Kasper Van Wijk

List of Publications by Year in descending order

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96 papers	1,935 citations	23 h-index	3	39 g-index
104 all docs	104 docs citations	104 times ranked		1803 citing authors

#	Article	lF	CITATIONS
1	Global quieting of high-frequency seismic noise due to COVID-19 pandemic lockdown measures. Science, 2020, 369, 1338-1343.	6.0	202
2	Seismic wave attenuation in carbonates. Journal of Geophysical Research, 2009, 114, .	3.3	136
3	Cancellation of spurious arrivals in Green's function extraction and the generalized optical theorem. Physical Review E, 2008, 78, 036606.	0.8	96
4	Extension of the spatial autocorrelation (SPAC) method to mixed-component correlations of surface waves. Geophysical Journal International, 2012, 191, 189-206.	1.0	72
5	Physical modeling and analysis of P-wave attenuation anisotropy in transversely isotropic media. Geophysics, 2007, 72, D1-D7.	1.4	69
6	The virtual refraction: Useful spurious energy in seismic interferometry. Geophysics, 2009, 74, A13-A17.	1.4	67
7	Surface-wave Inversion Limitations from Laser-Doppler Physical Modeling. Journal of Environmental and Engineering Geophysics, 2005, 10, 151-162.	1.0	60
8	Imaging and suppressing near-receiver scattered surface waves. Geophysics, 2005, 70, V21-V29.	1.4	54
9	Changes in elastic wave velocity and rock microstructure due to basaltâ€CO ₂ â€water reactions. Journal of Geophysical Research: Solid Earth, 2013, 118, 4039-4047.	1.4	50
10	On estimating the impulse response between receivers in a controlled ultrasonic experiment. Geophysics, 2006, 71, SI79-SI84.	1.4	44
11	Monitoring glacier surface seismicity in time and space using Rayleigh waves. Journal of Geophysical Research, 2012, 117, .	3.3	41
12	Noncontacting benchtop measurements of the elastic properties of shales. Geophysics, 2013, 78, C25-C31.	1.4	41
13	Data and model uncertainty estimation for linear inversion. Geophysical Journal International, 2002, 149, 625-632.	1.0	40
14	Multiple scattering attenuation and anisotropy of ultrasonic surface waves. Applied Physics Letters, 1999, 74, 3899-3901.	1.5	38
15	Auckland Volcanic Field magmatism, volcanism, and hazard: a review. New Zealand Journal of Geology, and Geophysics, 0, , 1-22.	1.0	36
16	Multicomponent wavefield characterization with a novel scanning laser interferometer. Review of Scientific Instruments, 2010, 81, 073101.	0.6	34
17	Analysis of strong scattering at the micro-scale. Journal of the Acoustical Society of America, 2004, 115, 1006-1011.	0.5	32
18	Laser Ultrasound Observations of Mechanical Property Variations in Ice Cores. Geosciences (Switzerland), 2017, 7, 47.	1.0	32

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19	Imaging scattered seismic surface waves. Near Surface Geophysics, 2004, 2, 223-230.	0.6	30
20	Observation and modeling of source effects in coda wave interferometry at Pavlof volcano. The Leading Edge, 2009, 28, 554-560.	0.4	30
21	Using SVD for improved interferometric Green's function retrieval. Geophysical Journal International, 2013, 194, 1596-1612.	1.0	28
22	Gas-coupled laser acoustic detection as a non-contact line detector for photoacoustic and ultrasound imaging. Journal of Optics (United Kingdom), 2016, 18, 024005.	1.0	27
23	Estimating the Rayleigh-wave impulse response between seismic stations with the cross terms of the Green tensor. Geophysical Research Letters, 2011 , 38 , n/a - n/a .	1.5	25
24	Monitoring attenuation and the elastic properties of an apple with laser ultrasound. Postharvest Biology and Technology, 2016, 121, 71-77.	2.9	25
25	A feasibility study of time-lapse seismic monitoring of CO2 sequestration in a layered basalt reservoir. Journal of Applied Geophysics, 2012, 82, 145-152.	0.9	24
26	Monitoring the temperature-dependent elastic and anelastic properties in isotropic polycrystalline ice using resonant ultrasoundÂspectroscopy. Cryosphere, 2016, 10, 2821-2829.	1.5	22
27	All-optical extravascular laser-ultrasound and photoacoustic imaging of calcified atherosclerotic plaque in excised carotid artery. Photoacoustics, 2018, 9, 62-72.	4.4	22
28	Seismic refraction interferometry with a semblance analysis on the crosscorrelation gather. Geophysics, 2011, 76, SA77-SA82.	1.4	21
29	Tunable multiple-scattering system. Applied Physics Letters, 2001, 79, 2294-2296.	1.5	20
30	Analyzing the coda from correlating scattered surface waves. Journal of the Acoustical Society of America, 2012, 131, EL275-EL281.	0.5	20
31	Theory and laboratory experiments of elastic wave scattering by dry planar fractures. Journal of Geophysical Research, $2011,116,.$	3.3	19
32	Nonconfocal all-optical laser-ultrasound and photoacoustic imaging system for angle-dependent deep tissue imaging. Journal of Biomedical Optics, 2017, 22, 041014.	1.4	19
33	A Marchenko equation for acoustic inverse source problems. Journal of the Acoustical Society of America, 2017, 141, 4332-4346.	0.5	19
34	The relation between viscosity and acoustic emissions as a laboratory analogue for volcano seismicity. Geology, 2019, 47, 499-503.	2.0	18
35	Full-wavefield modeling and reverse time migration of laser ultrasound data: A feasibility study. Geophysics, 2015, 80, D553-D563.	1.4	17
36	1D energy transport in a strongly scattering laboratory model. Physical Review E, 2004, 69, 036611.	0.8	15

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37	Surface wave dispersion from small vertical scatterers. Geophysical Research Letters, 2004, 31, .	1.5	15
38	Characterizing Phantom Arteries with Multi-channel Laser Ultrasonics and Photo-acoustics. Ultrasound in Medicine and Biology, 2014, 40, 513-520.	0.7	15
39	PLACE: An Open-Source Python Package for Laboratory Automation, Control, and Experimentation. Journal of the Association for Laboratory Automation, 2015, 20, 10-16.	2.8	15
40	Radiative transfer in layered media and its connection to the O'Doherty-Anstey formula. Geophysics, 2005, 70, T1-T11.	1.4	14
41	PS-wave moveout inversion for tilted TI media: A physical-modeling study. Geophysics, 2006, 71, D135-D143.	1.4	14
42	Laser ultrasonic measurements to estimate the elastic properties of rock samples under <i>in situ</i> conditions. Review of Scientific Instruments, 2019, 90, 114503.	0.6	14
43	MalargÃ $^{1\!/\!4}$ e seismic array: Design and deployment of the temporary array. European Physical Journal Plus, 2012, 127, 1.	1.2	13
44	Clustering revisited: A spectral analysis of microseismic events. Geophysics, 2013, 78, KS41-KS49.	1.4	13
45	A modified delay-time method for statics estimation with the virtual refraction. Geophysics, 2012, 77, A29-A33.	1.4	12
46	Estimating the Orientation of Borehole Seismometers from Ambient Seismic Noise. Bulletin of the Seismological Society of America, 2019, 109, 424-432.	1.1	12
47	The spatial cross-correlation method for dispersive surface waves. Geophysical Journal International, 2014, 199, 1-10.	1.0	11
48	Photoacoustic imaging through a cortical bone replica with anisotropic elasticity. Applied Physics Letters, 2020, 116, .	1.5	11
49	Laser Excitation of a Fracture Source for Elastic Waves. Physical Review Letters, 2011, 107, 275501.	2.9	10
50	Western limits of the Seattle fault zone and its interaction with the Olympic Peninsula, Washington. , 2012, 8, 915-930.		10
51	Scattering amplitude of a single fracture under uniaxial stress. Geophysical Journal International, 2014, 197, 875-881.	1.0	10
52	Teaching Geophysics with a Vertical-Component Seismometer. Physics Teacher, 2013, 51, 552-554.	0.2	9
53	Estimating location of scatterers using seismic interferometry of scattered rayleigh waves. Near Surface Geophysics, 2014, 12, 721-730.	0.6	9
54	Constraining Microfractures in Foliated Alpine Fault Rocks With Laser Ultrasonics. Geophysical Research Letters, 2020, 47, e2020GL087378.	1.5	9

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55	Seismic monitoring of the Auckland Volcanic Field during New Zealand's COVID-19 lockdown. Solid Earth, 2021, 12, 363-373.	1.2	9
56	Modified Kubelka-Munk equations for localized waves inside a layered medium. Physical Review E, 2007, 75, 036601.	0.8	8
57	Probing the subsurface of the Auckland Volcanic Field with ambient seismic noise. New Zealand Journal of Geology, and Geophysics, 2017, 60, 341-352.	1.0	8
58	A modified Hankinson Equation for the wave speed of laser ultrasound in Radiata Pine. Wave Motion, 2019, 89, 57-64.	1.0	8
59	Application of the virtual refraction to nearâ€surface characterization at the Boise Hydrogeophysical Research Site [‡] . Geophysical Prospecting, 2010, 58, 1011-1022.	1.0	7
60	Heterodyne interferometry for the detection of elastic waves: a tutorial and open-hardware project. European Journal of Physics, 2015, 36, 035011.	0.3	7
61	The influence of fluid type on elastic wave velocity and attenuation in volcanic rocks. Journal of Volcanology and Geothermal Research, 2020, 403, 107004.	0.8	7
62	LP or VT signals? How intrinsic attenuation influences volcano seismic signatures constrained by Whakaari volcano parameters. Journal of Volcanology and Geothermal Research, 2021, 418, 107337.	0.8	7
63	CO2 sequestration in basalt: Carbonate mineralization and fluid substitution. The Leading Edge, 2011, 30, 1354-1359.	0.4	6
64	Mudstone P-wave anisotropy measurements with non-contacting lasers under confining pressure. , 2014, , .		6
65	Resonant ultrasound spectroscopy of horizontal transversely isotropic samples. Journal of Geophysical Research: Solid Earth, 2015, 120, 4887-4897.	1.4	5
66	Separating intrinsic and scattering attenuation in full waveform sonic logging with radiative transfer theory. Geophysical Journal International, 2018, 213, 757-769.	1.0	5
67	Spatial Dependence of Dynamic Nonlinear Rock Weakening at the Alpine Fault, New Zealand. Geophysical Research Letters, 2021, 48, e2021GL093862.	1.5	5
68	PSâ€wave moveout inversion for tilted TI media: A physicalâ€modeling study. , 2005, , .		4
69	The establishment of a geophysics field camp in northern Thailand. The Leading Edge, 2011, 30, 414-420.	0.4	4
70	Measuring, imaging and suppressing scattered surface waves. , 2003, , .		4
71	A numerical sensitivity analysis to monitor CO 2 sequestration in layered basalt with coda waves. , 2009, , .		4
72	Toward noncontacting seismology. Geophysical Research Letters, 2005, 32, .	1.5	3

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73	CO 2 sequestration in basalt: Carbonate mineralization and fluid substitution., 2011,,.		3
74	Scanning for velocity anomalies in the crust and mantle with diffractions from the coreâ€mantle boundary. Geophysical Research Letters, 2012, 39, .	1.5	3
75	Image reconstruction of multi-channel photoacoustic and laser-ultrasound data using reverse time migration. , 2015, , .		3
76	Photoacoustic and ultrasound imaging with a gas-coupled laser acoustic line detector. , 2016, , .		3
77	Multiâ€level 3D VSP travel time inversion in VTI media, Weyburn Field, Canada. , 2003, , .		3
78	Numerical modeling of time″apse monitoring of CO 2 sequestration in a layered basalt reservoir. , 2008, , .		3
79	Introduction to this special section: Attenuation dispersion. The Leading Edge, 2014, 33, 604-605.	0.4	2
80	Quality-factor and reflection-coefficient estimation using surface-wave ghost reflections from subvertical structures. Journal of Applied Geophysics, 2015, 112, 206-214.	0.9	2
81	Estimating the Green's function using a single channel dual-beam interferometer. Journal of the Acoustical Society of America, 2018, 144, 124-130.	0.5	2
82	Surface wave isolation with the interferometric Green tensor. , 2010, , .		2
83	Monitoring the effects of CO $$ sub $$ 2 $$ /sub $$ injection on carbonate-cemented sandstones with elastic waves. , 2015, , .		2
84	The critical angle in seismic interferometry. , 2008, , .		1
85	Apple seismology. Physics Today, 2017, 70, 94-95.	0.3	1
86	Advances in Laboratory Modeling of Wave Propagation. , 2010, , .		1
87	Dynamic aspects of apparent attenuation and wave localization in layered media., 2008,,.		1
88	Exploiting the crossterms of the virtual Rayleighâ€wave Green tensor for surfaceâ€wave inversion. , 2011, , .		1
89	Elastic scattering by planar fractures. , 2011, , .		0
90	Near-surface imaging of a hydrogeothermal system at Mount Princeton, Colorado using 3D seismic, self-potential, and dc resistivity data. The Leading Edge, 2012, 31, 70-74.	0.4	0

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91	Spectral analysis for earthquake cluster detection. , 2012, , .		O
92	Teaching hands-on geophysics: examples from the RÅ« seismic network in New Zealand. European Journal of Physics, 2017, 38, 023001.	0.3	0
93	Radiative transfer in 1D, and the connection to the O'Dohertyâ€Anstey formula. , 2003, , .		O
94	MuSPAC: Near-surface characterization with multi-component surface-wave correlations. , $2013, \ldots$		0
95	Quality-factor and reflection-coefficient estimation using reflected surface waves. , 2014, , .		0
96	Separating intrinsic and scattering attenuation in sonic logging of a geothermal field., 2015,,.		0