Ze'ev Reches

List of Publications by Year
in descending order

40 papers	3,412 citations	218662 26 h-index	265191 42 g-index
43 all docs	43 docs citations	43 times ranked	1925 citing authors

#	Article	IF	Citations
1	Nucleation and growth of faults in brittle rocks. Journal of Geophysical Research, 1994, 99, 18159-18173.	3.3	429
2	Fault weakening and earthquake instability by powder lubrication. Nature, 2010, 467, 452-455.	27.8	249
3	Particle size and energetics of gouge from earthquake rupture zones. Nature, 2005, 434, 749-752.	27.8	247
4	Analysis of faulting in three-dimensional strain field. Tectonophysics, 1978, 47, 109-129.	2.2	238
5	Faulting of rocks in three-dimensional strain fields II. Theoretical analysis. Tectonophysics, 1983, 95, 133-156.	2.2	234
6	Determination of the tectonic stress tensor from slip along faults that obey the Coulomb yield condition. Tectonics, 1987, 6, 849-861.	2.8	194
7	Tectonic analysis of the Dead Sea Rift Region since the Lateâ€Cretaceous based on mesostructures. Tectonics, 1983, 2, 167-185.	2.8	181
8	Gouge formation by dynamic pulverization during earthquake rupture. Earth and Planetary Science Letters, 2005, 235, 361-374.	4.4	166
9	Faulting of rocks in three-dimensional strain fields I. Failure of rocks in polyaxial, servo-control experiments. Tectonophysics, 1983, 95, 111-132.	2.2	159
10	Number and orientation of fault sets in the field and in experiments. Geology, 1982, 10, 107.	4.4	120
11	Holocene seismic and tectonic activity in the Dead Sea area. Tectonophysics, 1981, 80, 235-254.	2.2	104
12	Non-linear elastic behaviour of damaged rocks. Geophysical Journal International, 1997, 130, 157-166.	2.4	91
13	Dikes emplaced into fractured basement, Timna Igneous Complex, Israel. Journal of Geophysical Research, 1994, 99, 24039-24050.	3.3	87
14	Interseismic fault strengthening and earthquake-slip instability: Friction or cohesion?. Geology, 2003, 31, 881.	4.4	87
15	Microfracturing, damage, and failure of brittle granites. Journal of Geophysical Research, 2004, 109, .	3.3	86
16	Mechanical aspects of pull-apart basins and push-up swells with applications to the Dead Sea transform. Tectonophysics, 1987, 141, 75-88.	2.2	70
17	The mechanism of intrusion of the Inyo Dike, Long Valley Caldera, California. Journal of Geophysical Research, 1988, 93, 4321-4334.	3.3	66
18	Dynamic fracture by large extraterrestrial impacts as the origin of shatter cones. Nature, 2002, 418, 310-313.	27.8	60

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19	Fault mirrors along carbonate faults: Formation and destruction during shear experiments. Earth and Planetary Science Letters, 2015, 430, 367-376.	4.4	60
20	Hierarchic three-dimensional structure and slip partitioning in the western Dead Sea pull-apart. Tectonics, 2003, 22, n/a-n/a.	2.8	53
21	Stable and unstable damage evolution in rocks with implications to fracturing of granite. Geophysical Journal International, 2006, 167, 1005-1016.	2.4	49
22	Holocene tectonic deformation along the western margins of the Dead Sea. Tectonophysics, 1990, 180, 123-137.	2.2	48
23	Constraints on the strength of the upper crust from stress inversion of fault slip data. Journal of Geophysical Research, 1992, 97, 12481-12493.	3.3	47
24	Mechanisms of slip nucleation during earthquakes. Earth and Planetary Science Letters, 1999, 170, 475-486.	4.4	43
25	THE STRUCTURE OF A MONOCLINE IN THE SYRIAN ARC SYSTEM, MIDDLE EAST-SURFACE AND SUBSURFACE ANALYSIS. Journal of Petroleum Geology, 1981, 3, 413-426.	1.5	32
26	Analysis of joints in two monoclines in Israel. Bulletin of the Geological Society of America, 1976, 87, 1654.	3.3	31
27	Structure and paleostresses in the Gilboa' region, western margins of the central Dead Sea rift. Tectonophysics, 1990, 180, 87-100.	2.2	23
28	Fault strength evolution during high velocity friction experiments with slip-pulse and constant-velocity loading. Earth and Planetary Science Letters, 2014, 406, 93-101.	4.4	21
29	The frictional strength of talc gouge in highâ€velocity shear experiments. Journal of Geophysical Research: Solid Earth, 2017, 122, 3661-3676.	3.4	20
30	Friction Evolution of Granitic Faults: Heating Controlled Transition From Powder Lubrication to Frictional Melt. Journal of Geophysical Research: Solid Earth, 2017, 122, 9275-9289.	3.4	20
31	Doming mechanisms and structural development of two domes in Ramon, southern Israel. Tectonophysics, 1989, 166, 293-315.	2.2	16
32	Shear heating and clumped isotope reordering in carbonate faults. Earth and Planetary Science Letters, 2016, 445, 136-145.	4.4	15
33	Models of postâ€Miocene deformation of the Arabian Plate. Tectonics, 1987, 6, 707-725.	2.8	13
34	Dynamic fault weakening during earthquakes: Rupture or friction?. Earth and Planetary Science Letters, 2021, 575, 117165.	4.4	11
35	Frictional rheology: hardening by rotation of active normal faults. Tectonophysics, 1995, 247, 239-254.	2.2	7
36	An experimentally-based friction law for high-velocity, long-displacement slip-pulse events during earthquakes. Earth and Planetary Science Letters, 2019, 515, 209-220.	4.4	7

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37	Energy-flux control of the steady-state, creep, and dynamic slip modes of faults. Scientific Reports, 2019, 9, 10627.	3.3	6
38	Composite damage zones in the subsurface. Geophysical Journal International, 2020, 222, 225-230.	2.4	5
39	Weakening Mechanisms of Alpine Fault Gouge in Highâ€Velocity Shear Experiments. Journal of Geophysical Research: Solid Earth, 2019, 124, 7413-7428.	3.4	4
40	Asymmetry of faults and stress patterns within the Dead Sea basin as displayed by seismological analysis. Tectonophysics, 2021, 819, 229069.	2.2	4