation of Episodic Tremor and Slow Slip Constrained by Crackâ€Seal Veins and Viscous Shear in Subduction MÃ©lange. Geophysical Research Letters, 2018, 45, 5371-5379.	1.5	100
4	Slow slip source characterized by lithological and geometric heterogeneity. Science Advances, 2020, 6, eaay3314.	4.7	95
5	Shear veins observed within anisotropic fabric at high angles to the maximum compressive stress. Nature Geoscience, 2010, 3, 482-485.	5.4	92
6	Brittleâ€viscous deformation, slow slip, and tremor. Geophysical Research Letters, 2014, 41, 4159-4167.	1.5	80
7	Incrementally developed slickenfibers â€" Geological record of repeating low stress-drop seismic events?. Tectonophysics, 2011, 510, 381-386.	0.9	66
8	Fluid budgets along the northern Hikurangi subduction margin, New Zealand: the effect of a subducting seamount on fluid pressure. Geophysical Journal International, 2015, 202, 277-297.	1.0	62
9	On factors controlling the depth of interseismic coupling on the Hikurangi subduction interface, New Zealand. Earth and Planetary Science Letters, 2009, 278, 120-130.	1.8	60
10	Signature of coseismic decarbonation in dolomitic fault rocks of the Naukluft Thrust, Namibia. Earth and Planetary Science Letters, 2012, 333-334, 200-210.	1.8	58
11	Fracturing of doleritic intrusions and associated contact zones: Implications for fluid flow in volcanic basins. Journal of African Earth Sciences, 2015, 102, 70-85.	0.9	58
12	Subduction megathrust creep governed by pressure solution and frictionalâ€"viscous flow. Nature Geoscience, 2017, 10, 51-57.	5.4	58
13	New perspectives on â€˜geological strain ratesâ€™ calculated from both naturally deformed and actively deforming rocks. Journal of Structural Geology, 2019, 125, 100-110.	1.0	56
14	Strength of Strained Twoâ€Phase Mixtures: Application to Rapid Creep and Stress Amplification in Subduction Zone MÃ©lange. Geophysical Research Letters, 2019, 46, 169-178.	1.5	49
15	Fractal vein distributions within a fault-fracture mesh in an exhumed accretionary mÃ©lange, Chrystalls Beach Complex, New Zealand. Journal of Structural Geology, 2011, 33, 918-927.	1.0	47
16	Fault segmentation, deep rift earthquakes and crustal rheology: Insights from the 2009 Karonga sequence and seismicity in the Rukwaâ€"Malawi rift zone. Tectonophysics, 2013, 601, 216-225.	0.9	43
17	Fingerprints of late Neoproterozoic ridge subduction in the Pan-African Damara belt, Namibia. Geology, 2014, 42, 903-906.	2.0	42
18	The influence of melting and melt drainage on crustal rheology during orogenesis. Journal of Geophysical Research: Solid Earth, 2014, 119, 6193-6210.	1.4	42

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19	Frequency-size distribution of competent lenses in a block-in-matrix mÃ©lange: Imposed length scales of brittle deformation?. Journal of Geophysical Research, 2011, 116, .	3.3	39
20	Nonâ€volcanic tremor and discontinuous slab dehydration. Geophysical Research Letters, 2011, 38, .	1.5	39
21	Controls on Earlyâ€Rift Geometry: New Perspectives From the Bililaâ€Mtakataka Fault, Malawi. Geophysical Research Letters, 2018, 45, 3896-3905.	1.5	37
22	Earthquake nucleation in the lower crust by local stress amplification. Nature Communications, 2020, 11, 1322.	5.8	35
23	Geodetic Constraints on Cratonic Microplates and Broad Strain During Rifting of Thick Southern African Lithosphere. Geophysical Research Letters, 2021, 48, e2021GL093785.	1.5	34
24	Mixed deformation styles observed on a shallow subduction thrust, Hikurangi margin, New Zealand. Geology, 2019, 47, 872-876.	2.0	33
25	The metamorphic history of rocks buried, accreted and exhumed in an accretionary prism: an example from the Otago Schist, New Zealand. Journal of Metamorphic Geology, 2010, 28, 935-954.	1.6	32
26	Geological constraints on the mechanisms of slow earthquakes. Nature Reviews Earth & Environment, 2021, 2, 285-301.	12.2	32
27	Wedge geometry, mechanical strength, and interseismic coupling of the Hikurangi subduction thrust, New Zealand. Tectonophysics, 2011, 507, 26-30.	0.9	31
28	Upper plate tectonic stress state may influence interseismic coupling on subduction megathrusts. Geology, 2012, 40, 895-898.	2.0	31
29	On stress and strain in a continuous-discontinuous shear zone undergoing simple shear and volume loss. Journal of Structural Geology, 2013, 50, 44-53.	1.0	31
30	Active Fault Scarps in Southern Malawi and Their Implications for the Distribution of Strain in Incipient Continental Rifts. Tectonics, 2020, 39, e2019TC005834.	1.3	31
31	Geology of the earthquake source: an introduction. Geological Society Special Publication, 2011, 359, 1-16.	0.8	30
32	Strain distribution within a km-scale, mid-crustal shear zone: The Kuckaus Mylonite Zone, Namibia. Journal of Structural Geology, 2013, 56, 57-69.	1.0	29
33	How Do Variably Striking Faults Reactivate During Rifting? Insights From Southern Malawi. Geochemistry, Geophysics, Geosystems, 2019, 20, 3588-3607.	1.0	28
34	Geology of the seismogenic subduction thrust interface. Geological Society Special Publication, 2011, 359, 55-76.	0.8	27
35	â€œVirtual shear boxâ€•experiments of stress and slip cycling within a subduction interface mÃ©lange. Earth and Planetary Science Letters, 2018, 488, 27-35.	1.8	27
36	Quartz vein formation by local dehydration embrittlement along the deep, tremorgenic subduction thrust interface. Geology, 2018, 46, 67-70.	2.0	27

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37	Structural inheritance and border fault reactivation during active early-stage rifting along the Thyolo fault, Malawi. Journal of Structural Geology, 2020, 139, 104097.	1.0	26
38	Silica gel in a fault slip surface: Field evidence for palaeo-earthquakes?. Journal of Structural Geology, 2014, 69, 108-121.	1.0	25
39	Stable isotope study of the Archaean rocks of the Vredefort impact structure, central Kaapvaal Craton, South Africa. Contributions To Mineralogy and Petrology, 2007, 155, 63-78.	1.2	24
40	Is complex fault zone behaviour a reflection of rheological heterogeneity?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190421.	1.6	24
41	Fracture and Weakening of Jammed Subduction Shear Zones, Leading to the Generation of Slow Slip Events. Geochemistry, Geophysics, Geosystems, 2019, 20, 4869-4884.	1.0	23
42	Polymetamorphism, zircon growth and retention of early assemblages through the dynamic evolution of a continental arc in Fiordland, New Zealand. Journal of Metamorphic Geology, 2009, 27, 281-294.	1.6	22
43	A semi-automated algorithm to quantify scarp morphology (SPARTA): application to normal faults in southern Malawi. Solid Earth, 2019, 10, 27-57.	1.2	21
44	San Andreas Fault tremor and retrograde metamorphism. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	20
45	Evidence From Highâ€Resolution Topography for Multiple Earthquakes on High Slipâ€toâ€Length Fault Scarps: The Bililaâ€Mtakataka Fault, Malawi. Tectonics, 2020, 39, e2019TC005933.	1.3	20
46	Hydrous oceanic crust hosts megathrust creep at low shear stresses. Science Advances, 2020, 6, eaba1529.	4.7	20
47	Expedition 372B/375 summary. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	20
48	Lowâ€Temperature Frictional Characteristics of Chloriteâ€Epidoteâ€Amphibole Assemblages: Implications for Strength and Seismic Style of Retrograde Fault Zones. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019487.	1.4	19
49	Interplay between fluid flow and faultâ€“fracture mesh generation within underthrust sediments: Geochemical evidence from the Chrystalls Beach Complex, New Zealand. Tectonophysics, 2014, 612-613, 147-157.	0.9	18
50	The Role of Coseismic Coulomb Stress Changes in Shaping the Hard Link Between Normal Fault Segments. Journal of Geophysical Research: Solid Earth, 2018, 123, 797-814.	1.4	18
51	Expedition 372B/375 methods. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	18
52	Site U1520. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	18
53	Metamorphic imprint of accretion and ridge subduction in the Panâ€African Damara Belt, Namibia. Journal of Metamorphic Geology, 2015, 33, 633-648.	1.6	17
54	A systems-based approach to parameterise seismic hazard in regions with little historical or instrumental seismicity: active fault and seismogenic source databases for southern Malawi. Solid Earth, 2021, 12, 187-217.	1.2	17

#	Article	IF	Citations
55	Site U1518. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	16
56	The Malawi Active Fault Database: An Onshoreâ€Offshore Database for Regional Assessment of Seismic Hazard and Tectonic Evolution. Geochemistry, Geophysics, Geosystems, 2022, 23, .	1.0	16
57	Petrology of metabasalts from the Chrystalls Beach accretionary mÃ©lange - implications for tectonic setting and terrane origin. New Zealand Journal of Geology, and Geophysics, 2010, 53, 57-70.	1.0	15
58	Lower crustal earthquakes in the East African Rift System: Insights from frictional properties of rock samples from the Malawi rift. Tectonophysics, 2019, 767, 228167.	0.9	15
59	Weaker Than Weakest: On the Strength of Shear Zones. Geophysical Research Letters, 2019, 46, 7404-7413.	1.5	15
60	A range of fault slip styles on progressively misoriented planes during flexural-slip folding, Cape Fold Belt, South Africa. Journal of Structural Geology, 2015, 70, 156-169.	1.0	13
61	Microseismic Activity and Basement Controls on an Active Intraplate Strikeâ€Slip Fault, Ceresâ€“Tulbagh, South Africa. Bulletin of the Seismological Society of America, 2015, 105, 1540-1547.	1.1	13
62	Tectonic pressure gradients during viscous creep drive fluid flow and brittle failure at the base of the seismogenic zone. Geology, 2021, 49, 1255-1259.	2.0	13
63	Afterslip Moment Scaling and Variability From a Global Compilation of Estimates. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	13
64	STABLE ISOTOPE EVIDENCE FOR IMPACT-RELATED PSEUDOTACHYLITE FORMATION AT VREDEFORT BY LOCAL MELTING OF DRY ROCKS. South African Journal of Geology, 2013, 116, 101-118.	0.6	12
65	Mid-crustal shear zone development under retrograde conditions: pressureâ€“temperatureâ€“fluid constraints from the Kuckaus Mylonite Zone, Namibia. Solid Earth, 2016, 7, 1331-1347.	1.2	12
66	Stress, strain, and fault behavior at a thrust ramp: Insights from the Naukluft thrust, Namibia. Journal of Structural Geology, 2014, 58, 95-107.	1.0	11
67	Shear Zone Development in Serpentinized Mantle: Implications for the Strength of Oceanic Transform Faults. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020763.	1.4	11
68	Site U1519. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	11
69	Influence of Subduction Zone Dynamics on Interface Shear Stress and Potential Relationship With Seismogenic Behavior. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009267.	1.0	9
70	Mixed Brittle and Viscous Strain Localization in Pelagic Sediments Seaward of the Hikurangi Margin, New Zealand. Tectonics, 2020, 39, e2019TC005965.	1.3	8
71	Variable In Situ Stress Orientations Across the Northern Hikurangi Subduction Margin. Geophysical Research Letters, 2021, 48, e2020GL091707.	1.5	8
72	The Role of Quartz Cementation in the Seismic Cycle: A Critical Review. Reviews of Geophysics, 2022, 60, .	9.0	8

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73	Site U1526. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	7
74	The contemporary force balance in a wide accretionary wedge: numerical models of the southcentral Hikurangi margin of New Zealand. Geophysical Journal International, 2019, 219, 776-795.	1.0	6
75	Evidence of Seismic Slip on a Large Splay Fault in the Hikurangi Subduction Zone. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009638.	1.0	6
76	Seafloor overthrusting causes ductile fault deformation and fault sealing along the Northern Hikurangi Margin. Earth and Planetary Science Letters, 2022, 593, 117651.	1.8	6
77	A NOTE ON FOLDING MECHANISMS IN THE CAPE FOLD BELT, SOUTH AFRICA. South African Journal of Geology, 2012, 115, 137-144.	0.6	5
78	Significant shortening by pressure solution creep in the Dwyka diamictite, Cape Fold Belt, South Africa. Journal of African Earth Sciences, 2014, 97, 9-18.	0.9	5
79	On Seismicity and Structural Style of Oceanic Transform Faults: A Field Geological Perspective From the Troodos Ophiolite, Cyprus. , 2019, , 437-459.		4
80	Sources and Effects of Fluids in Continental Retrograde Shear Zones: Insights from the Kuckaus Mylonite Zone, Namibia. Geofluids, 2020, 2020, 1-21.	0.3	4
81	Asymmetric Brittle Deformation at the PÄpaku Fault, Hikurangi Subduction Margin, NZ, IODP Expedition 375. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009662.	1.0	4
82	Frictional Characteristics of Oceanic Transform Faults: Progressive Deformation and Alteration Controls Seismic Style. Geophysical Research Letters, 2021, 48, .	1.5	4
83	Low Dissipation of Earthquake Energy Where a Fault Follows Preâ€Existing Weaknesses: Field and Microstructural Observations of Malawiâ€™s Bililaâ€Mtakataka Fault. Geophysical Research Letters, 2022, 49, .	1.5	4
84	Knickpoint morphotectonics of the Middle Shire River basin: Implications for the evolution of rift interaction zones. Basin Research, 2022, 34, 1839-1858.	1.3	4
85	South African research in the Southern Ocean: New opportunities but serious challenges. South African Journal of Science, 2013, 109, 4.	0.3	3
86	Fluid-related deformation processes at the up- and downdip limits of the subduction thrust seismogenic zone: What do the rocks tell us?. , 0, , .		3
87	What Do Earthquake Magnitudes Mean? Example of the KaikÅura, New Zealand, 2016 Event. Developments in Structural Geology and Tectonics, 2019, 5, 57-64.	0.2	1
88	Paleostress Analysis of Karoo Supergroup of the Tshipise-Pafuri Basin, South Africa: Comment. South African Journal of Geology, 2015, 118, 511-513.	0.6	0