Tatsuhiko Saito

List of Publications by Year
in descending order

56 papers	1,651 citations	279487 23 h-index	301761 39 g-index
68 all docs	68 docs citations	68 times ranked	1078 citing authors

#	Article	IF	Citations
1	Spatial distribution and focal mechanisms of aftershocks of the 2011 off the Pacific coast of Tohoku Earthquake. Earth, Planets and Space, 2011, 63, 669-673.	0.9	229
2	Tsunami source of the 2011 Tohoku-Oki earthquake, Japan: Inversion analysis based on dispersive tsunami simulations. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	131
3	Global fast-traveling tsunamis driven by atmospheric Lamb waves on the 2022 Tonga eruption. Science, 2022, 377, 91-94.	6.0	113
4	Three-dimensional tsunami generation simulation due to sea-bottom deformation and its interpretation based on the linear theory. Geophysical Journal International, 2009, 178, 877-888.	1.0	81
5	Tsunami waveform inversion including dispersive waves: the 2004 earthquake off Kii Peninsula, Japan. Journal of Geophysical Research, 2010, 115, .	3.3	66
6	Dynamic tsunami generation due to sea-bottom deformation: Analytical representation based on linear potential theory. Earth, Planets and Space, 2013, 65, 1411-1423.	0.9	59
7	Dispersion and nonlinear effects in the 2011 Tohokuâ€Oki earthquake tsunami. Journal of Geophysical Research: Oceans, 2014, 119, 5160-5180.	1.0	54
8	Love-wave excitation due to the interaction between a propagating ocean wave and the sea-bottom topography. Geophysical Journal International, 2010, 182, 1515-1523.	1.0	51
9	Temporal Changes in Stress Drop, Frictional Strength, and Earthquake Size Distribution in the 2011 Yamagataâ€Fukushima, NE Japan, Earthquake Swarm, Caused by Fluid Migration. Journal of Geophysical Research: Solid Earth, 2017, 122, 10,379.	1.4	48
10	Threeâ€dimensional simulation of tsunami generation and propagation: Application to intraplate events. Journal of Geophysical Research, 2009, 114, .	3.3	46
11	Slipâ€Deficit Rate Distribution Along the Nankai Trough, Southwest Japan, With Elastic Lithosphere and Viscoelastic Asthenosphere. Journal of Geophysical Research: Solid Earth, 2018, 123, 8125-8142.	1.4	46
12	Dispersive tsunami of the 2010 Chile earthquake recorded by the highâ€samplingâ€rate oceanâ€bottom pressure gauges. Geophysical Research Letters, 2010, 37, .	1.5	40
13	Synthesizing ocean bottom pressure records including seismic wave and tsunami contributions: Toward realistic tests of monitoring systems. Journal of Geophysical Research: Solid Earth, 2016, 121, 8175-8195.	1.4	36
14	Stress rotations due to the M6.5 foreshock and M7.3 main shock in the 2016 Kumamoto, SW Japan, earthquake sequence. Geophysical Research Letters, 2016, 43, 10,097.	1.5	36
15	Tsunami generation: validity and limitations of conventional theories. Geophysical Journal International, 2017, 210, 1888-1900.	1.0	33
16	Tsunami Generation and Propagation. Springer Geophysics, 2019, , .	0.9	31
17	Millimeterâ€Scale Tsunami Detected by a Wide and Dense Observation Array in the Deep Ocean: Fault Modeling of an Mw 6.0 Interplate Earthquake off Sanriku, NE Japan. Geophysical Research Letters, 2020, 47, e2019GL085842.	1.5	30
18	Simulation of distant tsunami propagation with a radial loading deformation effect. Earth, Planets and Space, 2013, 65, 835-842.	0.9	28

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19	Fault size and depth extent of the Ecuador earthquake (M_w 7.8) of 16 April 2016 from teleseismic and tsunami data. Geophysical Research Letters, 2017, 44, 2211-2219.	1.5	26
20	Tsunami Coda across the Pacific Ocean Following the 2011 Tohoku-Oki Earthquake. Bulletin of the Seismological Society of America, 2013, 103, 1429-1443.	1.1	25
21	Tsunami Modeling for the Deep Sea and Inside Focal Areas. Annual Review of Earth and Planetary Sciences, 2020, 48, 121-145.	4.6	25
22	Fractional seismic velocity change related to magma intrusions during earthquake swarms in the eastern Izu peninsula, central Japan. Journal of Geophysical Research, 2012, 117, .	3.3	24
23	Estimation of Seismic Centroid Moment Tensor Using Ocean Bottom Pressure Gauges as Seismometers. Geophysical Research Letters, 2017, 44, 10,907.	1.5	23
24	Moment tensor inversion of the 2016 southeast offshore Mie earthquake in the Tonankai region using a three-dimensional velocity structure model: effects of the accretionary prism and subducting oceanic plate. Earth, Planets and Space, 2018, 70, .	0.9	21
25	Meteorological Tsunami Generation Due to Seaâ€Surface Pressure Change: Threeâ€Dimensional Theory and Synthetics of Oceanâ€Bottom Pressure Change. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017011.	1.0	21
26	Synthesizing sea surface height change including seismic waves and tsunami using a dynamic rupture scenario of anticipated Nankai trough earthquakes. Tectonophysics, 2019, 769, 228166.	0.9	18
27	Scattering of linear long-wave tsunamis due to randomly fluctuating sea-bottom topography: coda excitation and scattering attenuation. Geophysical Journal International, 2009, 177, 958-965.	1.0	17
28	Two subevents across the Japan Trench during the 7 December 2012 off Tohoku earthquake (M_w 7.3) inferred from offshore tsunami records. Journal of Geophysical Research: Solid Earth, 2014, 119, 5800-5813.	1.4	16
29	Using Tsunami Waves Reflected at the Coast to Improve Offshore Earthquake Source Parameters: Application to the 2016 Mw 7.1 Te Araroa Earthquake, New Zealand. Journal of Geophysical Research: Solid Earth, 2018, 123, 8767-8779.	1.4	16
30	Meteotsunami Observed by the Deepâ€Ocean Seafloor Pressure Gauge Network Off Northeastern Japan. Geophysical Research Letters, 2021, 48, e2021GL094255.	1.5	16
31	Energyâ€Based Scenarios for Great Thrustâ€Type Earthquakes in the Nankai Trough Subduction Zone, Southwest Japan, Using an Interseismic Slipâ€Deficit Model. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020417.	1.4	15
32	Modeling of Long-Period Ground Motions in the Nankai Subduction Zone: Model Simulation Using the Accretionary Prism Derived from Oceanfloor Local S-Wave Velocity Structures. Pure and Applied Geophysics, 2019, 176, 627-647.	0.8	14
33	Estimation of seismic velocity changes at different depths associated with the 2014 Northern Nagano Prefecture earthquake, Japan (M W 6.2) by joint interferometric analysis of NIED Hi-net and KiK-net records. Progress in Earth and Planetary Science, 2016, 3, .	1.1	13
34	Near-field tsunami forecast system based on near real-time seismic moment tensor estimation in the regions of Indonesia, the Philippines, and Chile. Earth, Planets and Space, 2016, 68, .	0.9	13
35	The Nankai Trough earthquake tsunamis in Korea: numerical studies of the 1707 Hoei earthquake and physics-based scenarios. Earth, Planets and Space, 2016, 68, .	0.9	13
36	Shallow Temporal Changes in S Wave Velocity and Polarization Anisotropy Associated With the 2016 Kumamoto Earthquake Sequence, Japan. Journal of Geophysical Research: Solid Earth, 2018, 123, 9899-9913.	1.4	13

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37	Shear Strain Energy Change Caused by the Interplate Coupling Along the Nankai Trough: An Integration Analysis Using Stress Tensor Inversion and Slipâ€Deficit Inversion. Journal of Geophysical Research: Solid Earth, 2018, 123, 5975-5986.	1.4	13
38	Rupture directivity, stress drop, and hypocenter migration of small earthquakes in the Yamagata-Fukushima border swarm triggered by upward pore-pressure migration after the 2011 Tohoku-Oki earthquake. Tectonophysics, 2019, 769, 228184.	0.9	13
39	Stress Release Process Along an Intraplate Fault Analogous to the Plate Boundary: A Case Study of the 2017 M5.2 Akitaâ€Daisen Earthquake, NE Japan. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019527.	1.4	13
40	Integrated Ground Motion and Tsunami Simulation for the 1944 Tonankai Earthquake Using High-Performance Supercomputers. Journal of Disaster Research, 2009, 4, 118-126.	0.4	13
41	Velocity shift in two-dimensional anisotropic random media using the Rytov method. Geophysical Journal International, 2006, 166, 293-308.	1.0	12
42	Ground tilt changes in Japan caused by the 2010 Maule, Chile, earthquake tsunami. Journal of Geophysical Research: Solid Earth, 2013, 118, 406-415.	1.4	12
43	Monitoring the instrument response of the high-sensitivity seismograph network in Japan (Hi-net): effects of response changes on seismic interferometry analysis. Earth, Planets and Space, 2015, 67, .	0.9	12
44	Ultrabroadband Seismic and Tsunami Wave Observation of Highâ€Sampling Oceanâ€Bottom Pressure Gauge Covering Periods From Seconds to Hours. Earth and Space Science, 2020, 7, e2020EA001197.	1.1	12
45	Detection of â€œRapidâ€•Aseismic Slip at the Izuâ€Bonin Trench. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022132.	1.4	11
46	Extracting Nearâ€Field Seismograms From Oceanâ€Bottom Pressure Gauge Inside the Focal Area: Application to the 2011 Mw 9.1 Tohokuâ€Oki Earthquake. Geophysical Research Letters, 2021, 48, e2020GL091664.	1.5	8
47	Impulsive Tsunami and Large Runup Along the Sanriku Coast of Japan Produced by an Inelastic Wedge Deformation Model. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022098.	1.4	6
48	Mechanically Coupled Areas on the Plate Interface in the Nankai Trough, Japan and a Possible Seismic and Aseismic Rupture Scenario for Megathrust Earthquakes. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	6
49	Strain energy released by earthquake faulting with random slip components. Geophysical Journal International, 2020, 220, 2009-2020.	1.0	5
50	The 3â€D Spatial Distribution of Shear Strain Energy Changes Associated With the 2016 Kumamoto Earthquake Sequence, Southwest Japan. Geophysical Research Letters, 2020, 47, e2019GL086369.	1.5	5
51	Earthquake Rupture and Tsunami Generation of the 2015 M_w 5.9 Bonin Event Revealed by In Situ Pressure Gauge Array Observations and Integrated Seismic and Tsunami Wave Simulation. Geophysical Research Letters, 2021, 48, e2021GL095915.	1.5	5
52	Global tsunami simulation using a grid rotation transformation in a latitudeâ€“longitude coordinate system. Natural Hazards, 2016, 80, 759-773.	1.6	4
53	Tsunami modeling from the seismic CMT solution considering the dispersive effect: a case of the 2013 Santa Cruz Islands tsunami. Earth, Planets and Space, 2015, 67, 4.	0.9	3
54	Tsunami Generation. Springer Geophysics, 2019, , 149-203.	0.9	3

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55	Propagation Simulation. Springer Geophysics, 2019, , 205-254.	0.9	1
56	Overview of Tsunami. Springer Geophysics, 2019, , 17-47.	0.9	0