Naihao Liu

List of Publications by Year
in descending order

70 papers	1,383 citations	361413 20 h-index	377865 34 g-index
70 all docs	70 docs citations	70 times ranked	574 citing authors

#	Article	IF	Citations
1	Seismic Impedance Inversion Using Fully Convolutional Residual Network and Transfer Learning. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 2140-2144.	3.1	96
2	Self-Adaptive Generalized S-Transform and Its Application in Seismic Time–Frequency Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 7849-7859.	6.3	79
3	Time–Frequency Analysis of Seismic Data Using a Three Parameters S Transform. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 142-146.	3.1	78
4	Seismic Time–Frequency Analysis via STFT-Based Concentration of Frequency and Time. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 127-131.	3.1	75
5	Semiautomatic first-arrival picking of microseismic events by using the pixel-wise convolutional image segmentation method. Geophysics, 2019, 84, V143-V155.	2.6	65
6	Synchroextracting transform: The theory analysis and comparisons with the synchrosqueezing transform. Signal Processing, 2020, 166, 107243.	3.7	65
7	High-Resolution Seismic Time–Frequency Analysis Using the Synchrosqueezing Generalized S-Transform. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 374-378.	3.1	61
8	High-resolution characterization of geologic structures using the synchrosqueezing transform. Interpretation, 2017, 5, T75-T85.	1.1	52
9	Common-azimuth seismic data fault analysis using residual UNet. Interpretation, 2020, 8, SM25-SM37.	1.1	43
10	Seismic Data Reconstruction via Wavelet-Based Residual Deep Learning. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	42
11	White noise attenuation of seismic trace by integrating variational mode decomposition with convolutional neural network. Geophysics, 2019, 84, V307-V317.	2.6	40
12	Automatic Lithology Identification by Applying LSTM to Logging Data: A Case Study in X Tight Rock Reservoirs. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1361-1365.	3.1	37
13	Self-adaptive denoising net: Self-supervised learning for seismic migration artifacts and random noise attenuation. Journal of Petroleum Science and Engineering, 2022, 214, 110431.	4.2	31
14	Time-Synchroextracting General Chirplet Transform for Seismic Time–Frequency Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8626-8636.	6.3	30
15	Deep Learning Prior Model for Unsupervised Seismic Data Random Noise Attenuation. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	27
16	Seismic Time–Frequency Analysis via Adaptive Mode Separation-Based Wavelet Transform. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 696-700.	3.1	25
17	Frequency-chirprate reassignment. , 2020, 104, 102783.		25
18	Automatic Fault Delineation in 3-D Seismic Images With Deep Learning: Data Augmentation or Ensemble Learning?. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	25

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19	Landslide Susceptibility Modeling Using Bagging-Based Positive-Unlabeled Learning. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 766-770.	3.1	24
20	Quantum-Enhanced Deep Learning-Based Lithology Interpretation From Well Logs. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	24
21	Large-Dimensional Seismic Inversion Using Global Optimization With Autoencoder-Based Model Dimensionality Reduction. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 1718-1732.	6.3	21
22	Ground-Roll Separation and Attenuation Using Curvelet-Based Multichannel Variational Mode Decomposition. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	21
23	The Improved Empirical Wavelet Transform and Applications to Seismic Reflection Data. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1939-1943.	3.1	20
24	Accurate seismic dip and azimuth estimation using semblance dip guided structure tensor analysis. Geophysics, 2019, 84, O103-O112.	2.6	19
25	Seismic signal de-noising using time–frequency peak filtering based on empirical wavelet transform. Acta Geophysica, 2020, 68, 425-434.	2.0	18
26	Multitrace Semiblind Nonstationary Deconvolution. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1195-1199.	3.1	17
27	Distilling Knowledge From an Ensemble of Convolutional Neural Networks for Seismic Fault Detection. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	17
28	Seismic attenuation estimation using the modified log spectral ratio method. Journal of Applied Geophysics, 2018, 159, 386-394.	2.1	16
29	Seismic Random Noise Separation and Attenuation Based on MVMD and MSSA. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	16
30	Random noise suppression of seismic data by time–frequency peak filtering with variational mode decomposition. Exploration Geophysics, 2019, 50, 634-644.	1.1	15
31	Structure-Oriented DTGV Regularization for Random Noise Attenuation in Seismic Data. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 1757-1771.	6.3	15
32	Seismic anelastic attenuation estimation using prestack seismic gathers. Geophysics, 2019, 84, M37-M49.	2.6	14
33	Second-Order Synchrosqueezing Wave Packet Transform and Its Application for Characterizing Seismic Geological Structures. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 760-764.	3.1	12
34	Seismic Traffic Noise Attenuation Using l_{p} -Norm Robust PCA. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1998-2001.	3.1	12
35	Variable seismic waveforms representation: Weak-supervised learning based seismic horizon picking. Journal of Petroleum Science and Engineering, 2022, 214, 110412.	4.2	12
36	Seismic instantaneous frequency extraction based on the SST-MAW. Journal of Geophysics and Engineering, 2018, 15, 995-1007.	1.4	11

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37	Improved seismic well tie by integrating variable-size window resampling with well-tie net. Journal of Petroleum Science and Engineering, 2022, 208, 109368.	4.2	11
38	Seismic geologic structure characterization using a high-order spectrum-coherence attribute. Interpretation, 2020, 8, T391-T401.	1.1	11
39	Data-Driven Time-Frequency Method and Its Application in Detection of Free Gas Beneath a Gas Hydrate Deposit. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	11
40	Exploring factors affecting the performance of deep learning in seismic fault attribute computation. Interpretation, 2022, 10, T619-T636.	1.1	11
41	Separation of Blended Seismic Data Using the Synchrosqueezed Curvelet Transform. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 711-715.	3.1	10
42	Elastic Properties Estimation From Prestack Seismic Data Using GGCNNs and Application on Tight Sandstone Reservoir Characterization. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-21.	6.3	10
43	Denoising Seismic Signal via Resampling Local Applicability Functions. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	10
44	Revisit seismic attenuation attributes: Influences of the spectral balancing operation on seismic attenuation analysis. Interpretation, 2021, 9, T767-T779.	1.1	10
45	Seismic Reservoir Delineation via Hankel Transform Based Enhanced Empirical Wavelet Transform. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1411-1414.	3.1	9
46	Construction of Optimal Basic Wavelet via AIDNN and Its Application in Seismic Data Analysis. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1144-1148.	3.1	9
47	Seismic Attenuation Estimation Using an Enhanced Log Spectral Ratio Method. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	9
48	Seismic Volumetric Dip Estimation via Multichannel Deep Learning Model. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	9
49	A Coherence Algorithm for 3-D Seismic Data Analysis Based on the Mutual Information. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 967-971.	3.1	8
50	Semi-Supervised Deep Learning Seismic Impedance Inversion Using Generative Adversarial Networks. , 2020, , .		8
51	Multi-Synchrosqueezing Wavelet Transform for Time–Frequency Localization of Reservoir Characterization in Seismic Data. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	8
52	Microseismic First-Arrival Picking Using Fine-Tuning Feature Pyramid Networks. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	7
53	Q estimation with improved frequency-shift method based on generalized seismic wavelet. , 2016, , .		6
54	Multiscale Coherence Attribute and Its Application on Seismic Discontinuity Description. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	6

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55	The approximate constant Q and linearized reflection coefficients based on the generalized fractional wave equation. Journal of the Acoustical Society of America, 2019, 145, 243-253.	1.1	4
56	Coherence algorithm with a highâ€resolution timeâ€"time transform and feature matrix for seismic data. Geophysical Prospecting, 2020, 68, 1113-1125.	1.9	4
57	Seismic wavelet phase estimation by semiautomatic seismic-well tying. , 2017, , .		2
58	Q estimation from time-migrated gathers based on S transform. , 2017, , .		2
59	An Improved TV-Type Variational Regularization Method for Seismic Impedance Inversion. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	2
60	The extraction of instantaneous frequency from seismic data via synchrosqueezing three parameter wavelet transform. , 2015, , .		2
61	Channel detection using the self-adaptive generalized S-transform. , 2018, , .		1
62	Seismic Local Instantaneous Frequency Extraction for Describing Superposed Sands. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	1
63	Time-frequency analysis of seismic data using synchrosqueezing three parameter wavelet transform. , 2015, , .		1
64	Correction to â€œSeismic Time-Frequency Analysis via Adaptive Mode Separation-Based Wavelet Transformâ€. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1102-1102.	3.1	1
65	Fluvial channel characterization using the improved empirical wavelet transform. , 2019, , .		0
66	Seismic random noise attenuation using MVMD and MSSA. , 2021, , .		0
67	Seismic time-frequency analysis using the vertical second-order synchrosqueezing transform. , 2018, , .		0
68	A generalized S transform and applications to seismic time-frequency analysis. , 2018, , .		0
69	Correction to â€œThe Improved Empirical Wavelet Transform and Applications to Seismic Reflection Dataâ€. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1103-1103.	3.1	0
70	Sparse inversion-based seismic random noise attenuation via self-paced learning. Artificial Intelligence in Geosciences, 2021, 2, 223-233.	1.9	0