J GermÃ¡n Rubino

List of Publications by Year
in descending order

81 papers	1,624 citations	279798 23 h-index	315739 38 g-index
86 all docs	86 docs citations	86 times ranked	544 citing authors

#	Article	IF	Citations
1	Equivalent viscoelastic solids for heterogeneous fluid-saturated porous rocks. Geophysics, 2009, 74, N1-N13.	2.6	135
2	Seismoacoustic signatures of fracture connectivity. Journal of Geophysical Research: Solid Earth, 2014, 119, 2252-2271.	3.4	93
3	Do seismic waves sense fracture connectivity?. Geophysical Research Letters, 2013, 40, 692-696.	4.0	91
4	Seismic dispersion and attenuation in saturated porous rocks with aligned fractures of finite thickness: Theory and numerical simulations â€" Part 1: P-wave perpendicular to the fracture plane. Geophysics, 2018, 83, WA49-WA62.	2.6	77
5	Seismic attenuation and velocity dispersion in heterogeneous partially saturated porous rocks. Geophysical Journal International, 2012, 188, 1088-1102.	2.4	67
6	Sensitivity of S-wave attenuation to the connectivity of fractures in fluid-saturated rocks. Geophysics, 2014, 79, WB15-WB24.	2.6	62
7	Numerical upscaling in 2â€Đ heterogeneous poroelastic rocks: Anisotropic attenuation and dispersion of seismic waves. Journal of Geophysical Research: Solid Earth, 2016, 121, 6698-6721.	3.4	61
8	Effects of fracture intersections on seismic dispersion: theoretical predictions versus numerical simulations. Geophysical Prospecting, 2017, 65, 1264-1276.	1.9	53
9	Numerical analysis of wave-induced fluid flow effects on seismic data: Application to monitoring of CO₂storage at the Sleipner field. Journal of Geophysical Research, 2011, 116, .	3.3	47
10	P-wave seismic attenuation by slow-wave diffusion: Numerical experiments in partially saturated rocks. Geophysics, 2007, 72, N11-N21.	2.6	45
11	A simple hydromechanical approach for simulating squirt-type flow. Geophysics, 2016, 81, D335-D344.	2.6	45
12	Seismic Attenuation and Stiffness Modulus Dispersion in Porous Rocks Containing Stochastic Fracture Networks. Journal of Geophysical Research: Solid Earth, 2018, 123, 125-143.	3.4	45
13	Seismic dispersion and attenuation in saturated porous rocks with aligned fractures of finite thickness: Theory and numerical simulations â€" Part 2: Frequency-dependent anisotropy. Geophysics, 2018, 83, WA63-WA71.	2.6	44
14	Research note: Seismic attenuation due to waveâ€induced fluid flow at microscopic and mesoscopic scales. Geophysical Prospecting, 2013, 61, 882-889.	1.9	39
15	Reflection and transmission of waves in composite porous media: A quantification of energy conversions involving slow waves. Journal of the Acoustical Society of America, 2006, 120, 2425-2436.	1.1	37
16	A viscoelastic representation of wave attenuation in porous media. Computers and Geosciences, 2010, 36, 44-53.	4.2	35
17	Seismoelectric effects due to mesoscopic heterogeneities. Geophysical Research Letters, 2013, 40, 2033-2037.	4.0	35
18	Attenuation mechanisms in fractured fluidâ€saturated porous rocks: a numerical modelling study. Geophysical Prospecting, 2019, 67, 935-955.	1.9	32

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19	Estimation of Fracture Compliance From Attenuation and Velocity Analysis of Fullâ€Waveform Sonic Log Data. Journal of Geophysical Research: Solid Earth, 2019, 124, 2738-2761.	3.4	28
20	Simulation of upscaling effects due to wave-induced fluid flow in Biot media using the finite-element method. Journal of Applied Geophysics, 2007, 62, 193-203.	2.1	27
21	Thin-bed prestack spectral inversion. Geophysics, 2009, 74, R49-R57.	2.6	27
22	Permeability effects on the seismic response of gas reservoirs. Geophysical Journal International, 2012, 189, 448-468.	2.4	27
23	Fracture connectivity can reduce the velocity anisotropy of seismic waves. Geophysical Journal International, 2017, 210, 223-227.	2.4	26
24	A numerical upscaling procedure to estimate effective plane wave and shear moduli in heterogeneous fluid-saturated poroelastic media. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2067-2077.	6.6	23
25	Seismic characterization of thin beds containing patchy carbon dioxide-brine distributions: A study based on numerical simulations. Geophysics, 2011, 76, R57-R67.	2.6	22
26	Seismic attenuation: effects of interfacial impedance on wave-induced pressure diffusion. Geophysical Journal International, 2014, 199, 1677-1681.	2.4	22
27	An energy-based approach to estimate seismic attenuation due to wave-induced fluid flow in heterogeneous poroelastic media. Geophysical Journal International, 2016, 207, 823-832.	2.4	22
28	Seismic wave attenuation and dispersion due to wave-induced fluid flow in rocks with strong permeability fluctuations. Journal of the Acoustical Society of America, 2013, 134, 4742-4751.	1.1	21
29	Fluid pressure diffusion effects on the seismic reflectivity of a single fracture. Journal of the Acoustical Society of America, 2016, 140, 2554-2570.	1.1	21
30	Numerical upscaling of frequencyâ€dependent Pâ€and Sâ€wave moduli in fractured porous media. Geophysical Prospecting, 2016, 64, 1166-1179.	1.9	21
31	Representative elementary volumes for evaluating effective seismic properties of heterogeneous poroelastic media. Geophysics, 2016, 81, D169-D181.	2.6	20
32	Including poroelastic effects in the linear slip theory. Geophysics, 2015, 80, A51-A56.	2.6	19
33	Dynamic seismic signatures of saturated porous rocks containing two orthogonal sets of fractures: theory versus numerical simulations. Geophysical Journal International, 2018, 213, 1244-1262.	2.4	19
34	Extension of the classical linear slip model for fluidâ€saturated fractures: Accounting for fluid pressure diffusion effects. Journal of Geophysical Research: Solid Earth, 2017, 122, 1302-1323.	3.4	18
35	Seismic attenuation and dispersion in poroelastic media with fractures of variable aperture distributions. Solid Earth, 2019, 10, 1321-1336.	2.8	18
36	Sensitivity of Seismic Attenuation and Phase Velocity to Intrinsic Background Anisotropy in Fractured Porous Rocks: A Numerical Study. Journal of Geophysical Research: Solid Earth, 2017, 122, 8181-8199.	3.4	16

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37	An analytical study of seismoelectric signals produced by 1-D mesoscopic heterogeneities. Geophysical Journal International, 2015, 201, 329-342.	2.4	13
38	Saturation Hysteresis Effects on the Seismic Signatures of Partially Saturated Heterogeneous Porous Rocks. Journal of Geophysical Research: Solid Earth, 2019, 124, 11316-11335.	3.4	13
39	Attenuation of sonic waves in water-saturated alluvial sediments due to wave-induced fluid flow at microscopic, mesoscopic and macroscopic scales. Geophysical Journal International, 2015, 203, 146-157.	2.4	10
40	A generalized effective anisotropic poroelastic model for periodically layered media accounting for both Biot's global and interlayer flows. Geophysical Prospecting, 2016, 64, 1135-1148.	1.9	10
41	Modeling Forced Imbibition Processes and the Associated Seismic Attenuation in Heterogeneous Porous Rocks. Journal of Geophysical Research: Solid Earth, 2017, 122, 9031-9049.	3.4	10
42	Seismic Signatures of Fractured Porous Rocks: The Partially Saturated Case. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019960.	3.4	10
43	Dynamic permeability functions for partially saturated porous media. Geophysical Journal International, 2020, 221, 1182-1189.	2.4	10
44	Seismic attenuation and velocity dispersion in fractured rocks: The role played by fracture contact areas. Geophysical Prospecting, 2014, 62, 1278-1296.	1.9	9
45	Impact of fracture clustering on the seismic signatures of porous rocks containing aligned fractures. Geophysics, 2018, 83, MR295-MR308.	2.6	9
46	Quantitative comparison between simulations of seismic wave propagation in heterogeneous poro-elastic media and equivalent visco-elastic solids for marine-type environments. Geophysical Journal International, 2013, 193, 463-474.	2.4	8
47	Energy dissipation of P- and S-waves in fluid-saturated rocks: An overview focusing on hydraulically connected fractures. Journal of Earth Science (Wuhan, China), 2015, 26, 785-790.	3.2	8
48	Seismic anisotropy in fractured low-permeability formations: The effects of hydraulic connectivity. , 2015, , .		8
49	Biotâ€type scattering effects in gas hydrateâ€bearing sediments. Journal of Geophysical Research, 2008, 113, .	3.3	6
50	Wave attenuation in partially saturated porous rocks â€" New observations and interpretations across scales. The Leading Edge, 2014, 33, 606-614.	0.7	5
51	Squirt flow in partially saturated cracks: a simple analytical model. Geophysical Journal International, 2021, 227, 680-692.	2.4	5
52	Modeling mesoscopic attenuation in a highly heterogeneous Biot's medium employing an equivalent viscoelastic model. , 2008, , .		4
53	Quantitative characterization of CO 2â€bearing thin layers at the Sleipner field using spectral inversion. , 2011, , .		4
54	Numerical Upscaling of Seismic Signatures of Poroelastic Rocks Containing Mesoscopic Fluidâ€Saturated Voids. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	4

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55	Seismic Attenuation in Realistic Fracture Networks. , 2017, , .		3
56	Impact of poroelastic effects on the inversion of fracture properties from amplitude variation with offset and azimuth data in horizontal transversely isotropic media. Geophysics, 2020, 85, N27-N39.	2.6	3
57	Fractures in Lowâ€Permeability Rocks: Can Poroelastic Effects Associated With Damage Zones Enhance Their Seismic Visibility?. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021155.	3.4	3
58	Dynamic permeability of heterogeneous porous rocks having strong permeability fluctuations and its effects on seismic attenuation and velocity dispersion. , 2012, , .		2
59	Can we use seismic waves to detect hydraulic connectivity between fractures?. , 2014, , .		2
60	Velocity and attenuation characteristics of P-waves in periodically fractured media as inferred from numerical creep and relaxation tests. , 2014, , .		2
61	Representative elementary volumes for evaluating effective seismic properties of heterogeneous poroelastic media. Geophysics, 2016, 81, D21-D33.	2.6	2
62	A simple hydro-mechanical approach to simulate squirt-type flow at any scale. , 2015, , .		2
63	Effects of Fracture Connectivity on Rayleigh Wave Dispersion. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	2
64	Fracture Connectivity Effects on Seismic Attenuation. , 2013, , .		1
65	An energy-based approach to estimate seismic attenuation due to wave-induced fluid flow. , 2014, , .		1
66	Incorporating capillarity into models for P-wave attenuation and dispersion in partially saturated rocks. , 2014, , .		1
67	Acoustics of Partially Saturated Rocks: Theory and Experiments. , 2015, , 45-75.		1
68	Attenuation in Fluid-Saturated Fractured Porous Mediaâ€"Quasi-Static Numerical Upscaling and Wave Propagation Modeling. , 2017, , .		1
69	Seismic Signatures of Fractured Reservoirs: Theory Versus Numerical Simulations. ASEG Extended Abstracts, 2018, 2018, 1-5.	0.1	1
70	Fluid pressure diffusion effects on the excess compliance matrix of porous rocks containing aligned fractures. Geophysical Journal International, 2020, 222, 715-733.	2.4	1
71	Statistical analysis of the effective velocity and mesoscopic attenuation in patchy saturated porous media. , 2007, , .		1
72	Effects of fracture connectivity on Rayleigh wave velocity dispersion. , 2020, , .		1

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73	Numerical and laboratory measurements of seismic attenuation in partially saturated rocks. , 2012, , .		0
74	A Comparison of Seismic Attenuation Models for Unconsolidated Surficial Sediments: Evidence from Multi-Frequency Sonic Logs. , 2013, , .		0
75	Effects of Finite Fracture Thicknaess on Seismic Dispersion and Attenuation in Saturated Rocks with Aligned Penny-Shaped Cracks: Theory versus Numerical Simulation. , 2017, , .		0
76	Modeling the reflection coefficients and slow wave mode conversions at the top and bottom of a gasâ€hydrate bearing interval. , 2006, , .		0
77	Seismic attenuation in heterogeneous partially saturated rocks. , 2011, , .		0
78	Quantitative comparison of simulations of seismic wave propagation in heterogeneous poro-elastic media involving fluid-solid interfaces and in equivalent visco-elastic solids. , 2012, , .		0
79	Deciphering fractured rock properties from seismic wavefields â€" Introduction. Geophysics, 2018, 83, WAi-WAii.	2.6	0
80	Modelling the effects of capillary hysteresis on the normal compliance of individual fractures. , 2019, , .		0
81	Poroelastic effects of the damaged zone on fracture reflectivity and normal compliance. , 2020, , .		0