

# Dirk Gajewski

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/412462/publications.pdf>

Version: 2024-02-01

136  
papers

3,392  
citations

136740

32  
h-index

161609

54  
g-index

139  
all docs

139  
docs citations

139  
times ranked

1567  
citing authors

#	ARTICLE	IF	CITATIONS
1	Seismic source location with time-reversal and maximum-amplitude path for sparse and small-aperture acquisitions. <i>Geophysics</i> , 2022, 87, KS113-KS123.	1.4	1
2	Wavefield decomposition for diffraction separation with convolutional neural networks. , 2021, , .		5
3	Categorizing and correlating diffractivity attributes with seismic-reflection attributes using autoencoder networks. <i>Geophysics</i> , 2020, 85, O59-O70.	1.4	7
4	Recent Advances and Challenges of Waveform-Based Seismic Location Methods at Multiple Scales. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000667.	9.0	105
5	Velocity inversion and scatterer detection with 3D P-Cable data. , 2020, , .		2
6	Source localization and joint velocity model building using wavefront attributes. <i>Geophysical Journal International</i> , 2019, 219, 995-1007.	1.0	14
7	Waveform-based microseismic location using stochastic optimization algorithms: A parameter tuning workflow. <i>Computers and Geosciences</i> , 2019, 124, 115-127.	2.0	15
8	On the role of diffractions in velocity model building: a full-waveform inversion example. <i>Studia Geophysica Et Geodaetica</i> , 2019, 63, 538-553.	0.3	4
9	Reliability of data-driven wavefront attributes in laterally heterogeneous media. <i>Geophysics</i> , 2019, 84, O49-O62.	1.4	1
10	Unsupervised event identification and tagging for diffraction focusing. <i>Geophysical Journal International</i> , 2019, 217, 2165-2176.	1.0	20
11	3-D seismic imaging in crystalline rock environments: An approach based on diffraction focusing. <i>Journal of Applied Geophysics</i> , 2019, 165, 49-59.	0.9	2
12	Velocity-estimation improvements and migration/demigration using the common-reflection surface with continuing deconvolution in the time domain. <i>Geophysics</i> , 2019, 84, S229-S238.	1.4	4
13	Using seismic diffractions for assessment of tectonic overprint and fault interpretation. <i>Geophysics</i> , 2019, 84, IM1-IM9.	1.4	10
14	Identification and focusing of edge diffractions with wavefront attributes. , 2019, , .		2
15	Improving focusing and estimation of excitation time for passive seismic events: Sparse and limited-aperture data examples. , 2019, , .		2
16	Wavefront attributes in anisotropic media. <i>Geophysical Journal International</i> , 2018, 214, 430-443.	1.0	4
17	A systematic analysis of correlation-based seismic location methods. <i>Geophysical Journal International</i> , 2018, 212, 659-678.	1.0	22
18	Common-reflection-surface-based prestack diffraction separation and imaging. <i>Geophysics</i> , 2018, 83, S47-S55.	1.4	55

#	ARTICLE	IF	CITATIONS
19	Diffraction separation based on the projected first Fresnel zone. Journal of Geophysics and Engineering, 2018, 15, 2507-2515.	0.7	12
20	Parameter tuning of differential evolution algorithm for microseismic location. , 2018, , .		1
21	3D wavefront attribute determination and conflicting dip processing. Geophysics, 2018, 83, V325-V343.	1.4	7
22	Simultaneous model building and source localization: A 3D synthetic case study. , 2018, , .		1
23	Velocity model building by geometrical spreading focusing. , 2018, , .		2
24	An unsupervised strategy for the global tagging of individual diffractions. , 2018, , .		0
25	Wavefront-attribute estimation for 3D laterally heterogeneous media. , 2018, , .		0
26	Wavefront tomography with diffraction-only 3D P-cable data. , 2018, , .		1
27	Utilizing diffractions in wavefront tomography. Geophysics, 2017, 82, R65-R73.	1.4	50
28	A competitive comparison of multiparameter stacking operators. Geophysics, 2017, 82, V275-V283.	1.4	16
29	Determination of wavefront attributes by differential evolution in the presence of conflicting dips. Geophysics, 2017, 82, V229-V239.	1.4	25
30	The two faces of NMO. The Leading Edge, 2017, 36, 512-517.	0.4	7
31	A generalized view on normal moveout. Geophysics, 2017, 82, V335-V349.	1.4	14
32	Wavefront tomography by dynamic focusing. , 2017, , .		0
33	Accessing the diffracted wavefield by coherent subtraction. Geophysical Journal International, 2017, 211, 45-49.	1.0	53
34	5-D interpolation with wave-front attributes. Geophysical Journal International, 2017, 211, 897-919.	1.0	25
35	Simultaneous estimation of the 3D CRS attributes by an evolutionary-based Nelderâ€œMead algorithm. , 2016, , .		6
36	Conflicting dips and hard-rock environments: A CRS land data case study. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
37	Interpolation and regularization with the 3D CRS operator. , 2016, , .		7
38	Enhancement of prestack diffraction data and attributes using a travelttime decomposition approach. Studia Geophysica Et Geodaetica, 2016, 60, 471-486.	0.3	21
39	Passive seismic source localization via common-reflection-surface attributes. Studia Geophysica Et Geodaetica, 2016, 60, 531-546.	0.3	29
40	Improving the resolution of wavefront tomography by utilizing diffractions. , 2016, , .		1
41	Prestack diffraction enhancement using a travelttime decomposition approach. , 2015, , .		3
42	3-D Time migration velocity model building using CRS-based pre-stack diffraction separation. , 2015, , .		1
43	Application of the 3D commonâ€reflectionâ€surface stack workflow in a crystalline rock environment. Geophysical Prospecting, 2015, 63, 990-998.	1.0	15
44	Data-driven time migration using a multiparameter approach. , 2015, , .		0
45	Common-reflection-surface stack improvement by differential evolution and conflicting dip processing. , 2015, , .		7
46	A zero-offset picking approach for pre-stack multiple attenuation. , 2015, , .		0
47	Curvatures and inhomogeneities: An improved common-reflection-surface approach. Geophysics, 2014, 79, S231-S240.	1.4	53
48	Imageâ€ray Tomography. Geophysical Prospecting, 2014, 62, 413-426.	1.0	13
49	Common reflection surface (CRS) based pre-stack diffraction separation. , 2014, , .		13
50	Seismic anisotropy in oil and gas exploration and development â€” Introduction. Geophysics, 2013, 78, WC1-WC2.	1.4	1
51	Diffraction travelttime approximation for general anisotropic media. Geophysics, 2013, 78, WC15-WC23.	1.4	8
52	True-amplitude Kirchhoff depth migration in anisotropic media: The travelttime-based approach. Geophysics, 2013, 78, WC33-WC39.	1.4	8
53	Prestack time migration by common-migrated-reflector-element stacking. Geophysics, 2012, 77, S73-S82.	1.4	15
54	Common-reflection-surface-based workflow for diffraction imaging. Geophysics, 2011, 76, S187-S195.	1.4	179

#	ARTICLE	IF	CITATIONS
55	From time to depth with CRS attributes. <i>Geophysics</i> , 2011, 76, S151-S155.	1.4	11
56	Diffraction imaging based on Commonâ€Reflectionâ€Surface attributes. , 2011, , .		1
57	An automatic time imaging using Common Scatter Point gathers. , 2010, , .		2
58	Structure and evolution of the Northeastern German Basin and its transition onto the Baltic Shield. <i>Marine and Petroleum Geology</i> , 2010, 27, 923-938.	1.5	22
59	Localization of seismic events in 3D media by diffraction stacking. , 2010, , .		11
60	Prestack seismic data enhancement with partial common-reflection-surface (CRS) stack. <i>Geophysics</i> , 2009, 74, V49-V58.	1.4	102
61	Reprocessing of deep seismic reflection data from the North German Basin with the Common Reflection Surface stack. <i>Tectonophysics</i> , 2009, 472, 273-283.	0.9	13
62	Revisiting the structural setting of the Glueckstadt Graben salt stock family, North German Basin. <i>Tectonophysics</i> , 2009, 470, 162-172.	0.9	13
63	Application of Snellâ€™s law in weakly anisotropic media. <i>Geophysics</i> , 2009, 74, WB147-WB152.	1.4	7
64	Influence of models on seismic-event localization. <i>Geophysics</i> , 2009, 74, WB55-WB61.	1.4	9
65	A workflow for the processing of reflection seismic data with CRS attributes. , 2009, , .		0
66	New insights into the crustal structure of the North German Basin from reprocessing of seismic reflection data using the Common Reflection Surface stack. <i>International Journal of Earth Sciences</i> , 2008, 97, 887-898.	0.9	7
67	Sedimentary basin evolution: subsidence, salt dynamics, fluid flow and deformation. <i>International Journal of Earth Sciences</i> , 2008, 97, 883-886.	0.9	0
68	Comparison of prestack stereotomography and NIP wave tomography for velocity model building: Instances from the Messinian evaporites. <i>Geophysics</i> , 2008, 73, VE291-VE302.	1.4	18
69	A multiple suppression method via CRS attributes. , 2008, , .		14
70	Seismic data enhancement with common reflection surface (CRS) stack method. , 2008, , .		3
71	Basin evolution of the northern part of the Northeast German Basin â€™ Insights from a 3D structural model. <i>Tectonophysics</i> , 2007, 437, 1-16.	0.9	47
72	The Levantine Basinâ€™ crustal structure and origin. <i>Tectonophysics</i> , 2006, 418, 167-188.	0.9	102

#	ARTICLE	IF	CITATIONS
73	Traveltime-based true-amplitude migration. <i>Geophysics</i> , 2006, 71, S251-S259.	1.4	9
74	Second-order interpolation of later-arrival traveltimes. <i>Geophysical Prospecting</i> , 2006, 54, 167-176.	1.0	1
75	The structural evolution of the Messinian evaporites in the Levantine Basin. <i>Marine Geology</i> , 2006, 230, 249-273.	0.9	96
76	Reverse modelling for seismic event characterization. <i>Geophysical Journal International</i> , 2005, 163, 276-284.	1.0	213
77	Traveltime computation by wavefront-orientated ray tracing. <i>Geophysical Prospecting</i> , 2005, 53, 23-36.	1.0	13
78	The Mesozoicâ€Cenozoic structural framework of the Bay of Kiel area, western Baltic Sea. <i>International Journal of Earth Sciences</i> , 2005, 94, 1070-1082.	0.9	20
79	Dynamics of sedimentary basins: the example of the Central European Basin system. <i>International Journal of Earth Sciences</i> , 2005, 94, 779-781.	0.9	12
80	Seismic velocities from the Yaquina forearc basin off Peru: evidence for free gas within the gas hydrate stability zone. <i>International Journal of Earth Sciences</i> , 2005, 94, 420-432.	0.9	22
81	Salt tectonics off northern Israel. <i>Marine and Petroleum Geology</i> , 2005, 22, 597-611.	1.5	80
82	Variation of the present-day stress field within the North German Basinâ€”insights from thin shell FE modeling based on residual GPS velocities. <i>Tectonophysics</i> , 2005, 397, 55-72.	0.9	40
83	Seismic study of pull-apart-induced sedimentation and deformation in the Northern Gulf of Aqaba (Elat). <i>Tectonophysics</i> , 2005, 396, 59-79.	0.9	42
84	Conrad Deep, Northern Red Sea: Development of an early stage ocean deep within the axial depression. <i>Tectonophysics</i> , 2005, 411, 19-40.	0.9	22
85	Application of sectorially bestâ€fitting isotropic background media. , 2004, , .		1
86	Imaging of complex basin structures with the common reflection surface (CRS) stack method. <i>Geophysical Journal International</i> , 2004, 157, 1206-1216.	1.0	28
87	Determination of sectorially bestâ€fitting isotropic background media. , 2004, , .		2
88	Trueâ€amplitude migration â€” the traveltimesâ€based strategy. , 2004, , .		0
89	Determination of geometrical spreading from traveltimes. <i>Journal of Applied Geophysics</i> , 2003, 54, 391-400.	0.9	19
90	Traveltime computation for 3D anisotropic media by a finite-difference perturbation method. <i>Geophysical Prospecting</i> , 2003, 51, 431-441.	1.0	8

#	ARTICLE	IF	CITATIONS
91	Crustal-scale pop-up structure in cratonic lithosphere: DOBRE deep seismic reflection study of the Donbas fold belt, Ukraine. <i>Geology</i> , 2003, 31, 733.	2.0	78
92	3D wavefront-oriented ray tracing: Estimation of traveltimes within cells. , 2002, , .		0
93	True Amplitude Migration Weights from Travel Times. <i>Pure and Applied Geophysics</i> , 2002, 159, 1583-1599.	0.8	3
94	Second-order interpolation of traveltimes. <i>Geophysical Prospecting</i> , 2002, 50, 73-83.	1.0	27
95	Amplitude Preserving Kirchhoff Migration: A Traveltime Based Strategy. <i>Studia Geophysica Et Geodaetica</i> , 2002, 46, 193-211.	0.3	10
96	True Amplitude Migration Weights from Travel Times. , 2002, , 1583-1599.		1
97	Traveltime interpolation for Kirchhoff migration in anisotropic media. , 2002, , .		0
98	Determining geometrical spreading from traveltimes in anisotropic media. , 2002, , .		0
99	Reference ellipsoids for anisotropic media. <i>Geophysical Prospecting</i> , 2001, 49, 321-334.	1.0	6
100	Traveltime based true amplitude migration of PS converted wave. , 2001, , .		13
101	Determining the optimum migration aperture from traveltimes. , 2001, , .		1
102	3D multi-valued traveltime computation using a hybrid method. , 2000, , .		1
103	Comparison of six different methods for calculating traveltimes. <i>Geophysical Prospecting</i> , 1999, 47, 269-297.	1.0	40
104	An Attempt to Integrate Reflection Seismics and Balanced Profiles. <i>Pure and Applied Geophysics</i> , 1999, 156, 207-232.	0.8	0
105	Quasi-isotropic approximation of ray theory for anisotropic media. <i>Geophysical Journal International</i> , 1998, 132, 643-653.	1.0	12
106	Efficient finite-difference modelling of seismic waves using locally adjustable time steps. <i>Geophysical Prospecting</i> , 1998, 46, 603-616.	1.0	40
107	Traveltime computation by perturbation with FD-eikonal solvers in isotropic and weakly anisotropic media. <i>Geophysics</i> , 1998, 63, 1066-1078.	1.4	22
108	Anisotropic reflection coefficients for a weak-contrast interface. <i>Geophysical Journal International</i> , 1998, 132, 159-166.	1.0	33

#	ARTICLE	IF	CITATIONS
109	On the computation of the true-amplitude weighting functions. <i>Geophysics</i> , 1998, 63, 1648-1651.	1.4	2
110	Polarization, phase velocity, and NMO velocity of qP-waves in arbitrary weakly anisotropic media. <i>Geophysics</i> , 1998, 63, 1754-1766.	1.4	107
111	P-wave AVAZ for inclined parallel fractures. , 1998, , .		0
112	True-amplitude common-shot migration revisited. <i>Geophysics</i> , 1997, 62, 1250-1259.	1.4	6
113	Reflection coefficients for weak anisotropic media. <i>Geophysical Journal International</i> , 1997, 129, 389-398.	1.0	26
114	Normal moveout velocities in 3D arbitrary anisotropic media. , 1997, , .		1
115	qP wave phase velocities in weakly anisotropic media—a perturbation approach. , 1996, , .		8
116	Wave front construction in smooth media for prestack depth migration. <i>Pure and Applied Geophysics</i> , 1996, 148, 481-502.	0.8	29
117	Tube wave modeling by the finite-difference method with varying grid spacing. <i>Pure and Applied Geophysics</i> , 1996, 148, 77-93.	0.8	41
118	Deep seismic sounding in the Turkana depression, northern Kenya Rift. <i>Tectonophysics</i> , 1994, 236, 165-178.	0.9	9
119	Crustal structure beneath the Kenya Rift from axial profile data. <i>Tectonophysics</i> , 1994, 236, 179-200.	0.9	64
120	Radiation from point sources in general anisotropic media. <i>Geophysical Journal International</i> , 1993, 113, 299-317.	1.0	42
121	Vector wavefields for weakly attenuating anisotropic media by the ray method. <i>Geophysics</i> , 1992, 57, 27-38.	1.4	57
122	Some remarks on the structure and geodynamics of the Kenya Rift. <i>Tectonophysics</i> , 1992, 213, 257-268.	0.9	24
123	Large-scale variation in lithospheric structure along and across the Kenya rift. <i>Nature</i> , 1991, 354, 223-227.	13.7	91
124	A new constraint on the composition of the topmost continental mantle— anomalously different depth increases of P and S velocity. <i>Geophysical Journal International</i> , 1990, 103, 497-507.	1.0	36
125	Crustal structure of southern Germany from seismic refraction data. <i>Tectonophysics</i> , 1990, 176, 59-86.	0.9	47
126	Vertical seismic profile synthetics by dynamic ray tracing in laterally varying layered anisotropic structures. <i>Journal of Geophysical Research</i> , 1990, 95, 11301-11315.	3.3	119



#	ARTICLE	IF	CITATIONS
127	Compressional and Shear-Wave Velocity Models of the Schwarzwald Derived from Seismic Refraction Data. Exploration of the Deep Continental Crust, 1989, , 363-383.	0.1	2
128	Ray synthetic seismograms for a 3-D anisotropic lithospheric structure. Physics of the Earth and Planetary Interiors, 1988, 51, 1-23.	0.7	9
129	An interpretation of wide-angle compressional and shear wave data in southwest Germany: Poisson's ratio and petrological implications. Journal of Geophysical Research, 1988, 93, 12081-12106.	3.3	111
130	Crustal evolution of the Rhinegraben area. 1. Exploring the lower crust in the Rhinegraben rift by unified geophysical experiments. Tectonophysics, 1987, 141, 261-275.	0.9	80
131	Seismic refraction investigation of the Black Forest. Tectonophysics, 1987, 142, 27-48.	0.9	76
132	A three-dimensional crustal model of southwest Germany derived from seismic refraction data. Tectonophysics, 1987, 142, 49-70.	0.9	63
133	Shear-wave velocity and Poisson's ratio structure of the upper lithosphere in southwest Germany. Geophysical Research Letters, 1987, 14, 231-234.	1.5	26
134	Combined seismic reflection and refraction profiling in southwest Germany - detailed velocity mapping by the refraction survey. Geophysical Journal International, 1987, 89, 333-338.	1.0	8
135	Computation of high-frequency seismic wavefields in 3-D laterally inhomogeneous anisotropic media. Geophysical Journal International, 1987, 91, 383-411.	1.0	140
136	On-the-Fly Full Hessian Kernel Calculations Based upon Seismic-Wave Simulations. Seismological Research Letters, 0, , .	0.8	1