Sergey B Fomel

List of Publications by Year in Descending Order

323 papers	**8,624** citations	**49** h-index	**82** g-index
375 ext. papers	**11,198** ext. citations	**2.7** avg, IF	**7.05** L-index

#	Paper	IF	Citations
323	Machine Learning for Fast and Reliable Source-Location Estimation in Earthquake Early Warning. *IEEE Geoscience and Remote Sensing Letters*, **2022**, 19, 1-5	4.1	3
322	Time-lapse seismic data inversion for estimating reservoir parameters using deep learning. *Interpretation*, **2022**, 10, T167-T179	1.4	1
321	Simultaneous reconstruction and denoising of extremely sparse 5D seismic data by a simple and effective method. *IEEE Transactions on Geoscience and Remote Sensing*, **2021**, 1-1	8.1	
320	A Probabilistic Approach to Seismic Diffraction Imaging. *Lithosphere*, **2021**, 2021,	2.7	2
319	The Slope-Attribute-Regularized High-Resolution Prestack Seismic Inversion. *Surveys in Geophysics*, **2021**, 42, 625-671	7.6	7
318	SCALODEEP: A Highly Generalized Deep Learning Framework for Real-Time Earthquake Detection. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB021473	3.6	12
317	A Compact Program for 3D Passive Seismic Source-Location Imaging. *Seismological Research Letters*, **2021**, 92, 3187-3201	3	5
316	Uncertainty and interpretability analysis of encoder-decoder architecture for channel detection. *Geophysics*, **2021**, 86, O49-O58	3.1	5
315	Seismic data interpolation using deep learning with generative adversarial networks. *Geophysical Prospecting*, **2021**, 69, 307-326	1.9	21
314	Wave-equation time migration. *Geophysics*, **2021**, 86, S103-S111	3.1	
313	Interactively tracking seismic geobodies with a deep-learning flood-filling network. *Geophysics*, **2021**, 86, A1-A5	3.1	4
312	5D dealiased seismic data interpolation using nonstationary prediction-error filter. *Geophysics*, **2021**, 86, V419-V429	3.1	2
311	Nonstationary local signal-and-noise orthogonalization. *Geophysics*, **2021**, 86, V409-V418	3.1	5
310	A Fast Algorithm for Elastic Wave-Mode Separation Using Deep Learning With Generative Adversarial Networks (GANs). *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB021123	3.6	3
309	Improving the resolution of migrated images by approximating the inverse Hessian using deep learning. *Geophysics*, **2020**, 85, WA173-WA183	3.1	19
308	Seismic ground-roll noise attenuation using deep learning. *Geophysical Prospecting*, **2020**, 68, 2064-2077	1.9	23
307	Deep learning parameterization for geophysical inverse problems **2020**,		5

306	Least-squares diffraction imaging using shaping regularization by anisotropic smoothing. *Geophysics*, **2020**, 85, S313-S325	3.1	6
305	Waveform embedding: Automatic horizon picking with unsupervised deep learning. *Geophysics*, **2020**, 85, WA67-WA76	3.1	17
304	Time-lapse seismic data inversion for estimating reservoir parameters using deep learning **2020**,		2
303	Separating primaries and multiples using hyperbolic Radon transform with deep learning **2020**,		6
302	Uncertainty estimation using Bayesian convolutional neural network for automatic channel detection **2020**,		5
301	Passive seismic signal denoising using convolutional neural network **2020**,		1
300	Building realistic structure models to train convolutional neural networks for seismic structural interpretation. *Geophysics*, **2020**, 85, WA27-WA39	3.1	62
299	Relative time seislet transform. *Geophysics*, **2020**, 85, V223-V232	3.1	5
298	Deep learning for relative geologic time and seismic horizons. *Geophysics*, **2020**, 85, WA87-WA100	3.1	19
297	Probabilistic moveout analysis by time warping. *Geophysics*, **2020**, 85, U1-U20	3.1	3
296	SaltSeg: Automatic 3D salt segmentation using a deep convolutional neural network. *Interpretation*, **2019**, 7, SE113-SE122	1.4	56
295	Automatic channel detection using deep learning. *Interpretation*, **2019**, 7, SE43-SE50	1.4	46
294	Pattern-guided dip estimation with plane-wave destruction filters. *Geophysical Prospecting*, **2019**, 67, 1798-1810	1.9	4
293	Least-squares path-summation diffraction imaging using sparsity constraints. *Geophysics*, **2019**, 84, S187-S200	3.1	13
292	Effects of lateral heterogeneity on time-domain processing parameters. *Geophysical Journal International*, **2019**, 219, 1181-1201	2.6	1
291	FaultNet3D: Predicting Fault Probabilities, Strikes, and Dips With a Single Convolutional Neural Network. *IEEE Transactions on Geoscience and Remote Sensing*, **2019**, 57, 9138-9155	8.1	58
290	Multitask learning for local seismic image processing: fault detection, structure-oriented smoothing with edge-preserving, and seismic normal estimation by using a single convolutional neural network. *Geophysical Journal International*, **2019**, 219, 2097-2109	2.6	33
289	Relative geologic time estimation using a deep convolutional neural network **2019**,		9

270	Increasing resolution of reverse-time migration using time-shift gathers. *Geophysical Prospecting*, **2018**, 66, 726-735	1.9	1
269	Automatic fault interpretation with optimal surface voting. *Geophysics*, **2018**, 83, O67-O82	3.1	39
268	Incremental correlation of multiple well logs following geologically optimal neighbors. *Interpretation*, **2018**, 6, T713-T722	1.4	5
267	Automatic channel detection using deep learning **2018**,		16
266	Missing well-log data prediction using Bayesian approach in the relative-geologic time domain **2018**,		4
265	Least-squares diffraction imaging using shaping regularization by anisotropic smoothing **2018**,		2
264	Improving migration resolution by approximating the least-squares Hessian using nonstationary amplitude and frequency matching **2018**,		2
263	Missing Well Log Estimation by Multiple Well-log Correlation **2018**,		3
262	Automatic fault interpretation using optimal surface voting **2018**,		3
261	Solving fractional Laplacian viscoelastic wave equations using domain decomposition **2018**,		5
260	A finite-element method for blind deconvolution with dynamic frequency wavelets **2018**,		1
259	Convolutional neural networks for fault interpretation in seismic images **2018**,		55
258	Least-squares seismic horizons with local slopes and multigrid correlations **2018**,		1
257	Automatic salt-body classification using deep-convolutional neural network **2018**,		56
256	Diffraction imaging and time-migration velocity analysis using oriented velocity continuation. *Geophysics*, **2017**, 82, U25-U35	3.1	28
255	Full-waveform inversion using seislet regularization. *Geophysics*, **2017**, 82, A43-A49	3.1	24
254	Creating detailed subsurface models using predictive image-guided well-log interpolation. *Interpretation*, **2017**, 5, T279-T285	1.4	9
253	Elastic wave-vector decomposition in heterogeneous anisotropic media. *Geophysical Prospecting*, **2017**, 65, 1231-1245	1.9	16

252	Analytical path-summation imaging of seismic diffractions. *Geophysics*, **2017**, 82, S51-S59	3.1	12
251	Well-log interpolation guided by geologic distance **2017**,		3
250	Balancing local frequency content in seismic data using nonstationary smoothing **2017**,		2
249	Effects of lateral heterogeneity on reflection traveltimes **2017**,		1
248	Diffraction-based migration velocity analysis using double-path summation **2017**,		2
247	Incremental correlation of multiple well logs following geologically optimal neighbors **2017**,		3
246	Reproducible research: Geophysics papers of the future Introduction. *Geophysics*, **2017**, 82, WBi-WBii	3.1	4
245	Plane-wave Sobel attribute for discontinuity enhancement in seismic images. *Geophysics*, **2017**, 82, WB63-WB69	3.1	10
244	Finding an optimal well-log correlation sequence using coherence-weighted graphs **2017**,		5
243	3D generalized nonhyperboloidal moveout approximation. *Geophysics*, **2017**, 82, C49-C59	3.1	24
242	Time-variant wavelet extraction with a local-attribute-based time-frequency decomposition for seismic inversion. *Interpretation*, **2017**, 5, SC9-SC16	1.4	10
241	The modified generalized moveout approximation: a new parameter selection. *Geophysical Prospecting*, **2017**, 65, 687-695	1.9	11
240	Fast salt-boundary interpretation with optimal path picking **2017**,		2
239	Recursive integral time extrapolation of elastic waves using low-rank symbol approximation. *Geophysical Journal International*, **2017**, 211, 1478-1493	2.6	6
238	Unconventional Reservoir Characterization Using Azimuthal Seismic Diffraction Imaging **2017**,		6
237	Enhancing seismic-diffraction images using semblance-weighted least-squares migration **2017**,		4
236	Predictive painting across faults **2017**,		2
235	Diffraction imaging of high-resolution 3D P-cable data from the Gulf of Mexico using azimuthal plane-wave destruction. *First Break*, **2017**, 35,	0.5	14

234	A Bayesian approach to estimate uncertainty for full-waveform inversion using a priori information from depth migration. *Geophysics*, **2016**, 81, R307-R323	3.1	59
233	Q-compensated full-waveform inversion using constant-Q wave equation **2016**,		11
232	Q-compensated least-squares reverse time migration using low-rank one-step wave extrapolation. *Geophysics*, **2016**, 81, S271-S279	3.1	65
231	Data-driven time-frequency analysis of seismic data using regularized nonstationary autoregression **2016**,		2
230	Theory of interval traveltime parameter estimation in layered anisotropic media. *Geophysics*, **2016**, 81, C253-C263	3.1	11
229	Seismic imaging of incomplete data and simultaneous-source data using least-squares reverse time migration with shaping regularization. *Geophysics*, **2016**, 81, S11-S20	3.1	117
228	A comparison of diffraction imaging to incoherence and curvature. *The Leading Edge*, **2016**, 35, 86-89	1	16
227	Low-rank one-step wave extrapolation for reverse time migration. *Geophysics*, **2016**, 81, S39-S54	3.1	40
226	Seismic time-lapse image registration using amplitude-adjusted plane-wave destruction **2016**,		4
225	High-resolution recursive stacking using plane-wave construction **2016**,		1
224	Recursive integral time extrapolation of elastic waves using lowrank approximation **2016**,		4
223	Mapping of moveout attributes using local slopes. *Geophysical Prospecting*, **2016**, 64, 31-37	1.9	12
222	Microseismic source localization using time-domain path-integral migration **2016**,		3
221	Full-waveform inversion of passive seismic data for sources and velocities **2016**,		25
220	Migration-based passive-source imaging for continuous data **2016**,		5
219	5. Diffraction Imaging **2016**, 655-800		
218	Diffraction imaging using azimuthal plane-wave destruction **2016**,		8
217	Least-squares path-integral diffraction imaging using sparsity constraints **2016**,		4

216	Streaming prediction-error filters **2016**,		10
215	A comparison of anisotropic parameterizations for Ti and orthorhombic media and their sensitivity with respect to qP velocities **2016**,		1
214	Fast scattered data gridding **2016**,		2
213	Structure-oriented plane-wave Sobel filter for edge detection in seismic images **2016**,		5
212	1. Overview **2016**, 1-62		
211	Full-waveform inversion using smoothing kernels **2016**,		11
210	Double-sparsity dictionary for seismic noise attenuation. *Geophysics*, **2016**, 81, V103-V116	3.1	135
209	Building good starting models for full-waveform inversion using adaptive matching filtering misfit. *Geophysics*, **2016**, 81, U61-U72	3.1	41
208	Carbonate reservoir characterization using seismic diffraction imaging. *Interpretation*, **2015**, 3, SF21-SF30	1.4	23
207	Seislet-based morphological component analysis using scale-dependent exponential shrinkage. *Journal of Applied Geophysics*, **2015**, 118, 66-74	1.7	7
206	Seismic diffraction interpretation at Piceance Creek. *Interpretation*, **2015**, 3, SF1-SF14	1.4	22
205	A robust approach to time-to-depth conversion and interval velocity estimation from time migration in the presence of lateral velocity variations. *Geophysical Prospecting*, **2015**, 63, 315-337	1.9	14
204	A fast algorithm for 3D azimuthally anisotropic velocity scan. *Geophysical Prospecting*, **2015**, 63, 368-377	1.9	4
203	Signal and noise separation in prestack seismic data using velocity-dependent seislet transform. *Geophysics*, **2015**, 80, WD117-WD128	3.1	38
202	Viscoacoustic modeling and imaging using low-rank approximation. *Geophysics*, **2015**, 80, A103-A108	3.1	68
201	Predictive coherence. *Interpretation*, **2015**, 3, SAE1-SAE7	1.4	15
200	Elastic wave-vector decomposition in orthorhombic media **2015**,		4
199	Weighted least square based lowrank finite difference for seismic wave extrapolation **2015**,		1

198	Preconditioning least-squares RTM in viscoacoustic media by Q-compensated RTM **2015**,		21
197	Investigating the possibility of locating microseismic sources using distributed sensor networks **2015**,		19
196	Seismic data interpolation using plane-wave shaping regularization **2015**,		9
195	An efficient workflow for path-integral imaging of seismic diffractions **2015**,		8
194	Stratigraphic coordinates: a coordinate system tailored to seismic interpretation. *Geophysical Prospecting*, **2015**, 63, 1246-1255	1.9	11
193	Source-receiver two-way wave extrapolation for prestack exploding-reflector modelling and migration. *Geophysical Prospecting*, **2015**, 63, 23-34	1.9	3
192	Image guided well log interpolation using predictive painting **2015**,		10
191	On anelliptic approximations for qP velocities in transversely isotropic and orthorhombic media. *Geophysics*, **2015**, 80, C89-C105	3.1	43
190	Reproducible Research as a Community Effort: Lessons from the Madagascar Project. *Computing in Science and Engineering*, **2015**, 17, 20-26	1.5	5
189	EMD-seislet transform **2015**,		16
188	Random noise attenuation using local signal-and-noise orthogonalization. *Geophysics*, **2015**, 80, WD1-WD9.	3.1	215
187	3D generalized nonhyperboloidal moveout approximation **2015**,		3
186	Improving resolution of NMO stack using shaping regularization **2015**,		3
185	Random Noise Attenuation Using Local Signal and Noise Orthogonalization **2015**,		2
184	Automatic approaches for seismic to well tying. *Interpretation*, **2014**, 2, SD9-SD17	1.4	19
183	Structural uncertainty of time-migrated seismic images. *Journal of Applied Geophysics*, **2014**, 101, 27-30	1.7	24
182	Viscoacoustic modeling and imaging using low-rank approximation **2014**,		10
181	Transforming prestack seismic data by Gardner continuation **2014**,		2

#	Title	IF	Cit
180	Least-squares reverse-time migration using one-step two-way wave extrapolation by non-stationary phase shift **2014**,		6
179	Recent advances in time-domain seismic imaging **2014**,		9
178	Diffraction imaging and velocity analysis using oriented velocity continuation **2014**,		3
177	Local skewness attribute as a seismic phase detector. *Interpretation*, **2014**, 2, SA49-SA56	1.4	11
176	Imaging incomplete data and simultaneous-source data using least-squares reverse-time migration with shaping regularization **2014**,		14
175	Iterative deblending of simultaneous-source seismic data using seislet-domain shaping regularization. *Geophysics*, **2014**, 79, V179-V189	3.1	193
174	Fast algorithms for elastic-wave-mode separation and vector decomposition using low-rank approximation for anisotropic media. *Geophysics*, **2014**, 79, C97-C110	3.1	74
173	Lowrank seismic-wave extrapolation on a staggered grid. *Geophysics*, **2014**, 79, T157-T168	3.1	30
172	Two-point seismic ray tracing in layered media using bending **2014**,		5
171	Time-lapse pre-stack seismic data registration and inversion for CO_2 sequestration study at Cranfield. *Geophysical Prospecting*, **2014**, 62, 1028-1039	1.9	6
170	Random noise attenuation using local similarity **2014**,		5
169	Modified anelliptic approximations for qP velocities in transversely isotropic media **2014**,		3
168	Anelliptic approximations for qP velocities in orthorhombic media **2014**,		5
167	Non-hyperbolic common reflection surface. *Geophysical Prospecting*, **2013**, 61, 21-27	1.9	41
166	Seismic wave extrapolation using lowrank symbol approximation. *Geophysical Prospecting*, **2013**, 61, 526-536	1.9	143
165	Kirchhoff migration using eikonal-based computation of traveltime source derivatives. *Geophysics*, **2013**, 78, S211-S219	3.1	8
164	A fast butterfly algorithm for generalized Radon transforms. *Geophysics*, **2013**, 78, U41-U51	3.1	27
163	Fast algorithms for elastic-wave-mode separation and vector decomposition using low-rank approximation for anisotropic media **2013**,		3

162	Seismic data analysis using local time-frequency decomposition. *Geophysical Prospecting*, **2013**, 61, 516-525	2.5	54
161	Comparison of seismic diffraction imaging techniques: Plane wave destruction versus apex destruction **2013**,		11
160	Automatic traveltime picking using instantaneous traveltime. *Geophysics*, **2013**, 78, T53-T58	3.1	10
159	Automated spectral recomposition with application in stratigraphic interpretation. *Interpretation*, **2013**, 1, SA109-SA116	1.4	7
158	Accelerated plane-wave destruction. *Geophysics*, **2013**, 78, V1-V9	3.1	32
157	Omnidirectional plane-wave destruction. *Geophysics*, **2013**, 78, V171-V179	3.1	18
156	First-break traveltime tomography with the double-square-root eikonal equation. *Geophysics*, **2013**, 78, U89-U101	3.1	19
155	Lowrank finite-differences and lowrank Fourier finite-differences for seismic wave extrapolation in the acoustic approximation. *Geophysical Journal International*, **2013**, 193, 960-969	2.6	71
154	Predictive coherency **2013**,		2
153	Selecting an optimal aperture in Kirchhoff migration using dip-angle images. *Geophysics*, **2013**, 78, S243-S254	3.1	19
152	Seismic data decomposition into spectral components using regularized nonstationary autoregression. *Geophysics*, **2013**, 78, O69-O76	3.1	56
151	Time-lapse seismic data registration and inversion for CO2 sequestration study at Cranfield. *Geophysics*, **2013**, 78, B329-B338	3.1	16
150	A robust approach to time-to-depth conversion in the presence of lateral-velocity variations **2013**,		4
149	Iterative deblending of simultaneous-source seismic data using shaping regularization **2013**,		2
148	Low-rank one-step wave extrapolation **2013**,		12
147	Seismic wave extrapolation on a staggered grid using low-rank decomposition and low-rank finite differences **2013**,		2
146	Seismic diffraction imaging, one migration dip at a time **2013**,		2
145	A fast algorithm for 3D azimuthally anisotropic velocity scan **2013**,		1

144   Wave-equation time migration **2013**,   5

143   Seismic modeling using the frozen Gaussian approximation **2013**,   4

142   Computing volumetric-curvature attributes using predictive painting **2013**,   1

141   Phase-space computation of multi-arrival traveltimes: Part II Implementation and application to angle-domain imaging **2012**,   1

140   Shifted hyperbola moveout approximation revisited. *Geophysical Prospecting*, **2012**, 60, 395-399   1.9   5

139   A fast butterfly algorithm for the hyperbolic Radon transform **2012**,   1

138   Separation and imaging of seismic diffractions using migrated dip-angle gathers. *Geophysics*, **2012**, 77, S131-S143   3.1   126

137   Generalized nonelliptic moveout approximation in τ-p domain. *Geophysics*, **2012**, 77, U23-U30   3.1   18

136   Constrained simultaneous automatic picking for VVAZ analysis **2012**,   2

135   Optimal migration aperture for conflicting dips **2012**,   3

134   Multiple suppression in the t-x-p domain **2012**,   3

133   Time-frequency analysis of seismic data using local attributes. *Geophysics*, **2011**, 76, P23-P34   3.1   59

132   Seismic Imaging. *International Journal of Geophysics*, **2011**, 2011, 1-2   2

131   Velocity-independent τ-p moveout in a horizontally layered VTI medium. *Geophysics*, **2011**, 76, U45-U57   3.1   20

130   Seismic data interpolation beyond aliasing using regularized nonstationary autoregression. *Geophysics*, **2011**, 76, V69-V77   3.1   47

129   Fourier finite-difference wave propagation. *Geophysics*, **2011**, 76, T123-T129   3.1   40

128   Diffraction velocity analysis by path-integral seismic imaging **2011**,   9

127   Gaussian beam decomposition for seismic migration **2011**,   3

126	Stacking angle-domain common-image gathers for normalization of illumination. *Geophysical Prospecting*, **2011**, 59, 244-255	1.9	9
125	Angle gathers in wave-equation imaging for transversely isotropic media. *Geophysical Prospecting*, **2011**, 59, 422-431	1.9	7
124	Theory of 3-D angle gathers in wave-equation seismic imaging. *Journal of Petroleum Exploration and Production*, **2011**, 1, 11-16	2.2	11
123	The basic components of residual migration in VTI media using anisotropy continuation. *Journal of Petroleum Exploration and Production*, **2011**, 1, 17-22	2.2	9
122	Automatic traveltime picking using local time-frequency maps **2011**,		1
121	Improving wave-equation fidelity of Gaussian beams by solving the complex eikonal equation **2011**,		6
120	Azimuthally Anisotropic 3D Velocity Continuation. *International Journal of Geophysics*, **2011**, 2011, 1-8	2	16
119	Lowrank finite-differences for wave extrapolation **2011**,		5
118	A stable implementation of the prestack exploding reflector modeling and migration **2011**,		1
117	Stratigraphic coordinate system **2011**,		2
116	3-D Forward Seismic Model of an Outcrop-Based Geocellular Model **2011**, 87-106		4
115	Nonlinear structure-enhancing filtering using plane-wave prediction*. *Geophysical Prospecting*, **2010**, 58, 415-427	1.9	64
114	Generalized nonhyperbolic moveout approximation. *Geophysics*, **2010**, 75, U9-U18	3.1	98
113	Local similarity with the envelope as a seismic phase detector **2010**,		7
112	Fourier finite-difference wave propagation **2010**,		5
111	OC-seislet: Seislet transform construction with differential offset continuation. *Geophysics*, **2010**, 75, WB235-WB245	3.1	31
110	Enhancing seismic data resolution using the prestack blueing technique: An example from the Ketzin C O2 injection site, Germany. *Geophysics*, **2010**, 75, V101-V110	3.1	11
109	Seislet transform and seislet frame. *Geophysics*, **2010**, 75, V25-V38	3.1	242

108 Nonstationary phase estimation: A tool for seismic interpretation?. *The Leading Edge*, **2010**, 29, 1020-1026   11

107 Azimuthally anisotropic 3D velocity continuation **2010**,   1

106 Predictive painting of 3D seismic volumes. *Geophysics*, **2010**, 75, A25-A30   3.1   119

105 Seismic wave extrapolation using lowrank symbol approximation **2010**,   26

104 An eikonal-based formulation for traveltime perturbation with respect to the source location. *Geophysics*, **2010**, 75, T175-T183   3.1   14

103 Seismic data sampling and wavefield representation Introduction. *Geophysics*, **2010**, 75, WB1-WB2   3.1   6

102 Source-receiver two-way wave extrapolation for prestack exploding-reflector modeling and migration **2010**,   4

101 Fractures Detection Using Multi-Azimuth Diffractions Focusing Measure: Is it Feasible? **2010**,   10

100 20. Signal Processing **2010**, 453-493

99 Monitoring CO2 response on surface seismic data; a rock physics and seismic modeling feasibility study at the CO2 sequestration site, Ketzin, Germany. *Journal of Applied Geophysics*, **2010**, 71, 109-124   1.7   57

98 Trace interpolation beyond aliasing using regularized nonstationary autoregression **2010**,   3

97 VTI interval velocities by predictive painting in p domain **2010**,   1

96 Fractal heterogeneities in sonic logs and low-frequency scattering attenuation. *Geophysics*, **2009**, 74, WA77-WA92   3.1   16

95 Stacking seismic data using local correlation. *Geophysics*, **2009**, 74, V43-V48   3.1   95

94 Structure-enhancing nonlinear filtering of seismic images **2009**,   1

93 Adaptive multiple subtraction using regularized nonstationary regression. *Geophysics*, **2009**, 74, V25-V33   3.1   83

92 Time-lapse image registration using the local similarity attribute. *Geophysics*, **2009**, 74, A7-A11   3.1   47

91 . *Computing in Science and Engineering*, **2009**, 11, 5-7   1.5   75

90	Velocity analysis using AB semblance. *Geophysical Prospecting*, **2009**, 57, 311-321	1.9	87
89	Fast sweeping method for the factored eikonal equation. *Journal of Computational Physics*, **2009**, 228, 6440-6455	4.1	90
88	Analysis and algorithms for a regularized cauchy problem arising from a non-linear elliptic PDE for seismic velocity estimation. *Journal of Computational Physics*, **2009**, 228, 7388-7411	4.1	7
87	Nonstationary phase estimation using regularized local kurtosis maximization. *Geophysics*, **2009**, 74, A75-A80	3.1	61
86	Fast Computation of Partial Fourier Transforms. *Multiscale Modeling and Simulation*, **2009**, 8, 110-124	1.8	6
85	Time-domain seismic imaging using beams **2009**,		9
84	Generalized nonhyperbolic moveout approximation **2009**,		1
83	Time-frequency characterization of seismic data using local attributes **2009**,		7
82	3D velocity-independent elliptically anisotropic moveout correction. *Geophysics*, **2009**, 74, WB129-WB136	3.1	12
81	Angle gathers in wave-equation imaging for VTI media **2009**,		5
80	OC-seislet: Seislet transform construction with differential offset continuation **2009**,		2
79	Non-hyperbolic common reflection surface **2009**,		6
78	Moveout analysis by time-warping **2009**,		18
77	Stacking angle-domain common-image gathers for normalization of illumination **2009**,		1
76	Time-to-depth conversion and seismic velocity estimation using time-migration velocity. *Geophysics*, **2008**, 73, VE205-VE210	3.1	25
75	Nonlinear shaping regularization in geophysical inverse problems **2008**,		17
74	Seismic data analysis with one-dimensional seislet frame **2008**,		2
73	Separation, imaging, and velocity analysis of seismic diffractions using migrated dip-angle gathers **2008**,		76

72 Prestack spectral blueing: A tool for increasing seismic resolution **2008**,   2

71 Predictive painting of 3-D seismic volumes **2008**,   7

70 Wave-equation angle-domain common-image gathers for converted waves. *Geophysics*, **2008**, 73, S17-S26 3.1   37

69 3-D velocity-independent elliptically anisotropic moveout correction **2008**,   3

68 Split-step complex Padé-Fourier depth migration. *Geophysical Journal International*, **2007**, 171, 1308-1313 2.6   4

67 High-order kernels for Riemannian wavefield extrapolation. *Geophysical Prospecting*, **2007**, 56, 071030085652001-???

66 Time-lapse image registration using the local similarity attribute **2007**,   3

65 Reproducible Computational Experiments using Scons **2007**,   11

64 Seismic velocity estimation from time migration. *Inverse Problems*, **2007**, 23, 1329-1369   2.3   41

63 Velocity-independent time-domain seismic imaging using local event slopes. *Geophysics*, **2007**, 72, S139-S147 3.1   82

62 Poststack velocity analysis by separation and imaging of seismic diffractions. *Geophysics*, **2007**, 72, U89-U94 3.1   211

61 Shaping regularization in geophysical-estimation problems. *Geophysics*, **2007**, 72, R29-R36   3.1   252

60 Inverse problem in seismic imaging. *Proceedings in Applied Mathematics and Mechanics*, **2007**, 7, 1024803-1024804

59 Local seismic attributes. *Geophysics*, **2007**, 72, A29-A33   3.1   236

58 Directional analysis of the wave-equation imaging condition **2007**,   1

57 Regularizing seismic inverse problems by model reparameterization using plane-wave construction. *Geophysics*, **2006**, 71, A43-A47   3.1   43

56 Towards the seislet transform **2006**,   17

55 Time-shift imaging condition in seismic migration. *Geophysics*, **2006**, 71, S209-S217   3.1   218

54	Time-shift imaging condition for converted waves **2006**,		11
53	Flattening without picking. *Geophysics*, **2006**, 71, P13-P20	3.1	80
52	Reply to the discussion. *Geophysics*, **2006**, 71, X3-X4	3.1	
51	Seismic velocity estimation and time to depth conversion of time-migrated images **2006**,		5
50	Separation and imaging of seismic diffractions using plane-wave decomposition **2006**,		66
49	Path-integral seismic imaging. *Geophysical Prospecting*, **2006**, 54, 491-503	1.9	42
48	Continuation of a class of seismic processor s and associated rays **2006**,		2
47	Post-stack velocity analysis by separation and imaging of seismic diffractions **2006**,		15
46	Local seismic attributes **2006**,		1
45	A multistep approach to multicomponent seismic image registration with application to a West Texas carbonate reservoir study **2005**,		30
44	Velocity-independent time-domain seismic imaging using local event slopes **2005**,		5
43	Riemannian wavefield extrapolation. *Geophysics*, **2005**, 70, T45-T56	3.1	42
42	Shaping regularization in geophysical estimation problems **2005**,		5
41	Coordinate-independent angle-gathers for wave equation migration **2005**,		45
40	Wave-equation common-angle gathers for converted waves **2005**,		19
39	Time-shift imaging condition **2005**,		7
38	Model preconditioning by plane-wave construction in geophysical estimation problems **2005**,		1
37	On anelliptic approximations for qP velocities in VTI media. *Geophysical Prospecting*, **2004**, 52, 247-259	1.9	102

36	Split-step complex Padé-Fourier depth migration **2004**,		4
35	Theory of 3-D angle gathers in wave-equation imaging **2004**,		49
34	Multidimensional recursive filter preconditioning in geophysical estimation problems. *Geophysics*, **2003**, 68, 577-588	3.1	42
33	Time-migration velocity analysis by velocity continuation. *Geophysics*, **2003**, 68, 1662-1672	3.1	68
32	Velocity continuation and the anatomy of residual prestack time migration. *Geophysics*, **2003**, 68, 1650-1661	3.1	50
31	Multicomponent seismic data registration for subsurface characterization in the shallow Gulf of Mexico **2003**,		10
30	Angle-domain common-image gathers by wavefield continuation methods. *Geophysics*, **2003**, 68, 1065-1074	3.1	353
29	Multicomponent seismic data registration by least squares **2003**,		24
28	Theory of differential offset continuation. *Geophysics*, **2003**, 68, 718-732	3.1	30
27	Seismic reflection data interpolation with differential offset and shot continuation. *Geophysics*, **2003**, 68, 733-744	3.1	99
26	The Wilson-Burg method of spectral factorization with application to helical filtering. *Geophysical Prospecting*, **2003**, 51, 409-420	1.9	13
25	Asymptotic pseudounitary stacking operators. *Geophysics*, **2003**, 68, 1032-1042	3.1	2
24	Differential azimuth moveout **2003**,		2
23	Angle-domain seismic imaging and the oriented wave equation **2003**,		4
22	Iterative resolution estimation in least-squares Kirchhoff migration. *Geophysical Prospecting*, **2002**, 50, 577-588	1.9	21
21	Fast-phase space computation of multiple arrivals. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 7329-34	11.5	54
20	Applications of plane-wave destruction filters. *Geophysics*, **2002**, 67, 1946-1960	3.1	469
19	Wave-equation migration velocity analysis beyond the Born approximation **2002**,		2

18	Amplitude-preserved common image gathers by wave-equation migration **2001**,		34
17	3-D traveltime computation using Huygens wavefront tracing. *Geophysics*, **2001**, 66, 883-889	3.1	24
16	The space-time domain: theory and modelling for anisotropic media. *Geophysical Journal International*, **2001**, 144, 105-113	2.6	39
15	Implementing the fast marching eikonal solver: spherical versus Cartesian coordinates. *Geophysical Prospecting*, **2001**, 49, 165-178	1.9	47
14	Fast-marching eikonal solver in the tetragonal coordinates **1998**,		8
13	Robust reflection tomography in the time domain **1998**,		3
12	Huygens wavefront tracing: A robust alternative to ray tracing **1998**,		3
11	Azimuth moveout for 3-D prestack imaging. *Geophysics*, **1998**, 63, 574-588	3.1	66
10	Implicit 3-D depth migration by wavefield extrapolation with helical boundary conditions **1998**,		12
9	Regularizing velocity estimation using geologic dip information **1998**,		14
8	Velocity continuation and the anatomy of prestack residual migration **1997**,		4
7	True amplitude DMO, offset continuation and AVA/AVO for curved reflectors **1996**,		7
6	The time and space formulation of azimuth moveout **1995**,		3
5	A Matlab code package for 2D/3D local slope estimation and structural filtering. *Geophysics*,1-102	3.1	2
4	Semi-Supervised Salt Segmentation Using Mean Teacher. *Interpretation*,1-39	1.4	1
3	Deep learning for velocity model building with common-image gather volumes. *Geophysical Journal International*,	2.6	7
2	A variational approach for picking optimal surfaces from semblance-like panels. *Geophysics*,1-104	3.1	
1	Special section introduction: Automated approaches to interpretation. *Interpretation*,1-2	1.4	