Benchun Duan

List of Publications by Year in descending order

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687363 454955 39 904 13 30 citations h-index g-index papers 41 41 41 570 citing authors docs citations times ranked all docs

#	Article	IF	CITATIONS
1	Heterogeneous fault stresses from previous earthquakes and the effect on dynamics of parallel strike-slip faults. Journal of Geophysical Research, 2006, 111 , n/a-n/a.	3.3	147
2	A Suite of Exercises for Verifying Dynamic Earthquake Rupture Codes. Seismological Research Letters, 2018, 89, 1146-1162.	1.9	142
3	Multicycle dynamics of nonplanar strike-slip faults. Journal of Geophysical Research, 2005, 110, .	3.3	107
4	Inelastic strain distribution and seismic radiation from rupture of a fault kink. Journal of Geophysical Research, 2008, 113 , .	3.3	71
5	Dynamic rupture of the 2011 Mw 9.0 Tohokuâ€Oki earthquake: Roles of a possible subducting seamount. Journal of Geophysical Research, 2012, 117, .	3.3	65
6	Nonuniform prestress from prior earthquakes and the effect on dynamics of branched fault systems. Journal of Geophysical Research, 2007, 112, .	3.3	61
7	Role of initial stress rotations in rupture dynamics and ground motion: A case study with implications for the Wenchuan earthquake. Journal of Geophysical Research, 2010, 115, .	3.3	51
8	Communityâ€Driven Code Comparisons for Threeâ€Dimensional Dynamic Modeling of Sequences of Earthquakes and Aseismic Slip. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	27
9	Effects of lowâ€velocity fault zones on dynamic ruptures with nonelastic offâ€fault response. Geophysical Research Letters, 2008, 35, .	4.0	26
10	Asymmetric offâ€fault damage generated by bilateral ruptures along a bimaterial interface. Geophysical Research Letters, 2008, 35, .	4.0	23
11	Rupture Propagation along Stepovers of Strike-Slip Faults: Effects of Initial Stress and Fault Geometry. Bulletin of the Seismological Society of America, 2020, 110, 1011-1024.	2.3	18
12	EQsimu: a 3-D finite element dynamic earthquake simulator for multicycle dynamics of geometrically complex faults governed by rate- and state-dependent friction. Geophysical Journal International, 2020, 220, 598-609.	2.4	16
13	Dynamics of Nonplanar Thrust Faults Governed by Various Friction Laws. Journal of Geophysical Research: Solid Earth, 2018, 123, 5147-5168.	3.4	14
14	Scenario Earthquake and Groundâ€Motion Simulations in North China: Effects of Heterogeneous Fault Stress and 3D Basin Structure. Bulletin of the Seismological Society of America, 2018, 108, 2148-2169.	2.3	13
15	Inelastic response of compliant fault zones to nearby earthquakes. Geophysical Research Letters, 2010, 37, .	4.0	11
16	Multicycle Dynamics of the Aksay Bend Along the Altyn Tagh Fault in Northwest China: 2. The Realistically Complex Fault Geometry. Tectonics, 2019, 38, 1120-1137.	2.8	11
17	Spontaneous rupture on natural fractures and seismic radiation during hydraulic fracturing treatments. Geophysical Research Letters, 2016, 43, 7451-7458.	4.0	10
18	3D Finite-Element Modeling of Dynamic Rupture and Aseismic Slip over Earthquake Cycles on Geometrically Complex Faults. Bulletin of the Seismological Society of America, 2020, 110, 2619-2637.	2.3	10

#	Article	IF	Citations
19	Deformation of compliant fault zones induced by nearby earthquakes: Theoretical investigations in two dimensions. Journal of Geophysical Research, 2011, 116, .	3.3	8
20	Multicycle Dynamics of the Aksay Bend Along the Altyn Tagh Fault in Northwest China: 1. A Simplified Double Bend. Tectonics, 2019, 38, 1101-1119.	2.8	8
21	Observation-constrained multicycle dynamic models of the Pingding Shan earthquake gate along the Altyn Tagh Fault. Tectonophysics, 2021, 814, 228948.	2.2	8
22	Parallel Simulations of Dynamic Earthquake Rupture along Geometrically Complex Faults on CMP Systems. Journal of Algorithms and Computational Technology, 2011, 5, 313-340.	0.7	7
23	Seismic shaking in the North China Basin expected from ruptures of a possible seismic gap. Geophysical Research Letters, 2017, 44, 4855-4862.	4.0	7
24	Significance of the dynamic stress perturbations induced by hydraulic fracturing. Journal of Petroleum Science and Engineering, 2019, 174, 169-176.	4.2	7
25	Coseismic Slip Gradient and Rupture Jumps on Parallel Strikeâ€6lip Faults. Bulletin of the Seismological Society of America, 2016, 106, 204-212.	2.3	5
26	Dynamic modeling of bedding-plane slip during hydraulic fracturing. Geophysics, 2019, 84, KS95-KS104.	2.6	5
27	Exploring Physical Links between Fluid Injection and Nearby Earthquakes: The 2012 MwÂ4.8 Timpson, Texas, Case Study. Bulletin of the Seismological Society of America, 2020, 110, 2350-2365.	2.3	4
28	Parallel Earthquake Simulations on Large-Scale Multicore Supercomputers., 2011,, 539-562.		4
29	Using a dynamic earthquake simulator to explore tsunami earthquake generation. Geophysical Journal International, 2021, 229, 255-273.	2.4	4
30	Inelastic response of compliant fault zones to nearby earthquakes in three dimensions. Tectonophysics, 2014, 612-613, 56-62.	2.2	3
31	Elastic and inelastic responses of compliant fault zones to nearby earthquakes in three dimensions: a parameter-space study. Geophysical Journal International, 2015, 201, 1195-1214.	2.4	2
32	Do earthquakes trigger mud volcanoes? A case study from the southern margin of the Junggar Basin, NW China. Geological Journal, 2019, 54, 1223-1237.	1.3	2
33	Dynamical stresses caused by a propagating hydraulic fracture and dynamic shear sliding of weakness/bedding planes as a microseismic source. , 2017, , .		2
34	Observationâ€Constrained Multicycle Dynamic Models of the Southern San Andreas and the Northern San Jacinto Faults: Addressing Complexity in Paleoearthquake Extent and Recurrence With Realistic 2D Fault Geometry. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	2
35	An OpenMP Approach to Modeling Dynamic Earthquake Rupture Along Geometrically Complex Faults on CMP Systems. , 2009, , .		1
36	Reply to comment by Y. Fialko on "Deformation of compliant fault zones induced by nearby earthquakes: Theoretical investigations in two dimensions― Journal of Geophysical Research, 2011, 116, .	3.3	1

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#	Article	IF	CITATIONS
37	Studying stress state and fault zone properties of source regions of induced seismicity using dynamic rupture models., 2019,,.		1
38	Study on the microseismic clouds induced by hydraulic fracturing. Geomechanics and Geoengineering, 2021, 16, 400-416.	1.8	0
39	Inferring fault friction properties and background stress using fluid flow and dynamic rupture modeling, and machine learning techniques – Concept case study of the M4.8 Timpson (TX) earthquake., 2020, , .		0