Martin LandrÃ¸

List of Publications by Year
in descending order

161 papers	2,904 citations	201385 27 h-index	214527 47 g-index
166 all docs	166 docs citations	166 times ranked	1264 citing authors

#	Article	IF	Citations
1	Discrimination between pressure and fluid saturation changes from time‑lapse seismic data. Geophysics, 2001, 66, 836-844.	1.4	377
2	Quantitative estimation of compaction and velocity changes using 4D impedance and traveltime changes. Geophysics, 2004, 69, 949-957.	1.4	136
3	The Gullfaks 4D seismic study. Petroleum Geoscience, 1999, 5, 213-226.	0.9	111
4	Is it optimal to tow air guns shallow to enhance low frequencies?. Geophysics, 2014, 79, A13-A18.	1.4	90
5	Repeatability issues of 3-D VSP data. Geophysics, 1999, 64, 1673-1679.	1.4	77
6	Estimation of thickness and velocity changes of injected carbon dioxide layers from prestack time-lapse seismic data. Geophysics, 2009, 74, O17-O28.	1.4	72
7	Discrimination between pressure and fluid saturation changes from marine multicomponent time‑lapse seismic data. Geophysics, 2003, 68, 1592-1599.	1.4	71
8	Nonlinear inversion for estimating reservoir parameters from time-lapse seismic data. Journal of Geophysics and Engineering, 2008, 5, 54-66.	0.7	69
9	Simultaneous inversion of PP and PS seismic data. Geophysics, 2006, 71, R1-R10.	1.4	65
10	Deep electrical imaging of the ultraslow-spreading Mohns Ridge. Nature, 2019, 567, 379-383.	13.7	63
11	Shear-wave elastic impedance. The Leading Edge, 2000, 19, 1222-1229.	0.4	59
12	Vp ∕ Vs ratio versus differential stress and rock consolidation — A comparison between rock models and time-lapse AVO data. Geophysics, 2007, 72, C81-C94.	1.4	55
13	Estimation of layer thickness and velocity changes using 4D prestack seismic data. Geophysics, 2006, 71, S219-S234.	1.4	49
14	MODELLING OF GI GUN SIGNATURES1. Geophysical Prospecting, 1992, 40, 721-747.	1.0	45
15	Uncertainties in quantitative time-lapse seismic analysis. Geophysical Prospecting, 2002, 50, 527-538.	1.0	45
16	Source signature determination by inversion. Geophysics, 1992, 57, 1633-1640.	1.4	44
17	Long-offset AVO inversion of PP reflections from plane interfaces using effective reflection coefficients. Geophysics, 2011, 76, C65-C79.	1.4	43
18	Using Mindlin theory to model friction-dependent shear modulus in granular media. Geophysics, 2010, 75, E143-E152.	1.4	41

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19	AVO inversion of Troll Field data. Geophysics, 1996, 61, 1589-1602.	1.4	39
20	A derivative-free approach for the estimation of porosity and permeability using time-lapse seismic and production data. Journal of Geophysics and Engineering, 2010, 7, 351-368.	0.7	39
21	AVO attribute inversion for finely layered reservoirs. Geophysics, 2006, 71, C25-C36.	1.4	38
22	Storage of Carbon Dioxide in Saline Aquifers: Physicochemical Processes, Key Constraints, and Scale-Up Potential. Annual Review of Chemical and Biomolecular Engineering, 2021, 12, 471-494.	3.3	34
23	Estimation of pressure-saturation changes for unconsolidated reservoir rocks with highV_P/V_S ratio. Geophysics, 2014, 79, M35-M54.	1.4	33
24	Porosity and permeability estimation by integration of production and time-lapse near and far offset seismic data. Journal of Geophysics and Engineering, 2009, 6, 325-344.	0.7	32
25	High-frequency signals from air-gun arrays. Geophysics, 2011, 76, Q19-Q27.	1.4	31
26	3D CSEM modeling and time-lapse sensitivity analysis for subsurface CO2 storage. Geophysics, 2012, 77, E343-E355.	1.4	31
27	A comparison of rock physics models for fluid substitution in carbonate rocks. Exploration Geophysics, 2010, 41, 146-154.	0.5	29
28	Elastic reverse time migration of marine walkaway vertical seismic profiling data. Geophysics, 1998, 63, 1685-1695.	1.4	27
29	Use and abuse of seismic data in reservoir characterisation. Marine and Petroleum Geology, 2001, 18, 635-655.	1.5	26
30	High-speed photography of the bubble generated by an airgun1. Geophysical Prospecting, 1996, 44, 153-172.	1.0	25
31	Stochastic inversion of pressure and saturation changes from time-lapse AVO data. Geophysics, 2006, 71, C81-C92.	1.4	25
32	An experimental comparison of three direct methods of marine source signature estimation. Geophysical Prospecting, 1998, 46, 353-389.	1.0	24
33	Improved solution of displacements due to a compacting reservoir over a rigid basement. Applied Mathematical Modelling, 2010, 34, 3352-3362.	2.2	24
34	Time lapse refraction seismic â€•a tool for monitoring carbonate fields?. , 2004, , .		22
35	The effect of interface curvature on AVO inversion of near-critical and postcritical PP-reflections. Geophysics, 2012, 77, N1-N16.	1.4	21
36	Distributed acoustic sensing for near-surface imaging using submarine telecommunication cable: A case study in the Trondheimsfjord, Norway. Geophysics, 2021, 86, B303-B320.	1.4	21

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37	Discrimination between pressure and fluid saturation changes from time lapse seismic data. , 1999, , .		21
38	Seismic monitoring of *in situ* combustion process in a heavy oil field. Journal of Geophysics and Engineering, 2010, 7, 16-29.	0.7	20
39	Permeability variation with porosity, pore space geometry, and cement type: A case history from the Snåhvit field, the Barents Sea. Geophysics, 2015, 80, D43-D49.	1.4	20
40	Eavesdropping at the Speed of Light: Distributed Acoustic Sensing of Baleen Whales in the Arctic. Frontiers in Marine Science, 0, 9, .	1.2	20
41	Monitoring overburden layer changes and fault movements from time-lapse seismic data on the Valhall Field. Geophysical Journal International, 2007, 170, 1100-1118.	1.0	19
42	Gravimetric monitoring of gas-reservoir water influx â€" A combined flow- and gravity-modeling approach. Geophysics, 2008, 73, WA123-WA131.	1.4	19
43	Experimental study of viscosity effects on airâ€gun signatures. Geophysics, 1993, 58, 1801-1808.	1.4	19
44	TEMPERATURE EFFECTS ON AIRGUN SIGNATURES1. Geophysical Prospecting, 1993, 41, 737-750.	1.0	18
45	Iceberg ploughmarks illuminated by shallow gas in the central North Sea. Quaternary Science Reviews, 2014, 103, 34-50.	1.4	18
46	Estimation of rock physics properties from seismic attributes â€" Part 2: Applications. Geophysics, 2016, 81, M55-M69.	1.4	18
47	ESTIMATION OF ELASTIC PARAMETERS FROM AVO EFFECTS IN THE TAU-P DOMAIN1. Geophysical Prospecting, 1993, 41, 341-366.	1.0	17
48	The effect of noise generated by previous shots on seismic reflection data. Geophysics, 2008, 73, Q9-Q17.	1.4	17
49	Estimating saturation and density changes caused by CO_2 injection at Sleipner â€" Using time-lapse seismic amplitude-variation-with-offset and time-lapse gravity. Interpretation, 2017, 5, T243-T257.	0.5	17
50	Seismic critical-angle reflectometry: A method to characterize azimuthal anisotropy?. Geophysics, 2007, 72, D41-D50.	1.4	16
51	Variable source depth acquisition for improved marine broadband seismic data. Geophysics, 2015, 80, A69-A73.	1.4	16
52	Source signature determination from ministreamer data. Geophysics, 1994, 59, 1261-1269.	1.4	15
53	Normal modes in seismic data â€" Revisited. Geophysics, 2012, 77, W27-W40.	1.4	14
54	Gas flow through shallow sedimentsâ€"A case study using passive and active seismic field data. International Journal of Greenhouse Gas Control, 2019, 87, 121-133.	2.3	14

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55	Repeatability of high-resolution 3D seismic data. Geophysics, 2019, 84, B75-B94.	1.4	14
56	Overburden complexity and repeatability of seismic data: Impacts of positioning errors at the Oseberg field, North Sea. Geophysical Prospecting, 2007, 55, 365-379.	1.0	13
57	Time-lapse tomographic inversion using a Gaussian parameterization of the velocity changes. Geophysics, 2010, 75, U29-U38.	1.4	13
58	Single-station SVD-based polarization filtering of ground roll: Perfection and investigation of limitations and pitfalls. Geophysics, 2012, 77, V41-V59.	1.4	13
59	Implementing measured source signatures in a coarse€grid, finite€difference modeling scheme. Geophysics, 1993, 58, 1852-1860.	1.4	12
60	Monitoring a shallow subsurface gas flow by time-lapse refraction analysis. Geophysics, 2011, 76, O35-O43.	1.4	12
61	Repeatability issues of high-frequency signals emitted by air-gun arrays. Geophysics, 2013, 78, P19-P27.	1.4	12
62	On firing an air gun very shallow. Geophysics, 2017, 82, A25-A29.	1.4	12
63	Acoustically induced cavity cloud generated by air-gun arrays€"Comparing video recordings and acoustic data to modeling. Journal of the Acoustical Society of America, 2018, 143, 3383-3393.	0.5	12
64	The impact of common€offset migration on porosity estimation by AVO inversion. Geophysics, 2001, 66, 755-762.	1.4	11
65	Optimal use of PP and PS time-lapse stacks for fluid-pressure discrimination. Geophysical Prospecting, 2004, 52, 301-312.	1.0	11
66	Pore-pressure detection sensitivities tested with time-lapse seismic data. Geophysics, 2005, 70, O39-O50.	1.4	11
67	Fluid-pressure discrimination in anisotropic reservoir rocks â€" A sensitivity study. Geophysics, 2005, 70, O1-O11.	1.4	11
68	Determining the dilation factor in 4D monitoring of compacting reservoirs by rock-physics models. Geophysical Prospecting, 2007, 55, 793-804.	1.0	11
69	Time-lapse 2D interpretation of gas migration in shallow sand layers â€" Compared to reservoir simulation. International Journal of Greenhouse Gas Control, 2012, 10, 389-396.	2.3	11
70	Sensitivity analysis of effective fluid and rock bulk modulus due to changes in pore pressure, temperature and saturation. Journal of Applied Geophysics, 2016, 135, 77-89.	0.9	11
71	Calendar time interpolation of amplitude maps from 4D seismic data. Geophysical Prospecting, 2016, 64, 421-430.	1.0	11
72	Twenty Years of Monitoring CO2 Injection at Sleipner. , 2019, , 209-234.		11

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73	Feature Selection Based on Principal Component Regression for Underwater Source Localization by Deep Learning. Remote Sensing, 2021, 13, 1486.	1.8	11
74	Source level and vocalizing depth estimation of two blue whale subspecies in the western Indian Ocean from single sensor observations. Journal of the Acoustical Society of America, 2021, 149, 4422-4436.	0.5	11
75	Modeling of water–gun signatures. Geophysics, 1993, 58, 101-109.	1.4	10
76	Simple expression for the bubble-time period of two clustered air guns. Geophysics, 2012, 77, A1-A3.	1.4	10
77	Advances in time-lapse geophysics â€" Introduction. Geophysics, 2015, 80, WAi-WAii.	1.4	10
78	Reducing high-frequency ghost cavitation signals from marine air-gun arrays. Geophysics, 2016, 81, P33-P46.	1.4	9
79	Acoustic generation of underwater cavitiesâ€"Comparing modeled and measured acoustic signals generated by seismic air gun arrays. Journal of the Acoustical Society of America, 2017, 141, 2661-2672.	0.5	9
80	Time-lapse seismic as a complementary tool for in-fill drilling. Journal of Petroleum Science and Engineering, 2001, 31, 81-92.	2.1	8
81	Stochastic inversion of pressure and saturation changes from time-lapse multi component data. Geophysical Prospecting, 2007, 55, 805-818.	1.0	8
82	Controlled source electromagnetic three–dimensional grid–modelling based on a complex resistivity structure of the seafloor: effects of acquisition parameters and geometry of multi–layered resistors. Geophysical Prospecting, 2010, 58, 505-533.	1.0	8
83	Long-offset time-lapse seismic: Tested on the Valhall LoFS data. Geophysics, 2011, 76, O1-O13.	1.4	8
84	Stress and fluid sensitivity in two North Sea oil fieldsâ€"comparing rock physics models with seismic observations. The Leading Edge, 2011, 30, 98-102.	0.4	8
85	Frequency-depth-dependent spherical reflection response from the sea surface â€" a transmission experiment. Geophysical Journal International, 2018, 214, 1206-1217.	1.0	8
86	Well calibration of seabed seismic data. , 1999, , .		8
87	Multicomponent ocean bottom and vertical cable seismic acquisition for wavefield reconstruction. Geophysics, 2010, 75, WB87-WB94.	1.4	7
88	Relating 4D seismics to reservoir geomechanical changes using a discrete element approach. Geophysical Prospecting, 2010, 58, 657-668.	1.0	7
89	Estimation of changes in water column velocities and thicknesses from time lapse seismic data. Geophysical Prospecting, 2011, 59, 295-309.	1.0	7
90	An alternative method for modeling close-range interactions between air guns. Geophysics, 2014, 79, P1-P7.	1.4	7

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91	On low frequencies emitted by air guns at very shallow depths â€" An experimental study. Geophysics, 2019, 84, P61-P71.	1.4	7
92	Acoustic signals in air and water generated by very shallow marine seismic sources: An experimental study. Journal of the Acoustical Society of America, 2020, 147, 1092-1103.	0.5	7
93	A sensitivity study based on 2D synthetic data from the Gullfaks Field, using PP and PS time-lapse stacks for fluid-pressure discrimination. Journal of Geophysics and Engineering, 2006, 3, 314-328.	0.7	6
94	Attenuation of seismic water-column noise, tested on seismic data from the Grane field. Geophysics, 2007, 72, V87-V95.	1.4	6
95	Airâ€gun bubble damping by a screen. Geophysics, 1995, 60, 1765-1772.	1.4	6
96	Radiative correction to the equivalent-photon spectrum of a relativistic electron and the two-photon process. Physical Review D, 1987, 36, 44-54.	1.6	5
97	Source signature determination by inversion of ministreamer data. The Leading Edge, 2000, 19, 46-49.	0.4	5
98	4D study of fluid effects on seismic data in the Gullfaks Field, North Sea. Geofluids, 2003, 3, 233-244.	0.3	5
99	Overburden distortionsâ€"implications for seismic AVO analysis and time-lapse seismic. Journal of Geophysics and Engineering, 2005, 2, 81-89.	0.7	5
100	Potential improvements in reservoir monitoring using permanent seismic receiver arrays. The Leading Edge, 2008, 27, 1638-1645.	0.4	5
101	Using a pseudo-steady-state flow equation and 4D seismic traveltime shifts for estimation of pressure and saturation changes. Geophysics, 2014, 79, M11-M24.	1.4	5
102	Estimation of source signatures from air guns fired at various depths: A field test of the source scaling law. Geophysics, 2016, 81, P13-P22.	1.4	5
103	Processing and quality-control strategies for consistent time-lapse seismic attributes: A case history on an internal blowout using vintage data. Geophysics, 2017, 82, B135-B146.	1.4	5
104	Broadband seismic over/under sources and their designature-deghosting. Geophysics, 2017, 82, P61-P73.	1.4	5
105	High frequency ghost cavitation - a comparison of two seismic air-gun arrays using numerical modelling. Energy Procedia, 2017, 125, 153-160.	1.8	5
106	4D Seismic. , 2010, , 427-444.		5
107	Seismic monitoring of inâ€situ combustion in the Balol heavyâ€oil field. , 2007, , .		5
108	Estimation of bubble time period for air-gun clusters using potential isosurfaces. Geophysics, 2013, 78, P1-P7.	1.4	4

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109	Detecting gas leakage using high-frequency signals generated by air-gun arrays. Geophysics, 2017, 82, A 7-A 12.	1.4	4
110	The Role of Geophysics in Carbon Capture and Storage. , 2019, , 11-53.		4
111	Joint inversion of PPâ€•and PSâ€•seismic data. , 2001, , .		4
112	Comparing the broadband acoustic frequency response of single, clustered, and arrays of marine air guns. Geophysics, 2020, 85, P27-P36.	1.4	4
113	Self-supervised Underwater Source Localization based on Contrastive Predictive Coding. , 2021, , .		4
114	Estimation of effective source signatures from marine VSP data1. Geophysical Prospecting, 1996, 44, 179-196.	1.0	3
115	Pressure detection from rms velocities â€" A sensitivity study based on a 4D dataset. , 2001, , .		3
116	4D gravity response of compacting reservoirs: Analytical approach. Geophysics, 2012, 77, G45-G54.	1.4	3
117	Seaâ€•bed diffractions and their impact on 4D seismic data. Geophysical Prospecting, 2013, 61, 199-214.	1.0	3
118	Implementation of marine seismic source wavefields in finite-difference methods using wavefield injection. Geophysics, 2016, 81, T211-T219.	1.4	3
119	Multicomponent Seismic Monitoring. , 2019, , 83-92.		3
120	Characterizing the acoustic properties of the cavity cloud generated close to an air-gun array as a time-dependent effective medium. Geophysical Journal International, 2019, 216, 545-559.	1.0	3
121	Time-lapse seismic analysis of overburden water injection at the Ekofisk field, southern North Sea. Geophysics, 2020, 85, B9-B21.	1.4	3
122	The impact of bubble curtains on seismic air-gun signatures and its high-frequency emission. Geophysics, 2020, 85, P1-P11.	1.4	3
123	Tube-wave monitoring as a method to detect shear modulus changes around boreholes: A case study. Geophysics, 2021, 86, B193-B207.	1.4	3
124	Using diving waves for detecting shallow overburden gas layers. Geophysics, 2021, 86, B237-B247.	1.4	3
125	Pre-stack estimation of time-lapse seismic velocity changes â€" An example from the Sleipner CO2-Sequestration Project. , 2005, , 633-641.		3
126	Velocity and thickness estimation of thin CO_2 layers with uniform and patchy saturations â€" A 4D synthetic seismic study. , 2011, , .		3

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127	Time lapse pressure-saturation discrimination for CO $_2$ storage at the Snãhvit field. , 2012, , .		3
128	Stochastic inversion of pressure and saturation changes from timeâ€lapse seismic data. , 2003, , .		2
129	Vpâ€Vs ratio versus effective pressure and rock consolidation â€" a comparison between rock models and timeâ€lapse AVO studies. , 2004, , .		2
130	Simulation of 4D seismic signal with noise â€" illustrated by WAG injection on the Ula Field. , 2005, , .		2
131	Estimating velocity and thickness changes of compacting reservoirs combining 4D seismic and gravimetric measurements. , 2009, , .		2
132	Streamer depth versus vessel and seismic interference noise. Geophysics, 2017, 82, P41-P51.	1.4	2
133	Time lapse seismic analysis of the Tohoku-Oki 2011 earthquake. International Journal of Greenhouse Gas Control, 2019, 82, 98-116.	2.3	2
134	Ground-roll subtraction from common-shot gathers with significant trace-to-trace variations in the energy of random noise. Journal of Geophysics and Engineering, 2013, 10, 065001.	0.7	1
135	Implementation of marine source wavefields in FD-methods. , 2015, , .		1
136	Aspect ratio histograms of 3D ellipsoids and 2D ellipses â€" Analytical relations and numerical examples. Geophysics, 2015, 80, D429-D12.	1.4	1
137	Sensitivity analysis and application of timeâ€lapse fullâ€waveform inversion: synthetic testing and field data example from the North Sea, Norway. Geophysical Prospecting, 2016, 64, 1183-1200.	1.0	1
138	Variable source depth acquisition for (an overall) improved signal-to-noise ratio in marine broadband seismic data: A modeling study. Geophysics, 2017, 82, P31-P39.	1.4	1
139	A new approach to separate seismic time-lapse time shifts in the reservoir and overburden. Geophysics, 2017, 82, Q67-Q78.	1.4	1
140	Low-frequency acoustic signal created by rising air-gun bubble. Geophysics, 2017, 82, P119-P128.	1.4	1
141	Estimating source signatures from source-over-spread marine seismic data. Geophysics, 2018, 83, P39-P48.	1.4	1
142	Goals of CO2 Monitoring. , 2019, , 54-70.		1
143	Time-Lapse Seismic Analysis of the CO2 Injection into the Tubã¥en Formation at Snãhvit. , 2019, , 319-338.		1
144	Source strength variations and 4D seismic. , 2008, , .		1

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145	Mindlin's friction term and implications for shear modulus and anisotropy in granular media. , 2011, , .		1
146	Pressure-saturation discrimination for an underground blow-out seismic data of North-Sea. , 2012, , .		1
147	Using geophone components to obtain ultralow frequency signals at long offsets. , 2014, , .		1
148	Time lapse seismic analysis using long offset PS data. , 2005, , .		1
149	Far-offset detection of normal modes and diving waves: A case study from the Valhall Field, southern North Sea. Geophysics, 2022, 87, B105-B115.	1.4	1
150	Damping of secondary bubble oscillations for towed air guns with a screen. Geophysics, 1997, 62, 533-539.	1.4	0
151	SEG 2010 Awards Citations. The Leading Edge, 2010, 29, 1394-1410.	0.4	0
152	12. Reservoir Geophysics. , 2010, , 255-282.		0
153	Controlled source strength variation by changing the firing pressure â€¢a sensitivity study for 4D calibration. Geophysical Prospecting, 2012, 60, 480-487.	1.0	0
154	Discriminating between oil and gas exploiting the amplitude dimming at the rim. , 2015, , .		0
155	Estimating Saturation and Density Changes Caused by CO_2 Injection at Sleipner. , 2019, , 134-153.		0
156	Estimation of changes in gravity anomaly due to a compacting reservoir. , 2009, , .		0
157	Monitoring shallow gas migration by refraction timeshift. , 2011, , .		0
158	CSEM sensitivity study of CO $_2$ layers with uniform versus patchy saturation distributions. , 2011, , .		0
159	Modeling close range air gun interactions using isosurfaces of the velocity potential. , 2013, , .		0
160	New method for discriminating 4D time shifts in the overburden and reservoir. , 2016, , .		0
161	Estimation of shallow gas-migration rates after a subsurface blowout using time-lapse attributes. , 2017, , .		0