## **Roelof Snieder**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7872553/publications.pdf Version: 2024-02-01



POFLOF SNIFDED

#	Article	IF	CITATIONS
1	Spatial and temporal influence of sea level on inland stress based on seismic velocity monitoring. Earth, Planets and Space, 2022, 74, .	2.5	0
2	Focusing waves in an unknown medium without wavefield decomposition. JASA Express Letters, 2021, 1,	1.1	9
3	Green's function representations for Marchenko imaging without up/down decomposition. Geophysical Journal International, 2021, 227, 184-203.	2.4	16
4	Inter-Source Interferometry of Seismic Body Waves: Required Conditions and Examples. Pure and Applied Geophysics, 2021, 178, 3441-3460.	1.9	3
5	Spatio-temporal resolution improvement via weighted time-reversal. Wave Motion, 2021, 106, 102803.	2.0	1
6	Acoustic imaging using unknown random sources. Journal of the Acoustical Society of America, 2021, 149, 499-507.	1.1	1
7	Local coupling and conversion of surface waves due to Earth's rotation. Part 1: theory. Geophysical Journal International, 2021, 225, 158-175.	2.4	4
8	An acoustic Lippmann-Schwinger inversion method: applications and comparison with the linear sampling method. Journal of Physics Communications, 2020, 4, 015007.	1.2	4
9	Connecting to the Heart: Teaching Value-Based Professional Ethics. Science and Engineering Ethics, 2020, 26, 2235-2254.	2.9	11
10	Spatial and temporal influence of rainfall on crustal pore pressure based on seismic velocity monitoring. Earth, Planets and Space, 2020, 72, .	2.5	22
11	Theory of the linear sampling method for time-dependent fields. Inverse Problems, 2019, 35, 055003.	2.0	4
12	Imaging, focusing, and inversion with the linear sampling method. , 2019, , .		0
13	Nonlinear elasticity in resonance experiments. Physical Review B, 2018, 97, .	3.2	6
14	Estimating the Green's function using a single channel dual-beam interferometer. Journal of the Acoustical Society of America, 2018, 144, 124-130.	1.1	2
15	Source-receiver Marchenko redatuming: Obtaining virtual receivers and virtual sources in the subsurface. Geophysics, 2017, 82, Q13-Q21.	2.6	15
16	Review paper: Virtual sources and their responses, Part II: dataâ€driven singleâ€sided focusing. Geophysical Prospecting, 2017, 65, 1430-1451.	1.9	26
17	Strategies for imaging with Marchenko-retrieved Green's functions. Geophysics, 2017, 82, Q23-Q37.	2.6	15
18	Accounting for free-surface multiples in Marchenko imaging. Geophysics, 2017, 82, R19-R30.	2.6	44

#	Article	IF	CITATIONS
19	Demystifying the memory effect: A geometrical approach to understanding speckle correlations. European Physical Journal: Special Topics, 2017, 226, 1445-1455.	2.6	3
20	The time dependence of rock healing as a universal relaxation process, a tutorial. Geophysical Journal International, 2017, 208, 1-9.	2.4	51
21	Beyond Marchenko: Obtaining virtual receivers and virtual sources in the subsurface. , 2016, , .		4
22	Elastic-wave propagation and the Coriolis force. Physics Today, 2016, 69, 90-91.	0.3	2
23	Seismic shear waves as Foucault pendulum. Geophysical Research Letters, 2016, 43, 2576-2581.	4.0	14
24	Optimal source imaging in elastic media. Geophysical Journal International, 2016, 204, 1134-1147.	2.4	18
25	The lack of equipartitioning in global body wave coda. Geophysical Research Letters, 2015, 42, 7483-7489.	4.0	48
26	Timeâ€lapse imaging of a localized weak change with multiply scattered waves using numericalâ€based sensitivity kernel. Journal of Geophysical Research: Solid Earth, 2015, 120, 5595-5605.	3.4	17
27	Seismic interferometry and stationary phase at caustics. Journal of Geophysical Research: Solid Earth, 2015, 120, 4333-4343.	3.4	18
28	Marchenko imaging: Imaging with primaries, internal multiples, and free-surface multiples. Geophysics, 2015, 80, S165-S174.	2.6	84
29	Depth-dependence of seismic velocity change associated with the 2011 Tohoku earthquake, Japan, revealed from repeating earthquake analysis and finite-difference wave propagation simulation. Geophysical Journal International, 2015, 201, 741-763.	2.4	21
30	Locating Events Using Time Reversal and Deconvolution: Experimental Application and Analysis. Journal of Nondestructive Evaluation, 2015, 34, 1.	2.4	11
31	On the estimation of attenuation from the ambient seismic field: inferences from distributions of isotropic point scatterers. Geophysical Journal International, 2015, 203, 1054-1071.	2.4	12
32	Improving spatio-temporal focusing and source reconstruction through deconvolution. Wave Motion, 2015, 52, 151-159.	2.0	29
33	Autofocus Imaging: Image reconstruction based on inverse scattering theory. Geophysics, 2014, 79, A19-A26.	2.6	74
34	Focusing of elastic waves for microseismic imaging. Geophysical Journal International, 2014, 200, 390-401.	2.4	33
35	Body-wave interferometry using regional earthquakes with multidimensional deconvolution after wavefield decomposition at free surface. Geophysical Journal International, 2014, 199, 1125-1137.	2.4	24
36	Timeâ€lapse monitoring of velocity changes in Utah. Journal of Geophysical Research: Solid Earth, 2014, 119. 7209-7225.	3.4	3

#	Article	IF	CITATIONS
37	Marchenko imaging. Geophysics, 2014, 79, WA39-WA57.	2.6	268
38	Three-Dimensional Single-Sided Marchenko Inverse Scattering, Data-Driven Focusing, Green's Function Retrieval, and their Mutual Relations. Physical Review Letters, 2013, 110, 084301.	7.8	150
39	Extracting Earth's Elastic Wave Response from Noise Measurements. Annual Review of Earth and Planetary Sciences, 2013, 41, 183-206.	11.0	69
40	Body-wave interferometry using local earthquakes with multi-dimensional deconvolution and wavefield decomposition at free surface. , 2013, , .		1
41	Virtual Real Source: Source signature estimation using seismic interferometry. Geophysics, 2013, 78, Q57-Q68.	2.6	11
42	Locating a microseismic event using deconvolution. , 2013, , .		7
43	Time-lapse changes of P- and S-wave velocities and shear wave splitting in the first year after the 2011 Tohoku earthquake, Japan: shallow subsurface. Geophysical Journal International, 2013, 193, 238-251.	2.4	28
44	Estimation of velocity change using repeating earthquakes with different locations and focal mechanisms. Journal of Geophysical Research: Solid Earth, 2013, 118, 2905-2914.	3.4	5
45	Analyzing the coda from correlating scattered surface waves. Journal of the Acoustical Society of America, 2012, 131, EL275-EL281.	1.1	20
46	Extracting the Green's function from measurements of the energy flux. Journal of the Acoustical Society of America, 2012, 131, EL309-EL315.	1.1	2
47	Focusing the wavefield inside an unknown 1D medium: Beyond seismic interferometry. Geophysics, 2012, 77, A25-A28.	2.6	136
48	Timeâ€lapse change in anisotropy in Japan's near surface after the 2011 Tohokuâ€Oki earthquake. Geophysical Research Letters, 2012, 39, .	4.0	35
49	Connection of scattering principles: a visual and mathematical tour. European Journal of Physics, 2012, 33, 593-613.	0.6	117
50	Twoâ€dimensional controlledâ€source electromagnetic interferometry by multidimensional deconvolution: spatial sampling aspects. Geophysical Prospecting, 2012, 60, 974-994.	1.9	12
51	Creating a virtual source inside a medium from reflection data: heuristic derivation and stationary-phase analysis. Geophysical Journal International, 2012, 190, 1020-1024.	2.4	45
52	Estimate of shear wave velocity, and its time-lapse change, from seismic data recorded at the SMNH01 station of KiK-net using seismic interferometry. Soil Dynamics and Earthquake Engineering, 2012, 39, 128-137.	3.8	12
53	Time-lapse change in near-surface shear-wave velocities caused by rainfall and large earthquakes detected by applying seismic interferometry to earthquake data. , 2012, , .		0
54	The reciprocity theorem for the scattered field is the progenitor of the generalized optical theorem. Journal of the Acoustical Society of America, 2011, 129, 2765-2771.	1.1	13

#	Article	IF	CITATIONS
55	Seismic interferometry by crosscorrelation and by multidimensional deconvolution: a systematic comparison. Geophysical Journal International, 2011, 185, 1335-1364.	2.4	174
56	Uncertainty analysis for the integration of seismic and controlled source electroâ€magnetic data. Geophysical Prospecting, 2011, 59, 609-626.	1.9	9
57	Shear wave imaging from traffic noise using seismic interferometry by cross-coherence. Geophysics, 2011, 76, SA97-SA106.	2.6	218
58	Seismic modeling and analysis of a prototype heated nuclear waste storage tunnel, Yucca Mountain, Nevada. Geophysics, 2010, 75, T1-T8.	2.6	3
59	Imaging with ambient noise. Physics Today, 2010, 63, 44-49.	0.3	61
60	Green's function representation for seismic interferometry by deconvolution. , 2010, , .		9
61	Lagrangian Green's function extraction, with applications to potential fields, diffusion and acoustic waves. New Journal of Physics, 2010, 12, 063013.	2.9	12
62	Equipartitioning is not sufficient for Green's function extraction. Earthquake Science, 2010, 23, 403-415.	0.9	22
63	General representation theorem for perturbed media and application to Green's function retrieval for scattering problems. Geophysical Journal International, 2010, 183, 1648-1662.	2.4	13
64	On seismic interferometry, the generalized optical theorem, and the scattering matrix of a point scatterer. Geophysics, 2010, 75, SA27-SA35.	2.6	39
65	Cancellation of spurious arrivals in Green's function retrieval of multiple scattered waves. Journal of the Acoustical Society of America, 2010, 128, 1598-1605.	1.1	27
66	Tutorial on seismic interferometry: Part 1 — Basic principles and applications. Geophysics, 2010, 75, 75A195-75A209.	2.6	273
67	Retrieving electric resistivity data from selfâ€potential measurements by crossâ€correlation. Geophysical Research Letters, 2010, 37, .	4.0	15
68	Underestimation of body waves and feasibility of surface-wave reconstruction by seismic interferometry. The Leading Edge, 2010, 29, 790-794.	0.7	69
69	Tutorial on seismic interferometry: Part 2 — Underlying theory and new advances. Geophysics, 2010, 75, 75A211-75A227.	2.6	154
70	Controlled source electromagnetic interferometry: the illumination function. , 2010, , .		1
71	Underestimation of bodyâ $\in$ waves in Green's function retrieval and its implications. , 2010, , .		0
72	Representation theorems and Green's function retrieval for scattering in acoustic media. Physical Review E, 2009, 80, 036605.	2.1	49

#	Article	IF	CITATIONS
73	A Comparison of Strategies for Seismic Interferometry. Surveys in Geophysics, 2009, 30, 503-523.	4.6	94
74	Eikonal tomography: surface wave tomography by phase front tracking across a regional broad-band seismic array. Geophysical Journal International, 2009, 177, 1091-1110.	2.4	326
75	Required source distribution for interferometry of waves and diffusive fields. Geophysical Journal International, 2009, 179, 1232-1244.	2.4	48
76	Field Fluctuations, Imaging with Backscattered Waves, a Generalized Energy Theorem, and the Optical Theorem. SIAM Journal on Imaging Sciences, 2009, 2, 763-776.	2.2	33
77	Extracting the Time-Domain Building Response From Random Vibrations. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 283-292.	0.2	1
78	3â€D Controlled Source Electromagnetic (CSEM) interferometry by multiâ€dimensional deconvolution. , 2009, , .		6
79	The potential of potential field interferometry. , 2009, , .		0
80	Green's second theorem and the extraction of Green's functions. , 2009, , .		0
81	A Comparison of Strategies for Seismic Interferometry. , 2009, , 235-255.		0
82	Application of seismic interferometry to extract P- and S-wave propagation and observation of shear-wave splitting from noise data at Cold Lake, Alberta, Canada. Geophysics, 2008, 73, D35-D40.	2.6	84
83	Seismic and electromagnetic controlledâ€source interferometry in dissipative media. Geophysical Prospecting, 2008, 56, 419-434.	1.9	142
84	Drill Bit Noise Illuminates the San Andreas Fault. Eos, 2008, 89, 349-349.	0.1	8
85	Acquisition geometry requirements for generating virtual-source data. The Leading Edge, 2008, 27, 620-629.	0.7	58
86	Strengthening the virtual-source method for time-lapse monitoring. Geophysics, 2008, 73, S73-S80.	2.6	36
87	4. Green's Function Reconstruction. , 2008, , 99-329.		0
88	Seismic interferometry by crossâ $\in \mathfrak{e}$ orrelation or deconvolution?. , 2008, , .		5
89	Interferometry by deconvolution: Part 2 — Theory for elastic waves and application to drill-bit seismic imaging. Geophysics, 2008, 73, S129-S141.	2.6	116
90	Cancellation of spurious arrivals in Green's function extraction and the generalized optical theorem. Physical Review E, 2008, 78, 036606.	2.1	96

#	Article	IF	CITATIONS
91	Interferometry by deconvolution: Part 1 $\hat{a} \in$ " Theory for acoustic waves and numerical examples. Geophysics, 2008, 73, S115-S128.	2.6	164
92	Imaging internal multiples from subsalt VSP data — Examples of target-oriented interferometry. Geophysics, 2008, 73, S157-S168.	2.6	59
93	The critical angle in seismic interferometry. , 2008, , .		1
94	Seismic modeling and analysis of the prototype heated nuclear waste storage tunnel, Yucca Mountain, Nevada. , 2008, , .		0
95	Source distribution in interferometry for wave and diffusion. , 2008, , .		1
96	Unified Green's function retrieval by cross-correlation; connection with energy principles. Physical Review E, 2007, 75, 036103.	2.1	123
97	Extracting the Green's function of attenuating heterogeneous acoustic media from uncorrelated waves. Journal of the Acoustical Society of America, 2007, 121, 2637-2643.	1.1	131
98	Interferometry in dissipative media: Addressing the shallowâ€sea problem for seabed logging applications. , 2007, , .		9
99	Multiple scattering in evolving media. Physics Today, 2007, 60, 49-55.	0.3	32
100	From order to disorder to order: A philosophical view on seismic interferometry. , 2007, , .		2
101	Improving the virtual source method by wavefield separation. Geophysics, 2007, 72, V79-V86.	2.6	136
102	Advanced Noninvasive Geophysical Monitoring Techniques. Annual Review of Earth and Planetary Sciences, 2007, 35, 653-683.	11.0	39
103	Constraints on coda wave interferometry estimates of source separation: the acoustic case. Exploration Geophysics, 2007, 38, 189-199.	1.1	8
104	The virtualâ€source method applied to Mars field OBC data for timeâ€lapse monitoring. , 2007, , .		5
105	Improving the virtualâ $\in$ source method by wavefield separation. , 2007, , .		1
106	Time reversed imaging for perturbed media. American Journal of Physics, 2006, 74, 224-231.	0.7	6
107	Time-lapse monitoring of rock properties with coda wave interferometry. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	125
108	Seismic anisotropy of a building. The Leading Edge, 2006, 25, 1093-1093.	0.7	10

#	Article	IF	CITATIONS
109	Correcting for bias due to noise in coda wave interferometry. Geophysical Journal International, 2006, 164, 99-108.	2.4	14
110	Monitoringin situstress changes in a mining environment with coda wave interferometry. Geophysical Journal International, 2006, 167, 504-508.	2.4	50
111	The Theory of Coda Wave Interferometry. Pure and Applied Geophysics, 2006, 163, 455-473.	1.9	265
112	Virtual source gathers and attenuation of freeâ€ <b>s</b> urface multiples using OBC data:implementation issues and a case study. , 2006, , .		10
113	Spurious multiples in seismic interferometry of primaries. Geophysics, 2006, 71, SI111-SI124.	2.6	225
114	Retrieving the Green's function of the diffusion equation from the response to a random forcing. Physical Review E, 2006, 74, 046620.	2.1	61
115	Unified Green's Function Retrieval by Cross Correlation. Physical Review Letters, 2006, 97, 234301.	7.8	104
116	Equivalence of the virtual-source method and wave-field deconvolution in seismic interferometry. Physical Review E, 2006, 73, 066620.	2.1	110
117	Seismic interferometry—turning noise into signal. The Leading Edge, 2006, 25, 1082-1092.	0.7	346
118	Changing the boundary conditions in seismic interferometry, and the suppression of surface-related multiples , 2006, , .		0
119	Time-lapse travel time change of multiply scattered acoustic waves. Journal of the Acoustical Society of America, 2005, 118, 1300-1310.	1.1	165
120	Retrieving the Green's function in an open system by cross correlation: A comparison of approaches (L). Journal of the Acoustical Society of America, 2005, 118, 2783-2786.	1.1	150
121	Monitoring rapid temporal change in a volcano with coda wave interferometry. Geophysical Research Letters, 2005, 32, .	4.0	98
122	Constraining the source separation with coda wave interferometry: Theory and application to earthquake doublets in the Hayward fault, California. Journal of Geophysical Research, 2005, 110, .	3.3	60
123	Wellâ€log analysis of pore pressure mechanisms near a minibasinâ€bounding growth fault at South Eugene Island field, offshore Louisiana. , 2005, , .		0
124	Exploiting the Complexity of Elastic Waves in the Earth. , 2005, , .		0
125	Extracting the Green's function from the correlation of coda waves: A derivation based on stationary phase. Physical Review E, 2004, 69, 046610.	2.1	931
126	The liquefaction cycle and the role of drainage in liquefaction. Granular Matter, 2004, 6, 1.	2.2	27

#	Article	IF	CITATIONS
127	Error in shear-wave polarization and time splitting. Geophysical Prospecting, 2004, 52, 123-132.	1.9	4
128	Monitoring change in volcanic interiors using coda wave interferometry: Application to Arenal Volcano, Costa Rica. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	37
129	The Fresnel volume and transmitted waves. Geophysics, 2004, 69, 653-663.	2.6	164
130	Coda Wave Interferometry for Estimating Nonlinear Behavior in Seismic Velocity. Science, 2002, 295, 2253-2255.	12.6	490
131	Coda wave interferometry and the equilibration of energy in elastic media. Physical Review E, 2002, 66, 046615.	2.1	77
132	Marketing Earth science education. Eos, 2002, 83, 131.	0.1	9
133	The relative density-to-shear velocity scaling in the uppermost mantle. Physics of the Earth and Planetary Interiors, 2001, 124, 193-212.	1.9	41
134	The Anatomy of Inverse Problems. Geophysics, 2000, 65, 1708-1710.	2.6	58
135	The tube worm turns. Nature, 2000, 406, 939-939.	27.8	2
136	Thermal structure of continental upper mantle inferred from S-wave velocity and surface heat flow. Earth and Planetary Science Letters, 2000, 181, 395-407.	4.4	73
137	Computers and creativity. Geophysics, 1999, 64, 1347-1348.	2.6	2
138	What is a wave?. Nature, 1999, 401, 739-740.	27.8	24
139	Imaging and Averaging in Complex Media. , 1999, , 405-454.		28
140	What is noise?. Geophysics, 1998, 63, 1122-1124.	2.6	64
141	Detection of lateral velocity contrasts by crosswell traveltime tomography. Geophysics, 1998, 63, 523-533.	2.6	18
142	Modes of survival. Geophysics, 1998, 63, 1845-1846.	2.6	0
143	Humility and nonlinearity. Geophysics, 1997, 62, 1355-1358.	2.6	10
144	To Bayes or not to Bayes?. Geophysics, 1997, 62, 1045-1046.	2.6	107

#	Article	IF	CITATIONS
145	Fast, efficient calculation of rays and travel times with ray perturbation theory. Journal of the Acoustical Society of America, 1996, 99, 383-391.	1.1	16
146	Waveform inversions and the significance of surface-wave mode coupling. Geophysical Journal International, 1996, 124, 258-278.	2.4	56
147	Attenuation, dispersion, and anisotropy by multiple scattering of transmitted waves through distributions of scatterers. Journal of the Acoustical Society of America, 1995, 98, 3482-3492.	1.1	66
148	Finding sets of acceptable solutions with a genetic algorithm with application to surface wave group dispersion in Europe. Geophysical Research Letters, 1994, 21, 2617-2620.	4.0	60
149	Obtaining smooth solutions to large, linear, inverse problems. Geophysics, 1994, 59, 818-829.	2.6	65
150	The applicability of ray perturbation theory to mantle tomography. Geophysical Research Letters, 1993, 20, 73-76.	4.0	7
151	A test of the Great Circle Approximation in the analysis of surface waves. Geophysical Research Letters, 1993, 20, 915-918.	4.0	22
152	Solving large linear inverse problems by projection. Geophysical Journal International, 1990, 103, 565-568.	2.4	29
153	A perturbative analysis of non-linear inversion. Geophysical Journal International, 1990, 101, 545-556.	2.4	30
154	The reflection and transmission of planeP- andS-waves by a continuously stratified band: a new approach using invariant imbedding. Geophysical Journal International, 1989, 96, 447-456.	2.4	15
155	Effect of sharp lateral heterogeneity on the Earth's normal modes. Geophysical Research Letters, 1989,	4.0	6