Elizabeth H Madden

List of Publications by Year
in descending order

19 papers	489 citations	759233 12 h-index	839539 18 g-index
28 all docs	28 docs citations	28 times ranked	562 citing authors

#	Article	IF	Citations
1	Coupled, Physics-Based Modeling Reveals Earthquake Displacements are Critical to the 2018 Palu, Sulawesi Tsunami. Pure and Applied Geophysics, 2019, 176, 4069-4109.	1.9	96
2	Is the Earth Lazy? A review of work minimization in fault evolution. Journal of Structural Geology, 2014, 66, 334-346.	2.3	84
3	Extreme scale multi-physics simulations of the tsunamigenic 2004 sumatra megathrust earthquake. , 2017, , .		59
4	Modeling Megathrust Earthquakes Across Scales: One‐way Coupling From Geodynamics and Seismic Cycles to Dynamic Rupture. Journal of Geophysical Research: Solid Earth, 2019, 124, 11414-11446.	3.4	30
5	The work of fault growth in laboratory sandbox experiments. Earth and Planetary Science Letters, 2015, 432, 95-102.	4.4	28
6	Stress, rigidity and sediment strength control megathrust earthquake and tsunami dynamics. Nature Geoscience, 2022, 15, 67-73.	12.9	25
7	Evolving efficiency of restraining bends within wet kaolin analog experiments. Journal of Geophysical Research: Solid Earth, 2015, 120, 1975-1992.	3.4	22
8	Energy budget and propagation of faults via shearing and opening using work optimization. Journal of Geophysical Research: Solid Earth, 2017, 122, 6757-6772.	3.4	17
9	Linked 3-D modelling of megathrust earthquake-tsunami events: from subduction to tsunami run up. Geophysical Journal International, 2020, 224, 487-516.	2.4	17
10	Integration of Surface Slip and Aftershocks to Constrain the 3D Structure of Faults Involved in the M 7.3 Landers Earthquake, Southern California. Bulletin of the Seismological Society of America, 2012, 102, 321-342.	2.3	15
11	Mechanics of nonplanar faults at extensional steps with application to the 1992 M 7.3 Landers, California, earthquake. Journal of Geophysical Research: Solid Earth, 2013, 118, 3249-3263.	3.4	15
12	Growth by Optimization of Work (GROW): A new modeling tool that predicts fault growth through work minimization. Computers and Geosciences, 2016, 88, 142-151.	4.2	14
13	Work Optimization Predicts the Evolution of Extensional Step Overs Within Anisotropic Host Rock: Implications for the San Pablo Bay, CA. Tectonics, 2017, 36, 2630-2646.	2.8	12
14	Influence of Fault Geometry on the Spatial Distribution of Long‐Term Slip with Implications for Determining Representative Fault‐Slip Rates. Bulletin of the Seismological Society of America, 2018, 108, 1837-1852.	2.3	11
15	Incorporating fault mechanics into inversions of aftershock data for the regional remote stress, with application to the 1992 Landers, California earthquake. Tectonophysics, 2016, 674, 52-64.	2.2	9
16	Mechanical Models Suggest Fault Linkage through the Imperial Valley, California, U.S.A.. Bulletin of the Seismological Society of America, 2019, 109, 1217-1234.	2.3	7
17	The State of Pore Fluid Pressure and 3‐D Megathrust Earthquake Dynamics. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	7
18	3D Linked Subduction, Dynamic Rupture, Tsunami, and Inundation Modeling: Dynamic Effects of Supershear and Tsunami Earthquakes, Hypocenter Location, and Shallow Fault Slip. Frontiers in Earth Science, 2021, 9, .	1.8	6

#	Article	IF	Citations
19	Vertical Displacement Caused by Hydrological Influence in the Amazon Basin. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020691.	3.4	4