

# Hejun Zhu

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

1,736  
citations

304602

22  
h-index

289141

40  
g-index

63  
all docs

63  
docs citations

63  
times ranked

1316  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of the European upper mantle revealed by adjoint tomography. <i>Nature Geoscience</i> , 2012, 5, 493-498.	5.4	232
2	Seismic structure of the European upper mantle based on adjoint tomography. <i>Geophysical Journal International</i> , 2015, 201, 18-52.	1.0	156
3	Elastic imaging and time-lapse migration based on adjoint methods. <i>Geophysics</i> , 2009, 74, WCA167-WCA177.	1.4	83
4	A Bayesian approach to estimate uncertainty for full-waveform inversion using a priori information from depth migration. <i>Geophysics</i> , 2016, 81, R307-R323.	1.4	82
5	Mapping Tectonic Deformation in the Crust and Upper Mantle Beneath Europe and the North Atlantic Ocean. <i>Science</i> , 2013, 341, 871-875.	6.0	76
6	Elastic wavefield separation based on the Helmholtz decomposition. <i>Geophysics</i> , 2017, 82, S173-S183.	1.4	75
7	Seismic attenuation beneath Europe and the North Atlantic: Implications for water in the mantle. <i>Earth and Planetary Science Letters</i> , 2013, 381, 1-11.	1.8	69
8	Near real-time simulations of global CMT earthquakes. <i>Geophysical Journal International</i> , 2010, 183, 381-389.	1.0	60
9	Building good starting models for full-waveform inversion using adaptive matching filtering misfit. <i>Geophysics</i> , 2016, 81, U61-U72.	1.4	59
10	Seismic Structure of the Antarctic Upper Mantle Imaged with Adjoint Tomography. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, .	1.4	59
11	EMIC wave parameterization in the long-term VERB code simulation. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8488-8501.	0.8	55
12	Seismic wavespeed images across the Iapetus and Tornquist suture zones. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	48
13	Radial anisotropy of the North American upper mantle based on adjoint tomography with USArray. <i>Geophysical Journal International</i> , 2017, 211, 349-377.	1.0	47
14	Isotropic elastic reverse time migration using the phase- and amplitude-corrected vector P- and S-wavefields. <i>Geophysics</i> , 2018, 83, S489-S503.	1.4	46
15	A time-domain complex-valued wave equation for modelling visco-acoustic wave propagation. <i>Geophysical Journal International</i> , 2018, 215, 1064-1079.	1.0	44
16	Time-domain least-squares migration using the Gaussian beam summation method. <i>Geophysical Journal International</i> , 2018, 214, 548-572.	1.0	39
17	Viscoacoustic reverse time migration using a time-domain complex-valued wave equation. <i>Geophysics</i> , 2018, 83, S505-S519.	1.4	37
18	Full-waveform inversion using seislet regularization. <i>Geophysics</i> , 2017, 82, A43-A49.	1.4	36

#	ARTICLE	IF	CITATIONS
19	Seismic modeling and imaging based upon spectral-element and adjoint methods. <i>The Leading Edge</i> , 2009, 28, 568-574.	0.4	35
20	Elastic wavefield separation in anisotropic media based on eigenform analysis and its application in reverse-time migration. <i>Geophysical Journal International</i> , 2019, 217, 1290-1313.	1.0	35
21	Elastic least-squares reverse time migration in vertical transverse isotropic media. <i>Geophysics</i> , 2019, 84, S539-S553.	1.4	32
22	2D isotropic elastic Gaussian-beam migration for common-shot multicomponent records. <i>Geophysics</i> , 2018, 83, S127-S140.	1.4	31
23	Viscoacoustic least-squares reverse time migration using a time-domain complex-valued wave equation. <i>Geophysics</i> , 2019, 84, S479-S499.	1.4	26
24	A finite-difference approach for solving pure quasi-P-wave equations in transversely isotropic and orthorhombic media. <i>Geophysics</i> , 2018, 83, C161-C172.	1.4	23
25	Estimating $\langle i \rangle P \langle /i \rangle$ Wave Velocity and Attenuation Structures Using Full Waveform Inversion Based on a Time Domain Complex-Valued Viscoacoustic Wave Equation: The Method. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019129.	1.4	22
26	Locating and monitoring microseismicity, hydraulic fracture and earthquake rupture using elastic time-reversal imaging. <i>Geophysical Journal International</i> , 2019, 216, 726-744.	1.0	20
27	A practical data-driven optimization strategy for Gaussian beam migration. <i>Geophysics</i> , 2018, 83, S81-S92.	1.4	17
28	Elastic Least-Squares Imaging in Tilted Transversely Isotropic Media for Multicomponent Land and Pressure Marine Data. <i>Surveys in Geophysics</i> , 2020, 41, 805-833.	2.1	16
29	Azimuthal Anisotropy of the North American Upper Mantle Based on Full Waveform Inversion. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018432.	1.4	16
30	Viscoacoustic reverse time migration with a robust space-wavenumber domain attenuation compensation operator. <i>Geophysics</i> , 2021, 86, S339-S353.	1.4	16
31	Time- $\epsilon$ Lapse Imaging of Coseismic Ruptures for the 2019 Ridgecrest Earthquakes Using Multiazimuth Backprojection With Regional Seismic Data and a $\hat{\epsilon}$ Crustal Velocity Model. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087181.	1.5	15
32	Seismic evidence for subduction-induced mantle flows underneath Middle America. <i>Nature Communications</i> , 2020, 11, 2075.	5.8	14
33	Multifault Opposing $\hat{\epsilon}$ Dip Strike $\hat{\epsilon}$ Slip and Normal $\hat{\epsilon}$ Fault Rupture During the 2020 $M_{w} < /sub > 6.5$ Stanley, Idaho Earthquake. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092510.	1.5	13
34	High $V_p/V_s$ ratio in the crust and uppermost mantle beneath volcanoes in the Central and Eastern Anatolia. <i>Geophysical Journal International</i> , 2018, 214, 2151-2163.	1.0	11
35	Crustal wave speed structure of North Texas and Oklahoma based on ambient noise cross-correlation functions and adjoint tomography. <i>Geophysical Journal International</i> , 2018, 214, 716-730.	1.0	9
36	Isotropic elastic wavefields decomposition using fast Poisson solvers. , 2017, , .		8

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37	Poloidal and Toroidal Mode Mantle Flows Underneath the Cascadia Subduction Zone. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087530.	1.5	8
38	An Efficient and Stable High-Resolution Seismic Imaging Method: Point Spread Function Deconvolution. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	8
39	Seismogram registration via Markov chain Monte Carlo optimization and its applications in full waveform inversion. <i>Geophysical Journal International</i> , 2018, 212, 976-987.	1.0	7
40	Approximating the Gauss-Newton Hessian Using a Space-Wavenumber Filter and its Applications in Least-Squares Seismic Imaging. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-13.	2.7	7
41	Caribbean plate tilted and actively dragged eastwards by low-viscosity asthenospheric flow. <i>Nature Communications</i> , 2021, 12, 1603.	5.8	6
42	Least-squares reverse time migration using the impedance-sensitivity kernel. , 2018, , .		6
43	Modified viscoelastic wavefield simulations in the time domain using the new fractional Laplacians. <i>Journal of Geophysics and Engineering</i> , 2022, 19, 346-361.	0.7	4
44	Introduction to a Two-Way Beam Wave Method and Its Applications in Seismic Imaging. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	4
45	Surface-offset gathers from elastic reverse time migration and velocity analysis. <i>Geophysics</i> , 2020, 85, S47-S64.	1.4	3
46	Estimation of micro-earthquake source locations based on full adjoint $P$ and $S$ wavefield imaging. <i>Geophysical Journal International</i> , 2021, 226, 2116-2144.	1.0	3
47	Mitigating Velocity Errors in Least-Squares Imaging Using Angle-Dependent Forward and Adjoint Gaussian Beam Operators. <i>Surveys in Geophysics</i> , 2021, 42, 1305-1346.	2.1	3
48	Geometry-preserving full-waveform tomography and its application in the Longmen Shan area. <i>Science China Earth Sciences</i> , 2022, 65, 437-448.	2.3	3
49	Microearthquake location and uncertainty analysis using a Kirchhoff wavefront imaging method: A comparison with traveltimes inversion and full wavefield imaging methods. <i>Geophysics</i> , 2022, 87, KS147-KS167.	1.4	3
50	Adjoint Tomography of the Lithospheric Structure beneath Northeastern Tibet. <i>Seismological Research Letters</i> , 2020, 91, 3304-3312.	0.8	2
51	Isotropic elastic reverse-time migration using impedance sensitivity kernel. , 2019, , .		2
52	Study of data-driven optimization strategy for beam migration. , 2016, , .		1
53	Elastic Fresnel beam migration for areas with irregular topography. , 2016, , .		1
54	Seismogram registration via Markov chain-Monte Carlo optimization and its applications in full-waveform inversion. , 2017, , .		1

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55	Modeling and imaging based upon spectral element and adjoint methods. , 2010, , .		1
56	Biot-spherical squirt (BISSQ) model for wave attenuation and dispersion. Geophysical Journal International, 0, , .	1.0	1
57	A stable space-wavenumber attenuation compensation method for viscoacoustic reverse-time migration. , 2021, , .		0
58	Angle-domain least-squares Gaussian beam migration. , 2021, , .		0
59	Reducing artifacts of elastic reverse time migration with de-primary. , 2018, , .		0
60	Time-domain least-squares Gaussian beam migration with L1 regularization. , 2018, , .		0
61	Elastic reverse-time migration using phase- and amplitude-corrected vector P- and S-wavefields. , 2019, , .		0
62	Viscoacoustic least-squares reverse-time migration using a time-domain complex-valued wave equation. , 2019, , .		0