Friedemann Wenzel

List of Publications by Year
in descending order

93 papers	3,629 citations	159358 30 h-index	138251 58 g-index
101 all docs	101 docs citations	101 times ranked	3085 citing authors

#	Article	IF	Citations
1	The World Stress Map database release 2016: Crustal stress pattern across scales. Tectonophysics, 2018, 744, 484-498.	0.9	432
2	Direct mapping of seismic data to the domain of intercept time and ray parameterâ€"A planeâ€wave decomposition. Geophysics, 1981, 46, 255-267.	1.4	277
3	Seismogenic index and magnitude probability of earthquakes induced during reservoir fluid stimulations. The Leading Edge, 2010, 29, 304-309.	0.4	212
4	Plate boundary forces are not enough: Secondâ€and thirdâ€order stress patterns highlighted in the World Stress Map database. Tectonics, 2007, 26, .	1.3	162
5	Slab break-off - abrupt cut or gradual detachment? New insights from the Vrancea Region (SE) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.9	150
6	High-resolution teleseismic body wave tomography beneath SE-Romania - II. Imaging of a slab detachment scenario. Geophysical Journal International, 2006, 164, 579-595.	1.0	141
7	Multi-hazard and multi-risk decision-support tools as a part of participatory risk governance: Feedback from civil protection stakeholders. International Journal of Disaster Risk Reduction, 2014, 8, 50-67.	1.8	123
8	P-wave mantle velocity structure beneath northern Eurasia from long-range recordings along the profile Quartz. Physics of the Earth and Planetary Interiors, 1993, 79, 269-286.	0.7	119
9	The CATDAT damaging earthquakes database. Natural Hazards and Earth System Sciences, 2011, 11, 2235-2251.	1.5	106
10	Framework for improving the resilience and recovery of transportation networks under geohazard risks. International Journal of Disaster Risk Reduction, 2018, 31, 832-843.	1.8	88
11	Crustal-scale structure of the southern Rhinegraben from ECORS-DEKORP seismic reflection data. Geology, 1991, 19, 758.	2.0	87
12	Understanding tectonic stress in the oil patch: The World Stress Map Project. The Leading Edge, 2005, 24, 1276-1282.	0.4	80
13	A deep reflection seismic line across the Northern Rhine Graben. Earth and Planetary Science Letters, 1991, 104, 140-150.	1.8	71
14	PreSEIS: A Neural Network-Based Approach to Earthquake Early Warning for Finite Faults. Bulletin of the Seismological Society of America, 2008, 98, 366-382.	1.1	71
15	Investigation of superstorm Sandy 2012 in a multi-disciplinary approach. Natural Hazards and Earth System Sciences, 2013, 13, 2579-2598.	1.5	71
16	Integration of stress testing with graph theory to assess the resilience of urban road networks under seismic hazards. Natural Hazards, 2018, 91, 37-68.	1.6	69
17	S-Wave Attenuation Characteristics beneath the Vrancea Region in Romania: New Insights from the Inversion of Ground-Motion Spectra. Bulletin of the Seismological Society of America, 2008, 98, 2482-2497.	1.1	60
18	Megacities â€" megarisks. Natural Hazards, 2007, 42, 481-491.	1.6	56

#	Article	IF	Citations
19	Uncertainty and Spatial Correlation of Earthquake Ground Motion in Taiwan. Terrestrial, Atmospheric and Oceanic Sciences, 2010, 21, 905.	0.3	56
20	Source Spectra and Site Response from S Waves of Intermediate-Depth Vrancea, Romania, Earthquakes. Bulletin of the Seismological Society of America, 2009, 99, 235-254.	1.1	55
21	Losses Associated with Secondary Effects in Earthquakes. Frontiers in Built Environment, 2017, 3, .	1.2	53
22	Ground-motion prediction equations for the intermediate depth Vrancea (Romania) earthquakes. Bulletin of Earthquake Engineering, 2008, 6, 367-388.	2.3	45
23	Finite difference modelling of P-wave scattering in the upper mantle. Geophysical Journal International, 2000, 141, 787-800.	1.0	44
24	Probabilistic seismic hazard assessment for Romania and sensitivity analysis: A case of joint consideration of intermediate-depth (Vrancea) and shallow (crustal) seismicity. Soil Dynamics and Earthquake Engineering, 2009, 29, 364-381.	1.9	40
25	New constraints on the intraplate stress field of the Amurian plate deduced from light earthquake focal mechanisms. Tectonophysics, 2010, 482, 160-169.	0.9	39
26	Influence of spatial correlation of strong ground motion on uncertainty in earthquake loss estimation. Earthquake Engineering and Structural Dynamics, 2011, 40, 993-1009.	2.5	39
27	Lower crustal petrology from wide-angle P- and S-wave measurements in the Black Forest. Tectonophysics, 1990, 173, 495-505.	0.9	38
28	Influence of ground-motion correlation on probabilistic assessments of seismic hazard and loss: sensitivity analysis. Bulletin of Earthquake Engineering, 2011, 9, 1339-1360.	2.3	38
29	MAGNUS--A Seismological Broadband Experiment to Resolve Crustal and Upper Mantle Structure beneath the Southern Scandes Mountains in Norway. Seismological Research Letters, 2010, 81, 76-84.	0.8	37
30	Seismic results at Kola and KTB deep scientific boreholes: velocities, reflections, fluids, and crustal composition. Tectonophysics, 2000, 329, 301-317.	0.9	36
31	On the influence of site conditions and earthquake magnitude on ground-motion within-earthquake correlation: analysis of PGA data from TSMIP (Taiwan) network. Bulletin of Earthquake Engineering, 2012, 10, 1401-1429.	2.3	31
32	Accounting for site effect in probabilistic assessment of seismic hazard for Romania and Bucharest: a case of deep seismicity in Vrancea zone. Soil Dynamics and Earthquake Engineering, 2004, 24, 929-947.	1.9	30
33	Probability of earthquake occurrence and magnitude estimation in the post shut-in phase of geothermal projects. Journal of Seismology, 2013, 17, 5-11.	0.6	29
34	Interplay between tectonic, fluvial and erosional processes along the Western Border Fault of the northern Upper Rhine Graben, Germany. Tectonophysics, 2005, 406, 39-66.	0.9	28
35	Setting structural safety requirement for controlling earthquake mortality risk. Safety Science, 2016, 86, 174-183.	2.6	28
36	Prestack Kirchhoff depth migration of shallow seismic data. Geophysics, 1998, 63, 1241-1247.	1.4	27

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37	Source parameters of intermediate-depth Vrancea (Romania) earthquakes from empirical Green's functions modeling. Tectonophysics, 2007, 438, 33-56.	0.9	25
38	A spatial correlation model of peak ground acceleration and response spectra based on data of the Istanbul Earthquake Rapid Response and Early Warning System. Soil Dynamics and Earthquake Engineering, 2016, 85, 166-178.	1.9	24
39	The World Stress Map. Episodes, 2007, 30, 197-201.	0.8	24
40	Evaluation and optimization of seismic networks and algorithms for earthquake early warning â€“ the case of Istanbul (Turkey). Journal of Geophysical Research, 2010, 115, .	3.3	22
41	Further analysis of the influence of site conditions and earthquake magnitude on ground-motion within-earthquake correlation: analysis of PGA and PGV data from the K-NET and the KiK-net (Japan) networks. Bulletin of Earthquake Engineering, 2013, 11, 1909-1926.	2.3	21
42	Empirical Assessment of Non-Linear Seismic Demand of MainshockÃ¢â‚¬â€œAftershock Ground-Motion Sequences for Japanese Earthquakes. Frontiers in Built Environment, 2015, 1, .	1.2	20
43	Analysis of Taipei Basin Response for Earthquakes of Various Depths and Locations Using Empirical Data. Terrestrial, Atmospheric and Oceanic Sciences, 2009, 20, 687.	0.3	19
44	On the nature ofPn. Journal of Geophysical Research, 2000, 105, 16173-16180.	3.3	18
45	Simulating three-dimensional seismograms in 2.5-dimensional structures by combining two-dimensional finite difference modelling and ray tracing. Geophysical Journal International, 2008, 174, 309-315.	1.0	18
46	Broadband Urban Seismology in the Bucharest Metropolitan Area. Seismological Research Letters, 2005, 76, 574-580.	0.8	16
47	Global Megathrust Earthquake Hazardâ€"Maximum Magnitude Assessment Using Multi-Variate Machine Learning. Frontiers in Earth Science, 2019, 7, .	0.8	16
48	Potential of Earthquake Early Warning Systems. Natural Hazards, 2001, 23, 407-416.	1.6	15
49	Gravity and magnetic constraints on deep and intermediate crustal structure and evolution models for the Rhine Graben. Tectonophysics, 1992, 206, 113-135.	0.9	14
50	Rapid Source Parameter Estimations of Southern California Earthquakes Using PreSEIS. Seismological Research Letters, 2009, 80, 748-754.	0.8	14
51	Geophysical evidence for fluids in the crust beneath the Black Forest, SW Germany. Earth-Science Reviews, 1992, 32, 61-75.	4.0	13
52	On the use of JMA intensity in earthquake early warning systems. Bulletin of Earthquake Engineering, 2010, 8, 767-786.	2.3	13
53	A universal approach for evaluating earthquake safety level based on societal fatality risk. Bulletin of Earthquake Engineering, 2020, 18, 273-296.	2.3	13
54	Wave propagation in laterally heterogeneous layered media. Geophysical Journal International, 1990, 103, 675-684.	1.0	12

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55	Simulation of earthquakes in the Upper Rhinegraben using empirical Green functions. Geophysical Journal International, 2002, 151, 487-500.	1.0	12
56	t*-â€ƒan unsuitable parameter to characterize anelastic attenuation in the Eastern Carpathians. Geophysical Journal International, 2007, 170, 1139-1150.	1.0	11
57	Shake Map Methodology for Intermediate-Depth Vrancea (Romania) Earthquakes. Earthquake Spectra, 2009, 25, 497-514.	1.6	11
58	Global Significance of a Sub-Moho Boundary Layer (SMBL) Deduced from High-Resolution Seismic Observations. International Geology Review, 2002, 44, 671-685.	1.1	10
59	Parameterization of a Composite Attenuation Relation for the Dead Sea Area Based on 3-D Modeling of Elastic Wave Propagation. Pure and Applied Geophysics, 2007, 164, 23-37.	0.8	10
60	Loss of residential buildings in the event of a re-awakening of the Laacher See Volcano (Germany). Journal of Volcanology and Geothermal Research, 2017, 337, 111-123.	0.8	10
61	On the relation between point-wise and multiple-location probabilistic seismic hazard assessments. Bulletin of Earthquake Engineering, 2015, 13, 1281-1301.	2.3	9
62	Analysis of the similar epicenter earthquakes on 22 January 2013 and 01 June 2013, Central Gulf of Suez, Egypt. Journal of African Earth Sciences, 2016, 121, 274-285.	0.9	9
63	TsuPy: Computational robustness in Tsunami hazard modelling. Computers and Geosciences, 2017, 102, 148-157.	2.0	9
64	Fluid-induced seismicity: comparison of rate- and state- and critical pressure theory. Geothermal Energy, 2017, 5, .	0.9	9
65	A semi-probabilistic procedure for developing societal risk function. Natural Hazards, 2018, 92, 943-969.	1.6	9
66	Earthquake modeling in the Dead Sea Basin. Geophysical Research Letters, 2002, 29, 8-1.	1.5	8
67	Numerical modelling of ground motion in the Taipei Basin: basin and source effects. Geophysical Journal International, 2010, 183, 1633-1647.	1.0	8
68	Near-Real-Time Analysis of Publicly Communicated Disaster Response Information. International Journal of Disaster Risk Science, 2014, 5, 165-175.	1.3	8
69	Review article: Review of fragility analyses for major building types in China with new implications for intensityâ€"PGA relation development. Natural Hazards and Earth System Sciences, 2020, 20, 643-672.	1.5	8
70	Urban shakemap methodology for Bucharest. Geophysical Research Letters, 2006, 33, .	1.5	7
71	Simulating the Taipei basin response by numerical modeling of wave propagation. Bulletin of Earthquake Engineering, 2010, 8, 847-858.	2.3	7
72	Earthquake early warning for transport lines. Natural Hazards, 2014, 70, 1795-1825.	1.6	7

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73	Validation of strong-motion stochastic model using observed ground motion records in north-east India. Geomatics, Natural Hazards and Risk, 2016, 7, 565-585.	2.0	7
74	Engineering-Seismological Analysis of Site Effects in the Area of Cologne. Natural Hazards, 2006, 38, 199-214.	1.6	6
75	On estimation of earthquake magnitude in Earthquake EarlyWarning systems. Earth, Planets and Space, 2009, 61, 1275-1285.	0.9	6
76	Residential building stock modelling for mainland China targeted for seismic risk assessment. Natural Hazards and Earth System Sciences, 2021, 21, 3031-3056.	1.5	6
77	Reflectivity method for dipping layers. Journal of Geophysical Research, 1988, 93, 15046-15056.	3.3	5
78	Earthquake risk reduction â€“ obstacles and opportunities. European Review, 2006, 14, 221-231.	0.4	5
79	The smart cluster method. Journal of Seismology, 2017, 21, 965-985.	0.6	5
80	Development of thermo-reporting nanoparticles for accurate sensing of geothermal reservoir conditions. Scientific Reports, 2020, 10, 11422.	1.6	5
81	Areal exceedance of ground motion as a characteristic of multiple-site seismic hazard: Sensitivity analysis. Soil Dynamics and Earthquake Engineering, 2019, 126, 105770.	1.9	4
82	Low Free-Field Accelerations of the 1999 Kocaeli Earthquake?. Pure and Applied Geophysics, 2005, 162, 857-874.	0.8	3
83	On the modeling of ground-motion field for assessment of multiple-location hazard, damage, and loss: example of estimation of electric network performance during scenario earthquake. Natural Hazards, 2014, 74, 1555-1575.	1.6	3
84	Induced Seismicity Using Dieterich's Rate and State Theory and Comparison to the Critical Pressure Theory. Energy Procedia, 2015, 76, 282-290.	1.8	3
85	Kirchhoff diffraction mapping in media with large velocity contrasts. Geophysics, 1998, 63, 2072-2081.	1.4	3
86	Rapid Earthquake Information for Bucharest. Pure and Applied Geophysics, 2007, 164, 929-939.	0.8	2
87	A New CMP Stack Concept Based on the Born Approximation. Exploration Geophysics, 1991, 22, 439-441.	0.5	1
88	Elastic Properties of Crust and Upper Mantle â€" A New View. , 2020, , 31-43.		1
89	Deep Seismic Reflection Lines Across the Rhine Graben. Exploration Geophysics, 1991, 22, 443-446.	0.5	0
90	VSP Over Deep Coal Using Vibrator and Explosive. Exploration Geophysics, 1992, 23, 327-331.	0.5	0

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91	Seismic Tomography for Field VSP Surveys in an Inhomogeneous and Anisotropic Medium. Exploration Geophysics, 1993, 24, 864-872.	0.5	0
92	A Cross-Gallery Tomographic Survey in the New England Antimony Mine (Hillgrove, N.S.W.): A Case Study in a Hard Rock Environment. Exploration Geophysics, 1994, 25, 197-205.	0.5	0
93	Reply to â€œDiscussion of â€˜Areal exceedance of ground motion as a characteristics of multiple-site seismic hazard: Sensitivity analysisâ€™ by V. Sokolov, F. Wenzelâ€•by M. Giorgio and I. Iervolino. Soil Dynamics and Earthquake Engineering, 2020, 128, 105861.	1.9	0