Serge A Shapiro

List of Publications by Citations

183 papers	5,690 citations	40 h-index	70 g-index
228 ext. papers	6,841 ext. citations	3.2 avg, IF	6.01 L-index

#	Paper	IF	Citations
183	Modeling the propagation of elastic waves using a modified finite-difference grid. *Wave Motion*, **2000**, 31, 77-92	1.8	414
182	Estimating the crust permeability from fluid-injection-induced seismic emission at the KTB site. *Geophysical Journal International*, **1997**, 131, F15-F18	2.6	344
181	Characterization of fluid transport properties of reservoirs using induced microseismicity. *Geophysics*, **2002**, 67, 212-220	3.1	209
180	Elastic piezosensitivity of porous and fractured rocks. *Geophysics*, **2003**, 68, 482-486	3.1	183
179	Fluid-induced seismicity: Pressure diffusion and hydraulic fracturing. *Geophysical Prospecting*, **2009**, 57, 301-310	1.9	178
178	Triggering of Seismicity by Pore-pressure Perturbations: Permeability-related Signatures of the Phenomenon. *Pure and Applied Geophysics*, **2003**, 160, 1051-1066	2.2	147
177	Seismogenic index and magnitude probability of earthquakes induced during reservoir fluid stimulations. *The Leading Edge*, **2010**, 29, 304-309	1	145
176	Large-scalein situpermeability tensor of rocks from induced microseismicity. *Geophysical Journal International*, **1999**, 137, 207-213	2.6	124
175	Fluid-Induced Seismicity **2015**,		114
174	Effective velocities in fractured media: a numerical study using the rotated staggered finite-difference grid. *Geophysical Prospecting*, **2002**, 50, 183-194	1.9	107
173	Seismic imaging of a convergent continental margin and plateau in the central Andes (Andean Continental Research Project 1996 (ANCORP'96)). *Journal of Geophysical Research*, **2003**, 108,		107
172	Generalization of Gassmann equations for porous media saturated with a solid material. *Geophysics*, **2007**, 72, A75-A79	3.1	102
171	Pore-pressure diffusion: A possible triggering mechanism for the earthquake swarms 2000 in Vogtland/NW-Bohemia, central Europe. *Geophysical Research Letters*, **2003**, 30,	4.9	97
170	Effective elastic properties of randomly fractured soils: 3D numerical experiments. *Geophysical Prospecting*, **2004**, 52, 183-195	1.9	90
169	Fracturing of porous rock induced by fluid injection. *Tectonophysics*, **2011**, 503, 129-145	3.1	89
168	Hydraulic-fracturing controlled dynamics of microseismic clouds. *Geophysical Research Letters*, **2006** , 33,	4.9	87
167	Microseismic monitoring of borehole fluid injections: Data modeling and inversion for hydraulic properties of rocks. *Geophysics*, **2003**, 68, 685-689	3.1	87

166	Seismic Attenuation By Scattering: Theory and Numerical Results. *Geophysical Journal International*, **1993**, 114, 373-391	2.6	82
165	Back front of seismicity induced after termination of borehole fluid injection. *Geophysical Research Letters*, **2004**, 31,	4.9	81
164	Scaling of seismicity induced by nonlinear fluid-rock interaction. *Journal of Geophysical Research*, **2009**, 114,		80
163	Magnitudes of induced earthquakes and geometric scales of fluid-stimulated rock volumes. *Geophysics*, **2011**, 76, WC55-WC63	3.1	76
162	Characterization of hydraulic properties of rocks using probability of fluid-induced microearthquakes. *Geophysics*, **2005**, 70, F27-F33	3.1	76
161	Porosity and elastic anisotropy of rocks under tectonic stress and pore-pressure changes. *Geophysics*, **2005**, 70, N27-N38	3.1	71
160	Probability of a given-magnitude earthquake induced by a fluid injection. *Geophysical Research Letters*, **2007**, 34,	4.9	69
159	Seismic signatures of permeability in heterogeneous porous media. *Geophysics*, **1999**, 64, 99-103	3.1	68
158	Dynamic poroelasticity of thinly layered structures. *International Journal of Solids and Structures*, **1998**, 35, 4739-4751	3.1	66
157	Poroelastic Backus averaging for anisotropic layered fluid- and gas-saturated sediments. *Geophysics* , **1997**, 62, 1867-1878	3.1	63
156	Microseismic signatures of hydraulic fracture growth in sediment formations: Observations and modeling. *Journal of Geophysical Research*, **2008**, 113,		61
155	Variation in dynamic elastic shear modulus of sandstone upon fluid saturation and substitution. *Geophysics*, **2003**, 68, 472-481	3.1	60
154	Inter event times of fluid induced earthquakes suggest their Poisson nature. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	59
153	Decay rate of fluid-induced seismicity after termination of reservoir stimulations. *Geophysics*, **2010**, 75, MA53-MA62	3.1	59
152	Stress sensitivity of elastic moduli and electrical resistivity in porous rocks. *Journal of Geophysics and Engineering*, **2004**, 1, 1-11	1.3	55
151	Fluid induced seismicity guided by a continental fault: Injection experiment of 2004/2005 at the German Deep Drilling Site (KTB). *Geophysical Research Letters*, **2006**, 33, n/a-n/a	4.9	52
150	Seismotectonic state of reservoirs inferred from magnitude distributions of fluid-induced seismicity. *Journal of Seismology*, **2013**, 17, 13-25	1.5	51
149	Fast location of seismicity: A migration-type approach with application to hydraulic-fracturing data. *Geophysics*, **2007**, 72, S33-S40	3.1	51

148	Evidence for triggering of the Vogtland swarms 2000 by pore pressure diffusion. *Journal of Geophysical Research*, **2005**, 110,		50
147	Dynamic-equivalent medium approach for thinly layered saturated sediments. *Geophysical Journal International*, **1997**, 128, F1-F4	2.6	49
146	Probability of inducing given-magnitude earthquakes by perturbing finite volumes of rocks. *Journal of Geophysical Research: Solid Earth*, **2013**, 118, 3557-3575	3.6	46
145	The effect of random isotropic inhomogeneities on the phase velocity of seismic waves. *Geophysical Journal International*, **1996**, 127, 783-794	2.6	42
144	A generalized O'Doherty-Anstey formula for waves in finely layered media. *Geophysics*, **1994**, 59, 1750-1762	3.1	41
143	Statistics of fracture strength and fluid-induced microseismicity. *Journal of Geophysical Research*, **2007**, 112,		40
142	The O'Doherty-Anstey formula and localization of seismic waves. *Geophysics*, **1993**, 58, 736-740	3.1	39
141	Elastic waves in finely layered sediments: The equivalent medium and generalized O'Doherty-Anstey formulas. *Geophysics*, **1996**, 61, 1282-1300	3.1	37
140	Scattering and diffraction by a single crack: an accuracy analysis of the rotated staggered grid. *Geophysical Journal International*, **2005**, 162, 25-31	2.6	37
139	Acoustic emission induced by pore-pressure changes in sandstone samples. *Geophysics*, **2011**, 76, MA21-MA32	3.1	36
138	Scattering of a compressional wave in a poroelastic medium by an ellipsoidal inclusion. *Geophysical Journal International*, **1998**, 133, 91-103	2.6	36
137	Finite-difference modeling of wave propagation on microscale: A snapshot of the work in progress. *Geophysics*, **2007**, 72, SM293-SM300	3.1	35
136	High-resolution image of the North Chilean subduction zone: seismicity, reflectivity and fluids. *Geophysical Journal International*, **2014**, 197, 1744-1749	2.6	33
135	Seismic effects of viscous Biot-coupling: Finite difference simulations on micro-scale. *Geophysical Research Letters*, **2005**, 32, n/a-n/a	4.9	33
134	An approach to upscaling for seismic waves in statistically isotropic heterogeneous elastic media. *Geophysics*, **2000**, 65, 1837-1850	3.1	32
133	Predicting permeability and gas production of hydraulically fractured tight sands from microseismic data. *Geophysics*, **2010**, 75, B1-B10	3.1	31
132	Temperature dependence of seismic properties in geothermal rocks at reservoir conditions. *Geothermics*, **2010**, 39, 115-123	4.3	31
131	Effects of Parallel Crack Distributions on Effective Elastic Properties - a Numerical Study. *International Journal of Fracture*, **2003**, 124, L171-L178	2.3	31

130	The reflection seismic survey of project TIPTEQ-the inventory of the Chilean subduction zone at 38.2□S. *Geophysical Journal International*, **2008**, 172, 565-571	2.6	30
129	Effective Elastic Properties of Fractured Rocks: Dynamic vs. Static Considerations. *International Journal of Fracture*, **2006**, 139, 569-576	2.3	30
128	Numerical considerations of fluid effects on wave propagation: Influence of the tortuosity. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	30
127	Most probable seismic pulses in single realizations of two- and three-dimensional random media. *Geophysical Journal International*, **2001**, 144, 83-95	2.6	30
126	Seismic imaging using microseismic events: Results from the San Andreas Fault System at SAFOD. *Journal of Geophysical Research*, **2010**, 115,		29
125	Nonlinear diffusion-based interpretation of induced microseismicity: A Barnett Shale hydraulic fracturing case study. *Geophysics*, **2013**, 78, B211-B226	3.1	27
124	AVO correction for scalar waves in the case of a thinly layered reflector overburden. *Geophysics*, **1996**, 61, 520-528	3.1	27
123	Seismic Images of Accretive and Erosive Subduction Zones from the Chilean Margin **2006**, 147-169		27
122	Characterization of fluid transport properties of the Hot Dry Rock reservoir Soultz-2000 using induced microseismicity. *Journal of Geophysics and Engineering*, **2004**, 1, 77-83	1.3	25
121	Broad depth range seismic imaging of the subducted Nazca Slab, North Chile. *Tectonophysics*, **2002**, 350, 273-282	3.1	25
120	Viscoacoustic wave propagation in 2-D random media and separation of absorption and scattering attenuation. *Geophysics*, **1995**, 60, 459-467	3.1	25
119	Three-dimensional seismic imaging of tunnels. *International Journal of Rock Mechanics and Minings Sciences*, **2012**, 49, 12-20	6	24
118	Scattering parameters of the lithosphere below the Massif Central, France, from teleseismic wavefield records. *Geophysical Journal International*, **1998**, 134, 187-198	2.6	24
117	Watching Dehydration: Seismic Indication for Transient Fluid Pathways in the Oceanic Mantle of the Subducting Nazca Slab. *Geochemistry, Geophysics, Geosystems*, **2018**, 19, 3189-3207	3.6	24
116	Microseismic estimates of hydraulic diffusivity in case of non-linear fluid-rock interaction. *Geophysical Journal International*, **2012**, 188, 1441-1453	2.6	23
115	Stress-dependent anisotropy in transversely isotropic rocks: Comparison between theory and laboratory experiment on shale. *Geophysics*, **2009**, 74, D7-D12	3.1	23
114	Rupture directivity of fluid-induced microseismic events: Observations from an enhanced geothermal system. *Journal of Geophysical Research: Solid Earth*, **2016**, 121, 8034-8047	3.6	22
113	Stress triggering and stress memory observed from acoustic emission records in a salt mine. *Geophysical Journal International*, **2010**, 182, 933-948	2.6	22

112	Reflection Image Spectroscopy across the Andean subduction zone. *Tectonophysics*, **2009**, 472, 51-61	3.1	22
111	The surge of earthquakes in Central Oklahoma has features of reservoir-induced seismicity. *Scientific Reports*, **2018**, 8, 11505	4.9	21
110	A statistical model for seismic hazard assessment of hydraulic-fracturing-induced seismicity. *Geophysical Research Letters*, **2015**, 42, 10,601-10,606	4.9	20
109	Stress induced elastic anisotropy of the Etnean basalt: Theoretical and laboratory examination. *Geophysical Research Letters*, **2007**, 34,	4.9	20
108	Reply to comment by F. H. Cornet on 'Large-scale in situ permeability tensor of rocks from induced microseismicity'. *Geophysical Journal International*, **2000**, 140, 470-473	2.6	20
107	Most probable ballistic waves in random media: a weak-fluctuation approximation and numerical results. *Waves in Random and Complex Media*, **2002**, 12, 223-245		19
106	Stress impact on elastic anisotropy of triclinic porous and fractured rocks. *Journal of Geophysical Research: Solid Earth*, **2017**, 122, 2034	3.6	18
105	Quantitative analysis of rock stress heterogeneity: Implications for the seismogenesis of fluid-injection-induced seismicity. *Geophysics*, **2015**, 80, WC73-WC88	3.1	18
104	A numerical study on reflection coefficients of fractured media. *Geophysics*, **2007**, 72, D61-D67	3.1	18
103	A statistical model for the seismicity rate of fluid-injection-induced earthquakes. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	18
102	An inversion for fluid transport properties of three-dimensionally heterogeneous rocks using induced microseismicity. *Geophysical Journal International*, **2000**, 143, 931-936	2.6	18
101	Gutenberg-Richter relation originates from Coulomb stress fluctuations caused by elastic rock heterogeneity. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 1220-1234	3.6	16
100	Interpretation of Microseismicity Resulting from Gel and Water Fracturing of Tight Gas Reservoirs. *Pure and Applied Geophysics*, **2010**, 167, 169-182	2.2	16
99	Elastic waves scattering and radiation by fractal inhomogeneity of a medium. *Geophysical Journal International*, **1992**, 110, 591-600	2.6	16
98	Along-strike variations of crustal reflectivity related to the Andean subduction process. *Geophysical Research Letters*, **2003**, 30,	4.9	15
97	Reflectivity/transmissivity for one-dimensional inhomogeneous random elastic media: dynamic-equivalent-medium approach. *Geophysical Journal International*, **1996**, 126, 184-196	2.6	15
96	Microseismicity: a tool for reservoir characterization (OTE 2) **2008**,		15
95	Violation of the Kaiser effect by hydraulic-fracturing-related microseismicity. *Journal of Geophysics and Engineering*, **2007**, 4, 378-383	1.3	14

94	Amplitude fluctuations due to diffraction and refraction in anisotropic random media: implications for seismic scattering attenuation estimates. *Geophysical Journal International*, **2003**, 155, 139-148	2.6	13
93	Permeability dependency on stiff and compliant porosities: a model and some experimental examples. *Journal of Geophysics and Engineering*, **2015**, 12, 376-385	1.3	12
92	Microseismic reflection imaging and its application to the Basel geothermal reservoir. *Geophysics*, **2015**, 80, WC39-WC49	3.1	12
91	Intrinsic anisotropy and thin multilayering-two anisotropy effects combined. *Geophysical Journal International*, **1998**, 132, 363-373	2.6	12
90	From Slab Coupling to Slab Pull: Stress Segmentation in the Subducting Nazca Plate. *Geophysical Research Letters*, **2018**, 45, 5407-5416	4.9	12
89	Scaling of seismicity induced by nonlinear fluid-rock interaction after an injection stop. *Journal of Geophysical Research: Solid Earth*, **2016**, 121, 8154-8174	3.6	11
88	Statistical properties of reflection traveltimes in 3-D randomly inhomogeneous and anisomeric media. *Geophysical Journal International*, **2003**, 154, 841-851	2.6	11
87	Frequency-dependent shear-wave splitting in thinly layered media with intrinsic anisotropy. *Geophysics*, **1999**, 64, 604-608	3.1	11
86	Seismogenic Index of Underground Fluid Injections and Productions. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 7983-7997	3.6	11
85	Microseismic rupture propagation imaging. *Geophysics*, **2015**, 80, WC107-WC115	3.1	10
84	Ultrasonic signal analysis to monitor damage development in short fiber-reinforced polymers. *Ultrasonics*, **1998**, 36, 455-460	3.5	10
83	Fluid-Induced Seismicity: Theory, Modeling, and Applications. *Journal of Engineering Mechanics - ASCE*, **2005**, 131, 947-952	2.4	10
82	Amplitude corrections for randomly distributed heterogeneities above a target reflector. *Geophysics*, **2003**, 68, 1497-1502	3.1	10
81	Mutual relationship between microseismicity and seismic reflectivity: Case study at the German Continental Deep Drilling Site (KTB). *Geophysical Research Letters*, **2003**, 30, n/a-n/a	4.9	10
80	Fast repeat-modelling of time-lapse seismograms. *Geophysical Prospecting*, **2001**, 49, 557-569	1.9	10
79	Seismogenic plane of the northern Andean Subduction Zone from aftershocks of the Antofagasta (Chile) 1995 earthquake. *Geophysical Research Letters*, **2002**, 29, 105-1-105-4	4.9	10
78	Seismic scattering attenuation estimates for the German KTB Area derived from well-log statistics. *Geophysical Research Letters*, **2001**, 28, 3761-3764	4.9	10
77	Multiple scattering of seismic waves in multilayered structures. *Physics of the Earth and Planetary Interiors*, **1997**, 104, 147-159	2.3	9

76	Scattering attenuation in randomly layered structures with finite lateral extent: A hybrid Q model. *Geophysics*, **2004**, 69, 1530-1534	3.1	9
75	Seismic imaging of the geodynamic activity at the western Eger rift in central Europe. *Tectonophysics*, **2015**, 647-648, 105-111	3.1	8
74	Modeling fluid injection induced microseismicity in shales. *Journal of Geophysics and Engineering*, **2018**, 15, 234-248	1.3	8
73	Elastic properties of two VTI shale samples as a function of uniaxial stress: Experimental results and application of the porosity-deformation approach. *Geophysics*, **2017**, 82, C201-C210	3.1	8
72	Temperature-dependent poroelastic and viscoelastic effects on microscale-modelling of seismic reflections in heavy oil reservoirs. *Geophysical Journal International*, **2009**, 176, 822-832	2.6	8
71	Attenuation of Seismic Waves Due to Wave-Induced Flow and Scattering in Randomly Heterogeneous Poroelastic Continua. *Advances in Geophysics*, **2008**, 123-166	4.8	8
70	Microseismic reflection imaging of the Central Andean crust. *Geophysical Journal International*, **2016**, 204, 1396-1404	2.6	7
69	Seismic reflectivity of hydraulic fractures approximated by thin fluid layers. *Geophysics*, **2013**, 78, T79-T87	3.1	7
68	Microseismic imaging from a single geophone: KTB **2010**,		7
67	Interpretation of microseismicity induced by time-dependent injection pressure **2010**,		7
66	Attenuation of P-waves due to interlayer fluid flow in hydrate-bearing sediments. *Journal of Geophysics and Engineering*, **2007**, 4, 394-403	1.3	7
65	Location of seismicity using Gaussian beam type migration **2004**,		7
64	Back front of seismicity induced by non-linear pore pressure diffusion. *Geophysical Prospecting*, **2016**, 64, 170-191	1.9	7
63	Understanding of elastic anisotropy of shale under triaxial loading: Porosity-deformation approach. *Geophysics*, **2016**, 81, C163-C175	3.1	6
62	The Born approximation in the problem of elastic wave scattering by a spherical inhomogeneity in a fluid-saturated porous medium. *Applied Physics Letters*, **1992**, 61, 1275-1277	3.4	6
61	Fluids Along the Plate Interface Influencing the Frictional Regime of the Chilean Subduction Zone, Northern Chile. *Geophysical Research Letters*, **2018**, 45, 10,378-10,388	4.9	6
60	Visualizing effects of anisotropy on seismic moments and their potency-tensor isotropic equivalent. *Geophysics*, **2018**, 83, C85-C97	3.1	5
59	Magnitude estimation for microseismicity induced during the KTB 2004/2005 injection experiment. *Geophysics*, **2011**, 76, WC47-WC53	3.1	5

58	Leaky mode: A mechanism of horizontal seismic attenuation in a gas-hydrate-bearing sediment. *Geophysics*, **2007**, 72, E159-E163	3.1	5
57	Estimating statistical parameters of an elastic random medium from traveltime fluctuations of refracted waves. *Waves in Random and Complex Media*, **2005**, 15, 43-60	1.9	5
56	Fractal properties of fault systems by scattering of body seismic waves. *Tectonophysics*, **1992**, 202, 177-181	3.1	5
55	Microseismic reservoir characterization: Numerical experiments and case studies **2001**,		4
54	Simulation of the diffraction by single cracks: An accuracy study **2002**,		4
53	Seismic signatures of fluid transport□ntroduction. *Geophysics*, **2002**, 67, 197-198	3.1	4
52	Estimating Rupture Directions from Local Earthquake Data Using the IPOC Observatory in Northern Chile. *Seismological Research Letters*, **2018**, 89, 495-502	3	4
51	State of stress and crustal fluid migration related to west-dipping structures in the slab-forearc system in the northern Chilean subduction zone. *Geophysical Journal International*, **2017**, 208, 1403-1413	2.6	3
50	The Pressure Dependence of Permeability as a Function of Stiff and Compliant Porosities **2013**,		3
49	An inversion for the permeability tensor by using seismic emission **1999**,		3
48	Reflection coefficients of fractured rocks: A numerical study **2004**,		3
47	Application of an Arrival Time and Cross Correlation Value-based Location Algorithm to the Basel 1microseismic Data **2011**,		3
46	Patterns of Rupture Directivity of Subduction Zone Earthquakes in Northern Chile. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 10,785	3.6	3
45	Receiver based analysis of microseismic recordings: A tool for assessing quality of time picks and event locations **2014**,		2
44	Stress-dependent permeability versus stiff and compliant porosity: theory and experiments **2015**,		2
43	Comment on Role of seepage forces on seismicity triggering□by Alexander Y. Rozhko. *Journal of Geophysical Research*, **2012**, 117,		2
42	Waveform similarity analysis at Cotton Valley, Texas **2011**,		2
41	Temperature-dependent fluid substitution analysis of geothermal rocks at in-situ reservoir conditions **2008**,		2

40	Microseismic monitoring of borehole fluid injections: Data modeling and inversion for hydraulic properties of rocks **2002**,		2
39	Interpretation of Microseismicity Induced by a Gel and a Water Fracturing in Tight Gas Reservoir **2008**,		2
38	Active seismic imaging using microseismic events **2009**,		2
37	Seismicity Based Reservoir Characterization of Basel Geothermal Site **2009**,		2
36	Understanding Slow Deformation Before Dynamic Failure **2009**, 229-247		2
35	Nonlinear diffusion estimates from hydraulic fracturing of shales **2011**,		2
34	On stress drop, cohesion and seismogenic index of fluid-induced seismicity		2
33	Arrival-time picking uncertainty: Theoretical estimations and their application to microseismic data. *Geophysics*, **2020**, 85, U65-U76	3.1	1
32	Fracture mechanics approach to the problem of subsidence induced by resource extraction. *Engineering Fracture Mechanics*, **2020**, 236, 107173	4.2	1
31	Migration-based location of seismicity recorded with an array installed in the main hole of the San Andreas Fault Observatory at Depth (SAFOD). *Geophysical Journal International*, **2010**, no-no	2.6	1
30	Induced seismicity after termination of rock stimulations: Possibilities for reservoir characterization **2009**,		1
29	Chapter 4 Geometrical Optics of Acoustic Media with Anisometric Random Heterogeneities. *Advances in Geophysics*, **2008**, 95-121	4.8	1
28	Microseismicity induced by hydraulic fracturing: Evaluation and interpretation in terms of the Kaiser effect **2007**,		1
27	Effective elastic properties of fractured rocks: Dynamic vs. static considerations **2006**,		1
26	Estimation of the rocks statistical parameters from traveltime measurements. *Studia Geophysica Et Geodaetica*, **2006**, 50, 325-336	0.7	1
25	Hydraulic diffusivity estimations based on the seismicity rate of fluid-injection-induced earthquakes **2004**,		1
24	Determination of criticality and diffusivity heterogeneities based on seismic data analysis□case study of Vogtland, NW-Bohemia. *International Journal of Rock Mechanics and Minings Sciences*, **2005**, 42, 1088-1093	6	1
23	A numerical study of effective velocities in fractured media using the rotated staggered finite difference grid **2000**,		1

22	Reservoir characterization using passive seismic monitoring: Physical fundamentals and road ahead **2004**,		1
21	Microseismic monitoring of non-linear fluid-rock interaction: Hydraulic fracturing of geothermic and hydrocarbon reservoirs **2008**,		1
20	Geometric control of earthquake magnitudes by fluid injections in rocks **2011**,		1
19	Multi-source multi-receiver microseismic reflection imaging: case study Basel **2012**,		1
18	Magnitude and nucleation time of the 2017 Pohang Earthquake point to its predictable artificial triggering. *Nature Communications*, **2021**, 12, 6397	17.4	1
17	Simulation of effective elastic properties of 3D fractured medium **2002**,		1
16	Wave Propagation in Heterogeneous Media. Part 2: Attenuation of Seismic Waves Due to Scattering **2002**, 476-482		1
15	Understanding Vectorial Migration Patterns of Wastewater-Induced Earthquakes in the United States. *Bulletin of the Seismological Society of America*, **2020**, 110, 2295-2307	2.3	1
14	Performance test of the Seismogenic index model for forecasting magnitude distributions of fluid-injection-induced seismicity **2016**,		1
13	Stress Drop, Seismogenic Index and Fault Cohesion of Fluid-Induced Earthquakes. *Rock Mechanics and Rock Engineering*, **2021**, 54, 5483	5.7	1
12	Projecting seismicity induced by complex alterations of underground stresses with applications to geothermal systems. *Scientific Reports*, **2021**, 11, 23560	4.9	1
11	Stress Drop Variations in the Region of the 2014 MW8.1 Iquique Earthquake, Northern Chile. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB020112	3.6	0
10	Seismicity and linear diffusion of pore pressure118-163		
9	Stress Sensitivity of Seismic and Electric Rock Properties of the Upper Continental Crust at the KTB. *Pure and Applied Geophysics*, **2006**, 163, 1021-1029	2.2	
8	Numerical Considerations of Fluid Effects on Wave Propagation **2005**, 385-394		
7	Considerations of the Biot Velocity Relations: Viscous Finite-difference Calculations in Combination with Flow Simulations **2006**, 279-288		
6	Stress Sensitivity of Seismic and Electric Rock Properties of the Upper Continental Crust at the KTB **2006**, 1021-1029		
5	Summary of Project 11172 **2000**, 26-26		

4	Wave Propagation in Heterogeneous Media. Part 1: Effective Velocities in Fractured Media **2002**, 469-475	
3	Numerical Rock Physics: Fluid Effects on Wave Propagation. *ASEG Extended Abstracts*, **2004**, 2004, 1-4	0.2
2	Rock physics modelling of elastic properties of rocks saturated with heavy oils. *ASEG Extended Abstracts*, **2007**, 2007, 1-4	0.2
1	Geomechanical stress conditions to induce half-moon events during hydraulic fracturing. *Geophysics*, **2021**, 86, M141-M149	3.1