Yang Liu

List of Publications by Year
in descending order

161	2,726	218592	206029
papers	citations	26	48
		h-index	g-index

161	161	161	863
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elastic Wave Modeling With High-Order Temporal and Spatial Accuracies by a Selectively Modified and Linearly Optimized Staggered-Grid Finite-Difference Scheme. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-22.	2.7	10
2	Deep Learning-Based Low-Frequency Extrapolation and Impedance Inversion of Seismic Data. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	16
3	Inversion of low- to medium-frequency velocities and densities from AVO data using invertible neural networks. Geophysics, 2022, 87, A37-A42.	1.4	6
4	Time–space domain scalar wave modeling by a novel hybrid staggered-grid finite-difference method with high temporal and spatial accuracies. Journal of Computational Physics, 2022, 455, 111004.	1.9	5
5	3-D Seismic Data Recovery via Neural Network-Based Matrix Completion. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	3
6	Removing the stability limit of the time-space domain explicit finite-difference schemes for acoustic modeling with stability condition-based spatial operators. Geophysics, 2022, 87, T205-T223.	1.4	4
7	Dropout-Based Robust Self-Supervised Deep Learning for Seismic Data Denoising. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	5
8	A new linear optimized time–space domain spatial implicit and temporal high-order finite-difference scheme for scalar wave modeling. Journal of Applied Geophysics, 2022, 201, 104637.	0.9	3
9	Modified viscoelastic wavefield simulations in the time domain using the new fractional Laplacians. Journal of Geophysics and Engineering, 2022, 19, 346-361.	0.7	4
10	Full-waveform inversion for reverse vertical seismic profiling data based on a variant of the optimal transport theory. Geophysical Prospecting, 2022, 70, 1163-1175.	1.0	2
11	The Instability of High-Steep Road Cutting Slope: A 3D Continuum-Discrete Coupling Method. Geofluids, 2022, 2022, 1-11.	0.3	2
12	Deblending Method of Multisource Seismic Data Based on a Periodically Varying Cosine Code. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1675-1679.	1.4	3
13	Automatic seismic facies interpretation using supervised deep learning. Geophysics, 2021, 86, IM15-IM33.	1.4	36
14	Optimizing orthogonal-octahedron finite-difference scheme for 3D acoustic wave modeling by combination of Taylor-series expansion and Remez exchange method. Exploration Geophysics, 2021, 52, 335-355.	0.5	5
15	Suppressing residual low-frequency noise in VSP reverse time migration by combining wavefield decomposition imaging condition with Poynting vector filtering. Exploration Geophysics, 2021, 52, 235-244.	0.5	5
16	Viscoelastic Wave Simulation with High Temporal Accuracy Using Frequency-Dependent Complex Velocity. Surveys in Geophysics, 2021, 42, 97-132.	2.1	10
17	Acoustic finite-difference modeling beyond conventional Courant-Friedrichs-Lewy stability limit: Approach based on variable-length temporal and spatial operators. Earthquake Science, 2021, 34, 123-136.	0.4	9
18	Applying an advanced temporal and spatial high-order finite-difference stencil to 3D seismic wave modeling. Journal of Computational Physics, 2021, 436, 110133.	1.9	1

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19	Differential semblance optimisation based on the adaptive quadratic Wasserstein distance. Journal of Geophysics and Engineering, 2021, 18, 605-617.	0.7	0
20	Acoustic wave propagation with new spatial implicit and temporal high-order staggered-grid finite-difference schemes. Journal of Geophysics and Engineering, 2021, 18, 808-823.	0.7	4
21	Effects of periodically varying codes on separation of multisource blended data. Applied Geophysics, 2021, 18, 331-344.	0.1	0
22	Reflection and Transmission of Plane Elastic Waves at an Interface Between Two Double-Porosity Media: Effect of Local Fluid Flow. Surveys in Geophysics, 2020, 41, 283-322.	2.1	30
23	Seismic Facies Analysis Based on Deep Learning. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1119-1123.	1.4	29
24	Acoustic and elastic finite-difference modeling by optimal variable-length spatial operators. Geophysics, 2020, 85, T57-T70.	1.4	16
25	Anisotropic viscoacoustic wave modelling in VTI media using frequency-dependent complex velocity. Journal of Geophysics and Engineering, 2020, , .	0.7	1
26	Modeling 3D acoustic-wave propagation using modified cuboid-based staggered-grid finite-difference methods with temporal and spatial high-order accuracy. Studia Geophysica Et Geodaetica, 2020, 64, 465-482.	0.3	0
27	Incoherent Noise Suppression of Seismic Data Based on Robust Low-Rank Approximation. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8874-8887.	2.7	16
28	Maximizing the CFL number of stable time–space domain explicit finite-difference modeling. Journal of Computational Physics, 2020, 416, 109501.	1.9	8
29	Arbitrary–order Taylor series expansion–based viscoacoustic wavefield simulation in 3D vertical transversely isotropic media. Geophysical Prospecting, 2020, 68, 2379-2399.	1.0	13
30	High-Order AVO Inversion for Effective Pore-Fluid Bulk Modulus Based on Series Reversion and Bayesian Theory. Energies, 2020, 13, 1313.	1.6	5
31	Effect of local fluid flow on the reflection and transmission of elastic waves at an interface between an elastic solid and a double-porosity medium. Geophysics, 2020, 85, T237-T256.	1.4	5
32	Two novel Fourier finite-difference schemes for acoustic wave propagation. , 2020, , .		0
33	Seismic Noise Attenuation Using Unsupervised Sparse Feature Learning. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 9709-9723.	2.7	45
34	Temporal High-Order Time–Space Domain Finite-Difference Methods for Modeling 3D Acoustic Wave Equations on General Cuboid Grids. Pure and Applied Geophysics, 2019, 176, 5391-5414.	0.8	7
35	Efficient modelling of optimised pure acoustic wave equation in 3D transversely isotropic and orthorhombic anisotropic media. Exploration Geophysics, 2019, 50, 561-574.	0.5	3
36	An improved fast converted-wave imaging method. Applied Geophysics, 2019, 16, 171-184.	0.1	0

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37	Q full-waveform inversion based on the viscoacoustic equation. Applied Geophysics, 2019, 16, 77-91.	0.1	6
38	Time-space-domain temporal high-order staggered-grid finite-difference schemes by combining orthogonality and pyramid stencils for 3D elastic-wave propagation. Geophysics, 2019, 84, T259-T282.	1.4	8
39	A rectangular staggered-grid finite-difference scheme with fourth-order temporal accuracy for pseudo-acoustic VTI modelling. Exploration Geophysics, 2019, 50, 94-110.	0.5	1
40	Perfectly matched layer boundary conditions for frequency-domain acoustic wave simulation in the mesh-free discretization. Geophysical Prospecting, 2019, 67, 1732-1744.	1.0	6
41	Modeling 3D elastic VTI wave propagation using an optimal k-space operator-based temporal high-accuracy staggered-grid finite-difference scheme. Journal of Applied Geophysics, 2019, 170, 103847.	0.9	1
42	Unsupervised Seismic Random Noise Attenuation Based on Deep Convolutional Neural Network. IEEE Access, 2019, 7, 179810-179822.	2.6	42
43	High temporal accuracy viscoacoustic wave modeling in vertically transverse isotropic media based on low-rank decomposition. , 2019, , .		2
44	Automatic seismic facies interpretation based on an enhanced encoder-decoder structure. , 2019, , .		7
45	Suppressing low-frequency and smearing artifacts of VSP reverse time migration using multidirectional wavefield decomposition. , 2019, , .		0
46	Complex wavefield decomposition-based reverse-time migration for novel pure acoustic wave in VTI media. , 2019, , .		0
47	Relocating source points outside exclusion zones on 3-D seismic survey designs: An optimized strategy. , 2019, , .		1
48	A modified differential semblance optimization with quantitative true-amplitude one-way wave equation. , 2019, , .		0
49	Auto-recognition of the low-velocity zone's bottom interface based on low-frequency noise on RTM profile using image recognition technology. , 2019, , .		0
50	Low-wavenumber compensated, true-amplitude angle domain differential semblance optimization. , 2019, , .		0
51	Effective modeling and reverse-time migration for novel pure acoustic wave in arbitrary orthorhombic anisotropic media. Journal of Applied Geophysics, 2018, 150, 126-143.	0.9	9
52	Pseudoacoustic tilted transversely isotropic modeling with optimal k-space operator-based implicit finite-difference schemes. Geophysics, 2018, 83, T139-T157.	1.4	4
53	Time-space-domain implicit finite-difference methods for modeling acoustic wave equations. Geophysics, 2018, 83, T175-T193.	1.4	20
54	Acoustic reverse-time migration using GPU card and POSIX thread based on the adaptive optimal finite-difference scheme and the hybrid absorbing boundary condition. Computers and Geosciences, 2018, 115, 42-55.	2.0	10

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55	An implicit spatial and high-order temporal finite difference scheme for 2D acoustic modelling. Exploration Geophysics, 2018, 49, 187-201.	0.5	14
56	Cross-rhombus stencil-based finite-difference methods for 2D acoustic modeling and reverse-time migration on rectangular grids. Journal of Geophysics and Engineering, 2018, 15, 2674-2685.	0.7	2
57	Reverse-time migration using multidirectional wavefield decomposition method. Applied Geophysics, 2018, 15, 222-233.	0.1	11
58	An improved hybrid absorbing boundary condition for wave equation modeling. Journal of Geophysics and Engineering, 2018, 15, 2602-2613.	0.7	20
59	Hybrid absorbing boundary condition for piecewise smooth curved boundary in 2D acoustic finite difference modelling. Exploration Geophysics, 2018, 49, 469-483.	0.5	5
60	Streaming orthogonal prediction filter in the t-x domain for random noise attenuation. Geophysics, 2018, 83, F41-F48.	1.4	34
61	3D acoustic wave modeling with a time-space-domain temporal high-order finite-difference scheme. Journal of Geophysics and Engineering, 2018, 15, 1963-1976.	0.7	9
62	Finite-difference modeling with adaptive variable-length temporal and spatial operators. , 2018, , .		2
63	Modeling and RTM for arbitrary-order pure acoustic wave equation in VTI media using normalized pseudo-analytical method. Earthquake Science, 2018, 31, 83-91.	0.4	0
64	Least-squares reverse time migration in elastic media. Geophysical Journal International, 2017, 208, 1103-1125.	1.0	83
65	Time-space-domain mesh-free finite difference based on least squares for 2D acoustic-wave modeling. Geophysics, 2017, 82, T143-T157.	1.4	29
66	A perfectly matched layer boundary condition for acoustic-wave simulation in mesh-free discretization using frequency-domain radial-basis-function-generated finite difference. , 2017, , .		0
67	The hybrid absorbing boundary condition for one-step extrapolation and its application in wavefield decomposition-based reverse time migration. Journal of Geophysics and Engineering, 2017, 14, 1177-1188.	0.7	6
68	Hybrid absorbing boundary condition for three-dimensional elastic wave modeling. Applied Geophysics, 2017, 14, 270-278.	0.1	11
69	Modeling of the Acoustic Wave Equation by Staggered‐Grid Finite‐Difference Schemes with High‐Order Temporal and Spatial Accuracy. Bulletin of the Seismological Society of America, 2017, 107, 2160-2182.	1.1	29
70	Effective simulation of pure acoustic wave equation in TTI media. , 2017, , .		1
71	VSP wavefield decomposition using global and local optimization-based inversion. , 2017, , .		0
72	Comparison of three elastic wavefield decomposition methods and their applications in multidirectional vector imaging. , 2017, , .		0

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73	VSP reverse time migration based on complex wavefield decomposition. , 2017, , .		1
74	Effective finite-difference modelling methods with 2-D acoustic wave equation using a combination of cross and rhombus stencils. Geophysical Journal International, 2016, 206, 1933-1958.	1.0	54
75	Reverse time migration using analytical wavefield and wavefield decomposition imaging condition. , 2016, , .		1
76	China University of Petroleum successfully concludes 4th NEGCCS finals. The Leading Edge, 2016, 35, 995-995.	0.4	0
77	A hierarchical elastic full-waveform inversion scheme based on wavefield separation and the multistep-length approach. Geophysics, 2016, 81, R99-R123.	1.4	49
78	PP and PS AVO Joint Inversion for P- and S- Wave Moduli before NMO Correction. , 2015, , .		0
79	Three-dimensional acoustic wave equation modeling based on the optimal finite-difference scheme. Applied Geophysics, 2015, 12, 409-420.	0.1	9
80	Elastic reverse-time migration based on the optimal staggered-grid finite-difference scheme. , 2015, , .		2
81	Acoustic and elastic modeling by optimal time-space-domain staggered-grid finite-difference schemes. Geophysics, 2015, 80, T17-T40.	1.4	52
82	The AWWE-based hybrid absorbing boundary condition for finite-difference modeling and its application in reverse-time migration. Journal of Applied Geophysics, 2015, 123, 93-101.	0.9	4
83	Elastic full-waveform inversion using the second-generation wavelet and an adaptive-operator-length scheme. Geophysics, 2015, 80, R155-R173.	1.4	14
84	Application of the double absorbing boundary condition in seismic modeling. Applied Geophysics, 2015, 12, 111-119.	0.1	8
85	Absorption decomposition and compensation via a two-step scheme. Geophysics, 2015, 80, V145-V155.	1.4	36
86	Adaptive prediction filtering in t-x-y domain for random noise attenuation using regularized nonstationary autoregression. Geophysics, 2015, 80, V13-V21.	1.4	39
87	Signal and noise separation in prestack seismic data using velocity-dependent seislet transform. Geophysics, 2015, 80, WD117-WD128.	1.4	56
88	Suppression of strong scattered waves using the transverse component. Journal of Applied Geophysics, 2015, 112, 226-235.	0.9	2
89	Walkaway VSP data processing methods and their application in H oilfield. , 2014, , .		0
90	Multiscale viscoacoustic waveform inversion with the second generation wavelet transform and adaptive time–space domain finite-difference method. Geophysical Journal International, 2014, 197, 948-974.	1.0	21

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91	An optimal 5-point scheme for frequency-domain scalar wave equation. Journal of Applied Geophysics, 2014, 108, 19-24.	0.9	14
92	Optimal staggered-grid finite-difference schemes based on least-squares for wave equation modelling. Geophysical Journal International, 2014, 197, 1033-1047.	1.0	115
93	Viscoacoustic prestack reverse time migration based on the optimal time-space domain high-order finite-difference method. Applied Geophysics, 2014, 11, 50-62.	0.1	9
94	Comparisons of visco-acoustic wave equations. Journal of Geophysics and Engineering, 2014, 11, 025004.	0.7	4
95	Time–frequency domain SNR estimation and its application in seismic data processing. Journal of Applied Geophysics, 2014, 107, 25-35.	0.9	21
96	Visco-elastic modeling of refractions and its application in converted wave static correction. , 2014, , .		0
97	Second National Exploration Geophysics Competition for College Students finals concluded successfully. The Leading Edge, 2014, 33, 1278-1278.	0.4	0
98	A multicomponent wavefield decomposition method for VSP data based on global optimization. , 2014, , .		2
99	Visco-acoustic prestack reverse-time migration based on the time-space domain adaptive high-order finite-difference method. Geophysical Prospecting, 2013, 61, 941-954.	1.0	26
100	A truncated implicit high-order finite-difference scheme combined with boundary conditions. Applied Geophysics, 2013, 10, 53-62.	0.1	13
101	A hybrid absorbing boundary condition for frequency-domain finite-difference modelling. Journal of Geophysics and Engineering, 2013, 10, 054003.	0.7	26
102	Globally optimal finite-difference schemes based on least squares. Geophysics, 2013, 78, T113-T132.	1.4	145
103	Time–space domain dispersion-relation-based finite-difference method with arbitrary even-order accuracy for the 2D acoustic wave equation. Journal of Computational Physics, 2013, 232, 327-345.	1.9	74
104	Acoustic VTI modeling and pre-stack reverse-time migration based on the time–space domain staggered-grid finite-difference method. Journal of Applied Geophysics, 2013, 90, 41-52.	0.9	13
105	Pre-stack reverse-time migration based on the time–space domain adaptive high-order finite-difference method in acoustic VTI medium. Journal of Geophysics and Engineering, 2013, 10, 015010.	0.7	8
106	Geophysical modelling. Journal of Geophysics and Engineering, 2013, 10, .	0.7	2
107	An optimal finite-difference scheme based on least squares for acoustic modeling. , 2013, , .		0
108	A hybrid absorbing boundary condition with AWWEs for finite-difference modeling. , 2013, , .		1

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109	Prestack reverse-time migration with a time-space domain adaptive high-order staggered-grid finite-difference method. Exploration Geophysics, 2013, 44, 77-86.	0.5	6
110	Comparisons of viscous acoustic wave equations. , 2013, , .		2
111	Elastic prestack reverse time migration using the time-space domain high-order staggered-grid finite-difference method. , 2013, , .		0
112	High‐Order Finite‐Difference Numerical Modeling of Wave Propagation in Viscoelastic TTI Media Using Rotated Staggered Grid. Chinese Journal of Geophysics, 2012, 55, 252-265.	0.2	12
113	3D poroviscoelastic rotated staggered finite-difference modeling with PML absorbing boundary conditions. , 2012, , .		2
114	Finite-difference modeling with a minimal computation cost. , 2012, , .		1
115	Introduction to this special section: Carbonate research in China. The Leading Edge, 2012, 31, 138-138.	0.4	3
116	Variable damping constraint tomography and its application in VSP Data. Applied Geophysics, 2012, 9, 177-185.	0.1	1
117	A hybrid absorbing boundary condition for elastic staggered‐grid modelling. Geophysical Prospecting, 2012, 60, 1114-1132.	1.0	29
118	A hybrid absorbing boundary condition for frequency-domain visco-acoustic finite-difference modeling. , 2012, , .		1
119	Comparisons between the hybrid ABC and the PML method for 2D high‐order finite‐difference acoustic modeling. , 2011, , .		2
120	Joint PP and PS AVO inversion based on Bayes theorem. Applied Geophysics, 2011, 8, 293-302.	0.1	26
121	Reservoir prediction using multi-wave seismic attributes. Earthquake Science, 2011, 24, 373-389.	0.4	3
122	3D acoustic wave modelling with time-space domain dispersion-relation-based finite-difference schemes and hybrid absorbing boundary conditions. Exploration Geophysics, 2011, 42, 176-189.	0.5	24
123	Finite-difference modeling with adaptive variable-length spatial operators. Geophysics, 2011, 76, T79-T89.	1.4	79
124	VSP multiple attenuation theory using SRME technique. , 2011, , .		0
125	Finite‐difference modeling with variable length spatial operators and time steps. , 2011, , .		2
126	OC-seislet: Seislet transform construction with differential offset continuation. Geophysics, 2010, 75, WB235-WB245.	1.4	40

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127	A hybrid scheme for absorbing edge reflections in numerical modeling of wave propagation. Geophysics, 2010, 75, A1-A6.	1.4	125
128	Seislet transform and seislet frame. Geophysics, 2010, 75, V25-V38.	1.4	332
129	A hybrid absorbing boundary condition for elastic wave modeling with staggered‐grid finite difference. , 2010, , .		2
130	Acoustic VTI modeling with a time-space domain dispersion-relation-based finite-difference scheme. Geophysics, 2010, 75, A11-A17.	1.4	39
131	OBC Multiple Attenuation Technique Using SRME Theory. , 2010, , .		2
132	Finite‐difference modeling with adaptive variable length spatial operators. , 2010, , .		0
133	A new time–space domain high-order finite-difference method for the acoustic wave equation. Journal of Computational Physics, 2009, 228, 8779-8806.	1.9	187
134	Estimation of Q and inverse Q filtering for prestack reflected PP- and converted PS-waves. Applied Geophysics, 2009, 6, 59-69.	0.1	19
135	Acoustic impedance inversion of zero-offset VSP data. Applied Geophysics, 2009, 6, 150-158.	0.1	2
136	Numerical modeling of wave equation by a truncated high-order finite-difference method. Earthquake Science, 2009, 22, 205-213.	0.4	18
137	Detection of gas reservoirs by the joint use of P- and PS-waves: A case study on the Ordos basin, China. Earthquake Science, 2009, 22, 307-313.	0.4	0
138	An implicit staggered-grid finite-difference method for seismic modelling. Geophysical Journal International, 2009, 179, 459-474.	1.0	124
139	A practical implicit finite-difference method: examples from seismic modelling. Journal of Geophysics and Engineering, 2009, 6, 231-249.	0.7	73
140	Acoustic VTI modeling by a new time‐space domain high‐order finite‐difference method. , 2009, , .		0
141	Propagation characteristics of converted refracted wave and its application in static correction of converted wave. Science in China Series D: Earth Sciences, 2008, 51, 226-232.	0.9	2
142	Anisotropic converted wave amplitude-preserving prestack time migration by the pseudo-offset method. Applied Geophysics, 2008, 5, 204-211.	0.1	7
143	Pure S-waves in land P-wave source VSP data. Applied Geophysics, 2007, 4, 173-182.	0.1	7
144	Analysis and application of pseudo-offset method in the converted-wave prestack time migration. Applied Geophysics, 2006, 3, 18-26.	0.1	2

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145	A stability criterion of elastic wave modelling by the Fourier method. Journal of Geophysics and Engineering, 2005, 2, 153-157.	0.7	6
146	Interval Q inversion from CMP gathers: part I—absorption equation. , 2005, , .		6
147	Interval Q inversion from CMP gathers: Part II—inversion method. , 2005, , .		3
148	The application of equivalent velocity and slowness in VSP data processing. , 2005, , .		0
149	Fast P-wave AVO in fluid-saturated porous media with aligned fractures. Journal of Geophysics and Engineering, 2004, 1, 307-311.	0.7	1
150	Finite element equations and numerical simulation of elastic wave propagation in two-phase anisotropic media. Acta Seismologica Sinica, 2003, 16, 166-174.	0.2	4
151	The study of static correction in desert and loose terrain. , 2002, , .		2
152	Stability criterion of elastic wave modeling by Fourier method in arbitrary anisotropic media. , 2001, , .		0
153	Theoretical analyse of time-lapse explosion method. , 2001, , .		0
154	Finite element modeling of seismic wave propagation in two-phase anisotropic media. , 2001, , .		0
155	Reflection and Transmission of Plane Wave on an Interface between Dissimilar Two-Phase, Transversely Isotropic Media. Chinese Journal of Geophysics, 2000, 43, 731-739.	0.2	5
156	Study of elastic wave propagation in two-phase anisotropic media by numerical modeling of pseudospectral method. Acta Seismologica Sinica, 2000, 13, 143-150.	0.2	9
157	Fast P-wave AVO in fluid-saturated porous, aligned fractured media. , 2000, , .		0
158	Research on propagation properties of elastic waves in two-phase anisotropic media. Acta Seismologica Sinica, 1999, 12, 405-412.	0.2	7
159	A robust migration velocity analysis through an asymptotic inverse via generalised Radon transform. Exploration Geophysics, 0, , 1-16.	0.5	2
160	A novel equivalent staggered-grid finite-difference scheme and its optimization strategy for variable-density acoustic wave modelling. Exploration Geophysics, 0, , 1-14.	0.5	0
161	High temporal accuracy elastic wave simulation with new time–space domain implicit staggered-grid finite-difference schemes. Geophysical Prospecting, 0, , .	1.0	2